



Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 330: US Rte. 45 - Metra Rail to 187th Street Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

18300-18700 blocks of S. LaGrange Rd (US Rte. 45) (ISGS Site No. 3357-1)

City: Mokena State: IL Zip Code: _____

County: Will Township: Frankfort

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.549561815 Longitude: -87.852343959

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: _____ BOL: _____ BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

Zip Code: 60196-1096 Phone: 847-705-4101

Contact: Sam Mead

Contact: Sam Mead

Email, if available: Sam.Mead@illinois.gov

Email, if available: Sam.Mead@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 330: US Rte. 45 - Metra Rail to 187th Street

Latitude: 41.549561815 Longitude: -87.852343959

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

LOCATION ROW-1 WAS SAMPLED ADJACENT TO ISGS SITE No. 3357-1. SEE FIGURE 3-1 AND TABLE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT FOR SAMPLING DETAILS.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

EUROFINS ANALYTICAL REPORT - GROUP NUMBER: 1860028
ALSO SEE FIGURE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Michael A. Castillo, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Weston Solutions, Inc.
 Street Address: 300 Circle Plaza, Suite 202
 City: Mundelein State: IL Zip Code: 60060
 Phone: (224) 864-7200

Michael A. Castillo, P.G.
 Printed Name:

Michael A. Castillo
 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

7 December 2017
 Date:



Summary Table of ISGS Site No. 3357-1
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | ROW-1(0-2)-100517 | Soil Reference Concentrations^A |
|-----------------------------|-------------------|--|
| Sample Date | 10/5/2017 | |
| Location ID | ROW-1 | |
| Depth | 0 - 2 | |
| ISGS Site No. | 3357-1 | |
| Parameter | | |
| Laboratory pH (s.u.) | 8.46 | <6.25 ; >9.0 |
| VOCs (ug/kg) | | |
| Acetone | 11 J | 25000 |
| Benzene | 0.7 J | 30 |
| SVOCs (ug/kg) | | |
| Benzo(a)pyrene | 5 J | 90 / 1300 / 2100 |
| Benzo(b)fluoranthene | 7 J | 900 / 1500 / 2100 |
| Benzo(g,h,i)perylene | 14 J | --- |
| Chrysene | 9 J | 88000 |
| Dibenzo(a,h)anthracene | 4 J | 90 / 200 / 420 |
| Indeno(1,2,3-cd)pyrene | 5 J | 900 / 900 / 1600 |
| Pyrene | 4 J | 2300000 |
| Total Metals (mg/kg) | | |
| Arsenic, Total | 8.77 | 11.3 / 13.0 |
| Barium, Total | 57.2 | 1500 |
| Beryllium, Total | 0.767 | 22 |
| Cadmium, Total | 0.467 J | 5.2 |
| Calcium, Total | 55800 | --- |
| Chromium, Total | 27 | 21 |
| Cobalt, Total | 11.3 | 20 |
| Copper, Total | 22.5 | 2900 |
| Iron, Total | 25900 | 15000 / 15900 |
| Lead, Total | 17.3 J | 107 |
| Magnesium, Total | 27000 J | 325000 |
| Manganese, Total | 488 J | 630 / 636 |
| Nickel, Total | 30.1 | 100 |
| Potassium, Total | 5370 | --- |
| Silver, Total | 0.416 J | 4.4 |
| Sodium, Total | 1020 | --- |
| Vanadium, Total | 35.1 | 550 |
| Zinc, Total | 65.1 J | 5100 |
| TCLP Metals (mg/l) | | |
| Arsenic, TCLP | 0.1 | 0.05 |
| Barium, TCLP | 0.965 | 2 |
| Beryllium, TCLP | 0.0118 | 0.004 |
| Cadmium, TCLP | 0.003 J | 0.005 |
| Chromium, TCLP | 0.304 | 0.1 |
| Cobalt, TCLP | 0.0855 | 1 |
| Copper, TCLP | 0.171 | 0.65 |
| Iron, TCLP | 235 | 5 |
| Lead, TCLP | 0.166 | 0.0075 |
| Manganese, TCLP | 2.3 | 0.15 |
| Mercury, TCLP | 0.00021 | 0.002 |
| Nickel, TCLP | 0.245 | 0.1 |
| Selenium, TCLP | 0.0281 | 0.05 |
| Zinc, TCLP | 0.483 | 5 |
| SPLP Metals (mg/l) | | |
| Barium, SPLP | 0.57 | 2 |
| Cobalt, SPLP | 0.0248 | 1 |
| Iron, SPLP | 0.0969 J | 5 |
| Lead, SPLP | 0.0064 J | 0.0075 |
| Manganese, SPLP | 9.05 | 0.15 |
| Nickel, SPLP | 0.0256 | 0.1 |
| Zinc, SPLP | 0.0129 J | 5 |

Notes:

--- - not applicable or value not available.

^A - Soil reference concentrations from MAC Table. Background values for Chicago corporate limits and MSA counties are included, as applicable.

ND - Constituent not detected above the reporting limit.

J - Estimated concentration.

Shaded values indicate concentration **exceeds** Reference Concentration.

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Report Date: October 20, 2017

Project: IDOT Job 063

Account #: 11924
Group Number: 1860028
PO Number: 0088208
State of Sample Origin: IL

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To Weston Solutions

Attn: Andris Slesers

Respectfully Submitted,



Bonnie Stadelmann
Senior Project Manager

(312) 590-3133

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 11 J | 6 | 16 | 0.68 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.68 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 7 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 19 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 78 | 190 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 78 | 190 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 78 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 19 | 39 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 19 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 19 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 19 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 9 | J | 4 | 20 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 4 | J | 4 | 20 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 19 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 19 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 19 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 19 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 19 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 78 | 190 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 19 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 78 | 190 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 190 | 580 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 78 | 190 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 19 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 78 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | N.D. | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 19 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 190 | 580 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 190 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 5 | J | 4 | 20 |
| 10726 | Isophorone | 78-59-1 | N.D. | 19 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 19 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 19 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 78 | 190 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 78 | 190 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 19 | 39 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 190 | 580 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 19 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 19 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 78 | 190 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | N.D. | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 19 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 4 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 19 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 19 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 19 | 39 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.953 | 2.19 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.77 | 1.05 | 2.19 | 1 |
| 06946 | Barium | 7440-39-3 | 57.2 | 0.0482 | 0.548 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.767 | 0.0866 | 0.548 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.467 J | 0.0592 | 0.548 | 1 |
| 01650 | Calcium | 7440-70-2 | 55,800 | 3.65 | 21.9 | 1 |
| 06951 | Chromium | 7440-47-3 | 27.0 | 0.186 | 1.64 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.3 | 0.121 | 0.548 | 1 |
| 06953 | Copper | 7440-50-8 | 22.5 | 0.263 | 1.10 | 1 |
| 01654 | Iron | 7439-89-6 | 25,900 | 8.82 | 21.9 | 1 |
| 06955 | Lead | 7439-92-1 | 17.3 | 0.657 | 1.64 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,000 | 2.66 | 11.0 | 1 |
| 06958 | Manganese | 7439-96-5 | 488 | 0.0909 | 0.548 | 1 |
| 06961 | Nickel | 7440-02-0 | 30.1 | 0.164 | 1.10 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,370 | 18.3 | 54.8 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.02 | 2.19 | 1 |
| 06966 | Silver | 7440-22-4 | 0.416 J | 0.263 | 0.548 | 1 |
| 01667 | Sodium | 7440-23-5 | 1,020 | 18.3 | 110 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.50 | 3.29 | 1 |
| 06971 | Vanadium | 7440-62-2 | 35.1 | 0.164 | 0.548 | 1 |
| 06972 | Zinc | 7440-66-6 | 65.1 | 0.263 | 2.19 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0115 | 0.115 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.2 C. | n.a. | 8.46 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 15.5 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 20:07 | Linda C Pape | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:50 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 17:01 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I28

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:15 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:50 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251148
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I29

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------------|------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | SW-846 6010B | | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.570 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0248 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.0969 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0064 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 9.05 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0256 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0129 J | 0.0065 | 0.0200 | 1 |
| | SW-846 7470A | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:09 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:36 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251148
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I29

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251149
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I30

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.100 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.965 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0118 | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | 0.0030 J | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.304 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0855 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.171 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 235 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.166 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.30 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.245 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0281 | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.483 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00021 | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251149
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I30

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:01 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:24 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564550

| Client Information | | | | Matrix | | | Analysis Requested | | | | | | | | | | For Lab Use Only | | | | | | |
|---|---------|--|---|-----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|--------------------------------|---------------------------------|-----------------------|-----------------------------------|----------------|---|---------|--|------------------|--|--|--|--|--------------------|-------------|
| Client: <u>Weston Solutions</u> | | Acct. #: | | <input type="checkbox"/> Sediment | <input type="checkbox"/> Tissue | <input type="checkbox"/> Potable | <input type="checkbox"/> Ground | <input type="checkbox"/> Surface | <input type="checkbox"/> NPDES | <input type="checkbox"/> Other: | Total # of Containers | Preservation and Filtration Codes | | | | | | | | | | FSC: _____ | SCR#: _____ |
| Project Name/ #: <u>IDOT-063</u> | | PWSID #: | | | | | | | | | | | | | | | | | | | | Preservation Codes | |
| Project Manager: <u>S. Balasubramanian</u> | | P.O. #: | | | | | | | | | | | | H=HCl T=Thiosulfate | | | | | | | | | |
| Sampler: <u>T. Walls</u> | | Quote #: | | | | | | | | | | | | N=HNO ₃ B=NaOH | | | | | | | | | |
| State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | | | | | | | | | | | S=H ₂ SO ₄ P=H ₃ PO ₄ | | | | | | | | | |
| | | | | | | | | | | | | | | F=Field Filtered O=Other | | | | | | | | | |
| Sample Identification | | Collected | | Grab | Composite | Soil | Water | Other: | Total # of Containers | VOCs | SVOCs | Total Metals | TCUP/SP metals | PH | Remarks | | | | | | | | |
| Date | Time | | | | | | | | | | | | | | | | | | | | | | |
| MC-5(0-6)-100517 | 10-5-17 | 1125 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-5(6-12)-100517 | | 1130 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-5(6-12)-100517D | | 1130 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-6(0-6)-100517 | | 1150 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-6(6-12)-100517 | | 1155 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-7(0-6)-100517 | | 1205 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-7(6-12)-100517 | | 1210 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-8(0-6)-100517 | | 1225 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| MC-8(6-12)-100517 | | 1230 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |
| ROW-1(0-2)-100517 | 10-5-17 | 1250 | X | | X | | | | 4 | X | X | X | X | X | | | | | | | | | |

| | | | | | | | |
|---|--|--|----------------------|--|--------------|-------|-------|
| Turnaround Time (TAT) Requested (please circle) Standard <input checked="" type="radio"/> Rush <input type="radio"/> (Rush TAT is subject to laboratory approval and surcharge.) | | Relinquished by: <u>Z. Walls</u> | Date: <u>10-5-17</u> | Time: <u>1700</u> | Received by: | Date: | Time: |
| Date results are needed: _____ | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| E-mail address: _____ | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| Data Package Options (circle if required) Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only) Type III (Reduced non-CLP) NJ DKQP TX TRRP-13 NYSDEC Category A or B MA MCP CT RCP | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| | | EDD Required? <input checked="" type="radio"/> Yes <input type="radio"/> No If yes, format: <u>DTS2010</u> | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | | | |
| | | Site-Specific QC (MS/MSD/Dup)? Yes <input type="radio"/> No <input type="radio"/> (If yes, indicate QC sample and submit triplicate sample volume.) | | Temperature upon receipt <u>0.751°C</u> | | | |

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0717

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564547

| Client Information | | | | Matrix | | | | Analysis Requested | | | | | | For Lab Use Only | | | | | |
|--|--|---------------------|--|---|-----------------------------------|---------------------------------|----------------------------------|---|----------------------------------|--|--|--|--|--------------------------|--|---|-------------|--------------------------|--|
| Client: <u>Western Solutions</u> | | Acct. #: | | <input type="checkbox"/> Soil | <input type="checkbox"/> Sediment | <input type="checkbox"/> Tissue | <input type="checkbox"/> Potable | <input type="checkbox"/> Ground | <input type="checkbox"/> Surface | Preservation and Filtration Codes | | | | | | FSC: _____ | SCR#: _____ | | |
| Project Name/#: <u>IDOT-063</u> | | PWSID #: | | | | | | | | NOCs SNOCs Total Metals TLD/SLP metals PH | | | | | | Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other | | | |
| Project Manager: <u>S. Babusukumar</u> | | P.O. #: | | Water | | NPDES | | Other: | | | | | | | | Total # of Containers NOCs SNOCs Total Metals TLD/SLP metals PH | | | |
| Sampler: <u>T. Walls</u> | | Quote #: | | Grab | | Composite | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | | | |
| Sample Identification | | Collected | | Grab | | Composite | | Soil | | Sediment | | | | | | | | Tissue | |
| <u>MC-4 (0-6)-100517</u> | | <u>10-5-17 1320</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>MC-4 (6-12)-100517</u> | | <u>1325</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>MC-3 (0-6)-100517</u> | | <u>1340</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>MC-3 (6-12)-100517</u> | | <u>1345</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>MC-2 (0-6)-100517</u> | | <u>1415</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>MC-2 (6-12)-100517</u> | | <u>1420</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>MC-1 (0-6)-100517</u> | | <u>1435</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>MC-1 (6-12)-100517</u> | | <u>1440</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>BR-1 (0-2)-100517</u> | | <u>1500</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| <u>BR-1 (0-2)-100517D</u> | | <u>10-5-17 1500</u> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> | |
| Turnaround Time (TAT) Requested (please circle) <input checked="" type="radio"/> Standard <input type="radio"/> Rush (Rush TAT is subject to laboratory approval and surcharge.) | | | | Relinquished by: <u>Zumeth A. Wiley</u> | | Date: <u>10-5-17</u> | | Time: <u>1700</u> | | Received by: | | Date: | | Time: | | | | | |
| Date results are needed: _____ | | | | Relinquished by: | | Date: | | Time: | | Received by: | | Date: | | Time: | | | | | |
| E-mail address: _____ | | | | Relinquished by: | | Date: | | Time: | | Received by: | | Date: | | Time: | | | | | |
| Data Package Options (circle if required) Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only) Type III (Reduced non-CLP) NJ DKQP TX TRRP-13 NYSDEC Category A or B MA MCP CT RCP | | | | Relinquished by: | | Date: | | Time: | | Received by: | | Date: | | Time: | | | | | |
| | | | | Relinquished by: | | Date: | | Time: | | Received by: <u>[Signature]</u> | | Date: <u>10-6-17</u> | | Time: <u>935</u> | | | | | |
| | | | | EDD Required? <input checked="" type="radio"/> Yes <input type="radio"/> No | | If yes, format: <u>DIS 2010</u> | | Site-Specific QC (MS/MSD/Dup)? <input type="radio"/> Yes <input type="radio"/> No | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | | Temperature upon receipt <u>0.75.1</u> °C | | | | | | | |

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The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0717

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

| | | | |
|-------------------------|--|-----------------|-------------------------------|
| BMQL | Below Minimum Quantitation Level | mg | milligram(s) |
| C | degrees Celsius | mL | milliliter(s) |
| cfu | colony forming units | MPN | Most Probable Number |
| CP Units | cobalt-chloroplatinate units | N.D. | non-detect |
| F | degrees Fahrenheit | ng | nanogram(s) |
| g | gram(s) | NTU | nephelometric turbidity units |
| IU | International Units | pg/L | picogram/liter |
| kg | kilogram(s) | RL | Reporting Limit |
| L | liter(s) | TNTC | Too Numerous To Count |
| lb. | pound(s) | µg | microgram(s) |
| m³ | cubic meter(s) | µL | microliter(s) |
| meq | milliequivalents | umhos/cm | micromhos/cm |
| < | less than | | |
| > | greater than | | |
| ppm | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas. | | |
| ppb | parts per billion | | |
| Dry weight basis | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis. | | |

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

| Qualifier | Definition |
|----------------|---|
| C | Result confirmed by reanalysis |
| D1 | Indicates for dual column analyses that the result is reported from column 1 |
| D2 | Indicates for dual column analyses that the result is reported from column 2 |
| E | Concentration exceeds the calibration range |
| J (or G, I, X) | Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL) |
| P | Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported. |
| U | Analyte was not detected at the value indicated |
| V | Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference. |
| W | The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L. |
| Z | Laboratory Defined - see analysis report |

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.



Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 330: US Rte. 45 - Metra Rail to 187th Street Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

18700-18800 blocks of S. LaGrange Rd (US Rte. 45) (ISGS Site No. 3357-4)

City: Mokena State: IL Zip Code: _____

County: Will Township: Frankfort

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.548161009 Longitude: -87.852017153

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

- GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

Zip Code: 60196-1096 Phone: 847-705-4101

Contact: Sam Mead

Contact: Sam Mead

Email, if available: Sam.Mead@illinois.gov

Email, if available: Sam.Mead@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 330: US Rte. 45 - Metra Rail to 187th Street

Latitude: 41.548161009 Longitude: -87.852017153

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

LOCATIONS MC-1 THROUGH MC-3, AND MC-5 THROUGH MC-8 WERE SAMPLED ADJACENT TO ISGS SITE No. 3357-4. SEE FIGURE 3-1 AND TABLE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT FOR SAMPLING DETAILS.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

EUROFINS ANALYTICAL REPORT - GROUP NUMBER: 1860028
ALSO SEE FIGURE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Michael A. Castillo, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Weston Solutions, Inc.
 Street Address: 300 Circle Plaza, Suite 202
 City: Mundelein State: IL Zip Code: 60060
 Phone: (224) 864-7200

Michael A. Castillo, P.G.
 Printed Name:

Michael A. Castillo
 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

7 December 2017
 Date:



Summary Table of ISGS Site No. 3357-4
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-1(0-6)-100517 | MC-1(6-12)-100517 | MC-2(0-6)-100517 | MC-2(6-12)-100517 | MC-3(0-6)-100517 | MC-3(6-12)-100517 | MC-5(0-6)-100517 | MC-5(6-12)-100517 | Soil Reference Concentrations ^A |
|------------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|--|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | |
| Location ID | MC-1 | MC-1 | MC-2 | MC-2 | MC-3 | MC-3 | MC-5 | MC-5 | |
| Depth | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | |
| Parameter | | | | | | | | | |
| Laboratory pH (s.u.) | 7.87 | 8.19 | 7.79 | 8.32 | 7.97 | 8.20 | 7.67 | 8.07 | <6.25 ; >9.0 |
| VOCs (ug/kg) | | | | | | | | | |
| Acetone | 45 | 18 | 33 | 6 J | 7 J | 30 | 23 | 15 J | 25000 |
| Benzene | ND | 2 J | 1 J | 2 J | 0.7 J | 0.8 J | 1 J | 0.7 J | 30 |
| Carbon disulfide | 5 J | ND | ND | ND | ND | ND | ND | ND | 9000 |
| Ethylbenzene | ND | ND | ND | ND | ND | ND | ND | ND | 13000 |
| Methyl ethyl ketone | 4 J | ND | 5 J | ND | ND | 5 J | 4 J | ND | --- |
| Toluene | ND | 3 J | 2 J | 3 J | 0.8 J | 1 J | 3 J | ND | 12000 |
| Xylene (Total) | ND | ND | ND | 0.9 J | ND | ND | 1 J | ND | 5600 |
| SVOCs (ug/kg) | | | | | | | | | |
| 2-Methylnaphthalene | 4 J | ND | ND | ND | ND | ND | 11 J | ND | --- |
| 4-Methylphenol | ND | ND | ND | ND | ND | ND | 260 J | ND | --- |
| Acenaphthene | ND | ND | ND | ND | ND | ND | ND | ND | 570000 |
| Acenaphthylene | ND | ND | ND | ND | ND | ND | ND | ND | --- |
| Anthracene | ND | ND | ND | ND | ND | ND | ND | ND | 1.20E+07 |
| Benzo(a)anthracene | ND | ND | ND | 5 J | ND | ND | 9 J | 5 J | 900 / 1100 / 1800 |
| Benzo(a)pyrene | ND | ND | 4 J | 4 J | ND | ND | 12 J | 6 J | 90 / 1300 / 2100 |
| Benzo(b)fluoranthene | 6 J | 5 J | 7 J | 10 J | 13 J | 9 J | 22 | 12 J | 900 / 1500 / 2100 |
| Benzo(g,h,i)perylene | 6 J | 9 J | 10 J | 22 | 25 | 16 J | 10 J | 20 J | --- |
| Benzo(k)fluoranthene | ND | ND | ND | ND | ND | ND | 11 J | 5 J | 9000 |
| Chrysene | 5 J | ND | 8 J | 13 J | 11 J | 12 J | 20 J | 12 J | 88000 |
| Dibenzo(a,h)anthracene | ND | ND | ND | ND | ND | 4 J | ND | ND | 90 / 200 / 420 |
| Fluoranthene | 6 J | ND | 7 J | 7 J | ND | 6 J | 35 | 9 J | 3100000 |
| Fluorene | ND | ND | ND | ND | ND | ND | ND | ND | 560000 |
| Indeno(1,2,3-cd)pyrene | ND | ND | ND | 6 J | 8 J | 5 J | 8 J | 6 J | 900 / 900 / 1600 |
| Naphthalene, SVOC | 5 J | ND | 4 J | ND | ND | ND | 28 | ND | 1800 |
| Phenanthrene | 9 J | ND | 6 J | 21 | 4 J | 11 J | 35 | 7 J | --- |
| Pyrene | 5 J | ND | 5 J | 11 J | 4 J | 9 J | 20 J | 9 J | 2300000 |

Summary Table of ISGS Site No. 3357-4
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-1(0-6)-100517 | MC-1(6-12)-100517 | MC-2(0-6)-100517 | MC-2(6-12)-100517 | MC-3(0-6)-100517 | MC-3(6-12)-100517 | MC-5(0-6)-100517 | MC-5(6-12)-100517 | Soil Reference Concentrations ^A |
|-----------------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|--|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | |
| Location ID | MC-1 | MC-1 | MC-2 | MC-2 | MC-3 | MC-3 | MC-5 | MC-5 | |
| Depth | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | |
| Parameter | | | | | | | | | |
| Total Metals (mg/kg) | | | | | | | | | |
| Arsenic, Total | 3.7 | 4.13 | 6.8 | 8 | 7.59 | 4.09 | 6.87 | 8.43 | 11.3 / 13.0 |
| Barium, Total | 46.7 | 73.5 | 121 | 71.9 | 86 | 72.2 | 157 | 84.2 | 1500 |
| Beryllium, Total | 0.516 J | 0.623 | 1.15 | 0.761 | 0.916 | 0.822 | 1.38 | 0.994 | 22 |
| Cadmium, Total | 0.235 J | 0.437 J | 2.24 | 0.446 J | 0.467 J | 0.381 J | 0.516 J | 0.42 J | 5.2 |
| Calcium, Total | 28100 | 80600 | 17800 | 59800 | 57800 | 59600 | 9080 | 55900 | --- |
| Chromium, Total | 16.9 | 25.4 | 33.9 | 28.2 | 31.2 | 29.5 | 38.1 J | 32.8 | 21 |
| Cobalt, Total | 6.49 | 13.2 | 13.4 | 10.7 | 11.2 | 11.8 | 12.4 | 12.2 | 20 |
| Copper, Total | 11.8 | 34.4 | 20.1 | 17.7 | 20.4 | 17.3 | 21.9 | 18.5 | 2900 |
| Iron, Total | 15200 | 21100 | 25800 | 24900 | 27400 | 23200 | 25500 | 28800 | 15000 / 15900 |
| Lead, Total | 8.63 J | 11.5 J | 17.8 J | 11.3 J | 13.2 J | 10.9 J | 23.4 J | 12.5 J | 107 |
| Magnesium, Total | 13900 J | 42100 J | 14600 J | 27800 J | 24500 J | 27600 J | 9310 J | 25300 J | 325000 |
| Manganese, Total | 311 J | 407 J | 217 J | 408 J | 410 J | 421 J | 168 J | 493 J | 630 / 636 |
| Mercury, Total | ND | ND | 0.0162 J | ND | 0.0127 J | ND | 0.038 J | ND | 0.89 |
| Nickel, Total | 18.2 | 26.7 | 31.1 | 29.8 | 31.9 | 29.7 | 30.3 | 31 | 100 |
| Potassium, Total | 2970 | 4160 | 5090 | 5540 | 5860 | 6140 | 5740 | 6880 | --- |
| Silver, Total | ND | ND | 0.384 J | ND | 0.362 J | 0.283 J | 0.496 J | 0.58 | 4.4 |
| Sodium, Total | 219 | 198 | 510 | 218 | 733 | 218 | 611 J | 239 | --- |
| Vanadium, Total | 23.6 | 34 | 51.9 | 37.7 | 43.2 | 38.2 | 60.1 J | 45.1 | 550 |
| Zinc, Total | 38.3 J | 46.7 J | 181 J | 55.6 J | 58.3 J | 54 J | 81.2 J | 55.9 J | 5100 |
| TCLP Metals (mg/l) | | | | | | | | | |
| Arsenic, TCLP | 0.0118 J | 0.0137 J | ND | ND | 0.0413 | 0.0138 J | 0.0247 | ND | 0.05 |
| Barium, TCLP | 0.0665 | 0.156 | 0.0207 | 0.0624 | 0.417 | 0.0683 | 0.367 | 0.0603 J | 2 |
| Beryllium, TCLP | ND | ND | ND | ND | 0.0054 | ND | 0.0038 J | ND | 0.004 |
| Chromium, TCLP | 0.013 J | 0.0411 | ND | 0.0142 J | 0.119 | 0.018 | 0.0968 | 0.0139 J | 0.1 |
| Cobalt, TCLP | 0.0034 J | 0.0104 | ND | 0.0031 J | 0.0346 | 0.0049 J | 0.0258 | 0.0028 J | 1 |
| Copper, TCLP | 0.0124 | 0.0267 | ND | 0.0085 J | 0.091 | 0.011 | 0.0569 | 0.0076 J | 0.65 |
| Iron, TCLP | 9.75 | 29.9 | 0.792 | 9.04 | 110 | 11.5 | 71.3 | 8.83 | 5 |
| Lead, TCLP | ND | 0.0121 J | ND | ND | 0.0542 | 0.0063 J | 0.0319 | ND | 0.0075 |
| Manganese, TCLP | 0.11 | 0.231 | 0.0243 | 0.0834 | 0.59 | 0.108 | 0.398 | 0.0937 | 0.15 |
| Mercury, TCLP | ND | ND | ND | ND | 0.00013 J | ND | 0.000086 J | ND | 0.002 |
| Nickel, TCLP | 0.0121 | 0.0379 | ND | 0.0119 | 0.114 | 0.015 | 0.0764 | 0.0132 | 0.1 |
| Selenium, TCLP | ND | ND | ND | ND | ND | ND | 0.0105 J | ND | 0.05 |
| Zinc, TCLP | 0.0199 J | 0.0602 | ND | 0.0187 J | 0.169 | 0.0232 | 0.133 | 0.0194 J | 5 |

Summary Table of ISGS Site No. 3357-4
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-1(0-6)-100517 | MC-1(6-12)-100517 | MC-2(0-6)-100517 | MC-2(6-12)-100517 | MC-3(0-6)-100517 | MC-3(6-12)-100517 | MC-5(0-6)-100517 | MC-5(6-12)-100517 | Soil Reference Concentrations ^A |
|---------------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|--|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | |
| Location ID | MC-1 | MC-1 | MC-2 | MC-2 | MC-3 | MC-3 | MC-5 | MC-5 | |
| Depth | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | |
| Parameter | | | | | | | | | |
| SPLP Metals (mg/l) | | | | | | | | | |
| Barium, SPLP | 0.658 | 0.528 | 0.62 | 0.516 | 0.522 | 0.561 | 0.395 | 0.57 | 2 |
| Cadmium, SPLP | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 |
| Cobalt, SPLP | 0.0145 | 0.0107 | 0.0128 | 0.0203 | 0.0285 | 0.0121 | 0.0187 | 0.0114 | 1 |
| Copper, SPLP | ND | ND | ND | 0.0184 | ND | ND | ND | ND | 0.65 |
| Iron, SPLP | ND | ND | 0.0939 J | ND | 0.664 | ND | 0.216 | 0.135 J | 5 |
| Lead, SPLP | 0.0094 J | 0.0147 J | 0.0174 | 0.0109 J | 0.0089 J | 0.0066 J | ND | 0.0069 J | 0.0075 |
| Manganese, SPLP | 5.9 | 3.72 | 6.06 | 3.01 | 4.61 | 2.75 | 2.72 | 3.09 | 0.15 |
| Nickel, SPLP | 0.0074 J | 0.014 | 0.0056 J | 0.0157 | 0.0116 | 0.011 | 0.0136 | 0.0101 | 0.1 |
| Selenium, SPLP | ND | ND | ND | ND | ND | ND | ND | ND | 0.05 |
| Zinc, SPLP | 0.0252 | 0.0121 J | 0.0468 | 0.0121 J | 0.0531 | 0.0285 | 0.0085 J | 0.0097 J | 5 |

Summary Table of ISGS Site No. 3357-4
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-5(6-12)-100517D | MC-6(0-6)-100517 | MC-6(6-12)-100517 | MC-7(0-6)-100517 | MC-7(6-12)-100517 | MC-8(0-6)-100517 | MC-8(6-12)-100517 | Soil Reference Concentrations ^A |
|------------------------|--------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|--|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | |
| Location ID | MC-5 | MC-6 | MC-6 | MC-7 | MC-7 | MC-8 | MC-8 | |
| Depth | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | |
| Parameter | | | | | | | | |
| Laboratory pH (s.u.) | 8.14 | 7.97 | 8.08 | 8.39 | 8.13 | 8.34 | 8.12 | <6.25 ; >9.0 |
| VOCs (ug/kg) | | | | | | | | |
| Acetone | 9 J | 14 J | 22 | 44 | 10 J | 9 J | 10 J | 25000 |
| Benzene | 0.6 J | 0.7 J | 0.8 J | 1 J | 2 J | 0.6 J | 1 J | 30 |
| Carbon disulfide | ND | ND | ND | ND | ND | ND | ND | 9000 |
| Ethylbenzene | ND | ND | ND | ND | 1 J | ND | ND | 13000 |
| Methyl ethyl ketone | ND | ND | 5 J | 9 | ND | ND | ND | --- |
| Toluene | 0.8 J | 1 J | 0.9 J | 2 J | 4 J | ND | 1 J | 12000 |
| Xylene (Total) | ND | ND | ND | ND | 1 J | ND | ND | 5600 |
| SVOCs (ug/kg) | | | | | | | | |
| 2-Methylnaphthalene | ND | 6 J | 30 | 8 J | ND | 14 J | ND | --- |
| 4-Methylphenol | ND | ND | ND | ND | ND | ND | ND | --- |
| Acenaphthene | ND | 12 J | ND | 5 J | ND | ND | ND | 570000 |
| Acenaphthylene | ND | ND | ND | 6 J | ND | ND | ND | --- |
| Anthracene | ND | ND | ND | 7 J | ND | ND | ND | 1.20E+07 |
| Benzo(a)anthracene | 5 J | 9 J | 5 J | 14 J | 4 J | 5 J | ND | 900 / 1100 / 1800 |
| Benzo(a)pyrene | 5 J | 10 J | 6 J | 19 J | 8 J | 8 J | 5 J | 90 / 1300 / 2100 |
| Benzo(b)fluoranthene | 14 J | 17 J | 14 J | 22 | 12 J | 9 J | 8 J | 900 / 1500 / 2100 |
| Benzo(g,h,i)perylene | 25 | 15 J | 15 J | 29 | 30 | 23 | 14 J | --- |
| Benzo(k)fluoranthene | 6 J | 9 J | ND | 10 J | 7 J | 4 J | 5 J | 9000 |
| Chrysene | 15 J | 15 J | 9 J | 26 | 15 J | 18 J | 9 J | 88000 |
| Dibenzo(a,h)anthracene | ND | ND | ND | 6 J | 5 J | ND | ND | 90 / 200 / 420 |
| Fluoranthene | 6 J | 17 J | 6 J | 21 | 5 J | 4 J | 5 J | 3100000 |
| Fluorene | ND | 16 J | 4 J | 9 J | ND | ND | ND | 560000 |
| Indeno(1,2,3-cd)pyrene | 7 J | 9 J | 7 J | 11 J | 11 J | 6 J | 5 J | 900 / 900 / 1600 |
| Naphthalene, SVOC | ND | ND | 11 J | 4 J | ND | ND | ND | 1800 |
| Phenanthrene | 11 J | 19 J | 8 J | 22 | 8 J | 11 J | 6 J | --- |
| Pyrene | 9 J | 17 J | 7 J | 26 | 7 J | 12 J | 6 J | 2300000 |

Summary Table of ISGS Site No. 3357-4
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-5(6-12)-100517D | MC-6(0-6)-100517 | MC-6(6-12)-100517 | MC-7(0-6)-100517 | MC-7(6-12)-100517 | MC-8(0-6)-100517 | MC-8(6-12)-100517 | Soil Reference Concentrations ^A |
|-----------------------------|--------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|--|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | |
| Location ID | MC-5 | MC-6 | MC-6 | MC-7 | MC-7 | MC-8 | MC-8 | |
| Depth | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | |
| Parameter | | | | | | | | |
| Total Metals (mg/kg) | | | | | | | | |
| Arsenic, Total | 8.96 | 7.78 | 6.96 | 6.9 | 6.56 | 9.86 | 11.8 | 11.3 / 13.0 |
| Barium, Total | 77.9 | 76 | 70.7 | 54.1 | 77.5 | 56 | 73.1 | 1500 |
| Beryllium, Total | 0.907 | 0.911 | 0.887 | 0.503 J | 0.811 | 0.842 | 0.808 | 22 |
| Cadmium, Total | 0.483 J | 0.534 J | 0.447 J | 0.403 J | 0.441 J | 0.503 J | 0.595 | 5.2 |
| Calcium, Total | 65600 | 60400 | 60600 | 92500 | 60900 | 43500 | 63300 | --- |
| Chromium, Total | 32.8 | 30.8 | 31.3 | 22.1 | 30.2 | 26.5 | 27.3 | 21 |
| Cobalt, Total | 11.6 | 12.1 | 15 | 8.42 | 12.5 | 14.8 | 13.4 | 20 |
| Copper, Total | 19.8 | 23.6 | 19.5 | 16.7 | 17.9 | 27.6 | 24.7 | 2900 |
| Iron, Total | 27100 | 28700 | 27300 | 19300 | 25300 | 28000 | 30200 | 15000 / 15900 |
| Lead, Total | 12.6 J | 22 J | 13.3 J | 12.4 J | 11.2 J | 18.4 J | 17.5 J | 107 |
| Magnesium, Total | 28900 J | 30400 J | 27600 J | 53300 J | 30100 J | 24900 J | 24500 J | 325000 |
| Manganese, Total | 440 J | 483 J | 521 J | 441 J | 464 J | 567 J | 550 J | 630 / 636 |
| Mercury, Total | ND | ND | ND | 0.012 J | ND | 0.014 J | ND | 0.89 |
| Nickel, Total | 31.9 | 32.7 | 32.9 | 22.7 | 32.6 | 35.5 | 31.2 | 100 |
| Potassium, Total | 7140 | 6090 | 6340 | 4560 | 6240 | 5470 | 5280 | --- |
| Silver, Total | 0.493 J | 0.509 J | 0.548 J | ND | 0.358 J | 0.38 J | 0.51 J | 4.4 |
| Sodium, Total | 300 | 828 | 516 | 708 | 610 | 600 | 180 | --- |
| Vanadium, Total | 45.3 | 42 | 43.5 | 32.5 | 40.7 | 35.6 | 39.5 | 550 |
| Zinc, Total | 56.9 J | 69.8 J | 59 J | 44.1 J | 55.9 J | 76.4 J | 61.2 J | 5100 |
| TCLP Metals (mg/l) | | | | | | | | |
| Arsenic, TCLP | 0.0163 J | 0.0358 | ND | 0.0372 | 0.011 J | 0.0385 | ND | 0.05 |
| Barium, TCLP | 0.119 J | 0.286 | 0.0644 | 0.354 | 0.0483 | 0.202 | 0.0387 | 2 |
| Beryllium, TCLP | ND | 0.0038 J | ND | 0.0039 J | ND | 0.0041 J | ND | 0.004 |
| Chromium, TCLP | 0.0293 J | 0.0885 | 0.0162 | 0.0951 | 0.0116 J | 0.0867 | 0.0117 J | 0.1 |
| Cobalt, TCLP | 0.0092 J | 0.031 | 0.0039 J | 0.0268 | 0.0025 J | 0.0243 | 0.0034 J | 1 |
| Copper, TCLP | 0.0185 J | 0.0788 | 0.0093 J | 0.0749 | 0.0079 J | 0.078 | 0.0097 J | 0.65 |
| Iron, TCLP | 20.9 J | 78.3 | 10.9 | 76 | 7.65 | 81.1 | 8.66 | 5 |
| Lead, TCLP | 0.0097 J | 0.0528 | ND | 0.0649 | 0.007 J | 0.0378 | ND | 0.0075 |
| Manganese, TCLP | 0.197 J | 0.876 | 0.0825 | 0.719 | 0.0496 | 0.483 | 0.124 | 0.15 |
| Mercury, TCLP | ND | 0.0001 J | ND | 0.00011 J | ND | 0.000092 J | ND | 0.002 |
| Nickel, TCLP | 0.0263 J | 0.0878 | 0.0143 | 0.0779 | 0.0106 | 0.089 | 0.0106 | 0.1 |
| Selenium, TCLP | ND | 0.0155 J | ND | ND | ND | 0.0123 J | ND | 0.05 |
| Zinc, TCLP | 0.0385 J | 0.167 | 0.0214 | 0.198 | 0.0166 J | 0.196 | 0.0219 | 5 |

Summary Table of ISGS Site No. 3357-4
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-5(6-12)-100517D | MC-6(0-6)-100517 | MC-6(6-12)-100517 | MC-7(0-6)-100517 | MC-7(6-12)-100517 | MC-8(0-6)-100517 | MC-8(6-12)-100517 | Soil Reference Concentrations ^A |
|---------------------------|--------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|--|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | |
| Location ID | MC-5 | MC-6 | MC-6 | MC-7 | MC-7 | MC-8 | MC-8 | |
| Depth | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | |
| Parameter | | | | | | | | |
| SPLP Metals (mg/l) | | | | | | | | |
| Barium, SPLP | 0.498 | 0.531 | 0.386 | 0.557 | 0.42 | 0.332 | 0.378 | 2 |
| Cadmium, SPLP | ND | ND | ND | ND | ND | ND | 0.0024 J | 0.005 |
| Cobalt, SPLP | 0.01 | 0.0207 | 0.0107 | 0.0174 | 0.0143 | 0.007 | 0.0228 | 1 |
| Copper, SPLP | ND | ND | ND | ND | ND | ND | ND | 0.65 |
| Iron, SPLP | ND | 0.0951 J | 0.114 J | 0.119 J | ND | ND | 0.143 J | 5 |
| Lead, SPLP | ND | 0.0119 J | 0.007 J | 0.0113 J | 0.0075 J | ND | 0.0128 J | 0.0075 |
| Manganese, SPLP | 2.78 | 5.02 | 2.35 | 5.19 | 2.46 | 2.66 | 5.15 | 0.15 |
| Nickel, SPLP | 0.0101 | 0.0205 | 0.0118 | 0.0142 | 0.0111 | 0.0153 | 0.0206 | 0.1 |
| Selenium, SPLP | ND | ND | ND | ND | ND | ND | 0.0103 J | 0.05 |
| Zinc, SPLP | 0.0115 J | 0.0586 | 0.007 J | 0.113 | 0.108 | ND | 0.0912 | 5 |

Notes:

--- - not applicable or value not available.

^A - Soil reference concentrations from MAC Table. Background values for Chicago corporate limits and MSA counties are included, as applicable.

ND - Constituent not detected above the reporting limit.

J - Estimated concentration.

Shaded values indicate concentration **exceeds** Reference Concentration.

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Report Date: October 20, 2017

Project: IDOT Job 063

Account #: 11924
Group Number: 1860028
PO Number: 0088208
State of Sample Origin: IL

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To Weston Solutions

Attn: Andris Slesers

Respectfully Submitted,



Bonnie Stadelmann
Senior Project Manager

(312) 590-3133

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 23 | 6 | 17 | 0.68 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | 4 J | 3 | 9 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 9 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 9 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | 3 J | 0.9 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | 1 J | 0.9 | 4 | 0.68 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -51%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -59%

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 22 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 22 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 22 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 9 J | 4 | 22 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 12 J | 4 | 22 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 22 | 4 | 22 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 10 J | 4 | 22 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 11 J | 4 | 22 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 21 | 42 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 85 | 210 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 85 | 210 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 42 | 85 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 21 | 42 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 21 | 42 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 42 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 21 | 42 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 21 | 42 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 20 J | 4 | 22 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 22 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 21 | 42 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 21 | 42 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 21 | 42 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 21 | 42 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 130 | 420 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 21 | 42 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 85 | 210 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 21 | 42 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 85 | 210 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 210 | 640 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 380 | 1,300 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 85 | 210 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 21 | 42 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 85 | 220 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 35 | 4 | 22 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 22 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 22 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 21 | 42 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 210 | 640 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 42 | 210 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 8 J | 4 | 22 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 21 | 42 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 11 J | 4 | 22 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | 260 | 21 | 42 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | 28 | 4 | 22 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 21 | 42 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 85 | 210 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 85 | 210 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 21 | 42 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 210 | 640 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 21 | 42 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 21 | 42 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 85 | 210 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 42 | 220 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 35 | 4 | 22 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 21 | 42 | 1 |
| 10726 | Pyrene | 129-00-0 | 20 J | 4 | 22 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 21 | 42 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 21 | 42 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 21 | 42 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.10 | 2.52 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.87 | 1.21 | 2.52 | 1 |
| 06946 | Barium | 7440-39-3 | 157 | 0.0554 | 0.630 | 1 |
| 06947 | Beryllium | 7440-41-7 | 1.38 | 0.0995 | 0.630 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.516 J | 0.0680 | 0.630 | 1 |
| 01650 | Calcium | 7440-70-2 | 9,080 | 4.19 | 25.2 | 1 |
| 06951 | Chromium | 7440-47-3 | 38.1 | 0.214 | 1.89 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.4 | 0.139 | 0.630 | 1 |
| 06953 | Copper | 7440-50-8 | 21.9 | 0.302 | 1.26 | 1 |
| 01654 | Iron | 7439-89-6 | 25,500 | 10.1 | 25.2 | 1 |
| 06955 | Lead | 7439-92-1 | 23.4 | 0.756 | 1.89 | 1 |
| 01657 | Magnesium | 7439-95-4 | 9,310 | 3.06 | 12.6 | 1 |
| 06958 | Manganese | 7439-96-5 | 168 | 0.105 | 0.630 | 1 |
| 06961 | Nickel | 7440-02-0 | 30.3 | 0.189 | 1.26 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,740 | 21.0 | 63.0 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.17 | 2.52 | 1 |
| 06966 | Silver | 7440-22-4 | 0.496 J | 0.302 | 0.630 | 1 |
| 01667 | Sodium | 7440-23-5 | 611 | 21.0 | 126 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.73 | 3.78 | 1 |
| 06971 | Vanadium | 7440-62-2 | 60.1 | 0.189 | 0.630 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 81.2 | mg/kg 0.302 | mg/kg 2.52 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg 0.0380 J | mg/kg 0.0121 | mg/kg 0.121 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | SW-846 9045C modified n.a. | Std. Units 7.67 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 21.4 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 01:07 | Stephen C Nolte | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:25 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 13:23 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I01

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 01:58 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:30 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251121
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I02

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.395 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0187 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.216 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.72 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0136 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0085 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:21 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:21 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:11 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251121
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I02

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251122
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I03

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0247 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.367 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0038 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0968 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0258 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0569 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 71.3 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0319 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.398 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0764 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0105 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.133 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.000086 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251122
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I03

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:05 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 00:56 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 15 J | 5 | 15 | 0.63 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.63 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.63 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.63 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.63 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.63 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Toluene | 108-88-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.63 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 6 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 12 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 20 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 5 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 12 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 9 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 6 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 39 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 7 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 9 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 39 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.975 | 2.24 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.43 | 1.08 | 2.24 | 1 |
| 06946 | Barium | 7440-39-3 | 84.2 | 0.0493 | 0.560 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.994 | 0.0885 | 0.560 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.420 J | 0.0605 | 0.560 | 1 |
| 01650 | Calcium | 7440-70-2 | 55,900 | 3.73 | 22.4 | 1 |
| 06951 | Chromium | 7440-47-3 | 32.8 | 0.191 | 1.68 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.2 | 0.123 | 0.560 | 1 |
| 06953 | Copper | 7440-50-8 | 18.5 | 0.269 | 1.12 | 1 |
| 01654 | Iron | 7439-89-6 | 28,800 | 9.02 | 22.4 | 1 |
| 06955 | Lead | 7439-92-1 | 12.5 | 0.672 | 1.68 | 1 |
| 01657 | Magnesium | 7439-95-4 | 25,300 | 2.72 | 11.2 | 1 |
| 06958 | Manganese | 7439-96-5 | 493 | 0.0930 | 0.560 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.0 | 0.168 | 1.12 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,880 | 18.7 | 56.0 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.24 | 1 |
| 06966 | Silver | 7440-22-4 | 0.580 | 0.269 | 0.560 | 1 |
| 01667 | Sodium | 7440-23-5 | 239 | 18.7 | 112 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.54 | 3.36 | 1 |
| 06971 | Vanadium | 7440-62-2 | 45.1 | 0.168 | 0.560 | 1 |
| 06972 | Zinc | 7440-66-6 | 55.9 | 0.269 | 2.24 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0118 | 0.118 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.6 C. | n.a. | 8.07 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|-----------------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | SM 2540 G-1997 | % | % | % |
| | | | %Moisture Calc | | | |
| 00111 | Moisture | n.a. | 16.6 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 17:48 | Linda C Pape | 0.63 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 13:47 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:27 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:32 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251124
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I05

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.570 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0114 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.135 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0069 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 3.09 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0101 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0097 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:29 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:29 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:20 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251124
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I05

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251125
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I06

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------------|------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | SW-846 6010B | | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0603 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0139 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0028 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0076 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 8.83 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0937 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0132 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0194 J | 0.0065 | 0.0200 | 1 |
| | SW-846 7470A | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251125
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I06

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:25 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:04 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 9 J | 6 | 16 | 0.64 |
| 10237 | Benzene | 71-43-2 | 0.6 J | 0.4 | 4 | 0.64 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.64 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.64 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.64 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.64 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.64 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.64 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.64 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.64 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Toluene | 108-88-3 | 0.8 J | 0.8 | 4 | 0.64 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.64 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 5 J | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 14 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 25 | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 6 J | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 81 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 81 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 81 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 15 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 81 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 81 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 7 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 81 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 81 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 81 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 11 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 9 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.05 | 2.41 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.96 | 1.16 | 2.41 | 1 |
| 06946 | Barium | 7440-39-3 | 77.9 | 0.0530 | 0.602 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.907 | 0.0951 | 0.602 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.483 J | 0.0650 | 0.602 | 1 |
| 01650 | Calcium | 7440-70-2 | 65,600 | 20.1 | 120 | 5 |
| 06951 | Chromium | 7440-47-3 | 32.8 | 0.205 | 1.81 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.6 | 0.132 | 0.602 | 1 |
| 06953 | Copper | 7440-50-8 | 19.8 | 0.289 | 1.20 | 1 |
| 01654 | Iron | 7439-89-6 | 27,100 | 9.70 | 24.1 | 1 |
| 06955 | Lead | 7439-92-1 | 12.6 | 0.723 | 1.81 | 1 |
| 01657 | Magnesium | 7439-95-4 | 28,900 | 2.93 | 12.0 | 1 |
| 06958 | Manganese | 7439-96-5 | 440 | 0.100 | 0.602 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.9 | 0.181 | 1.20 | 1 |
| 01662 | Potassium | 7440-09-7 | 7,140 | 20.1 | 60.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.12 | 2.41 | 1 |
| 06966 | Silver | 7440-22-4 | 0.493 J | 0.289 | 0.602 | 1 |
| 01667 | Sodium | 7440-23-5 | 300 | 20.1 | 120 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.65 | 3.61 | 1 |
| 06971 | Vanadium | 7440-62-2 | 45.3 | 0.181 | 0.602 | 1 |
| 06972 | Zinc | 7440-66-6 | 56.9 | 0.289 | 2.41 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0119 | 0.119 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.14 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.1 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 18.6 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 01:53 | Stephen C Nolte | 0.64 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 14:11 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:34 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:31 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:38 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251127
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I08

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.498 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0100 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.78 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0101 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0115 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:33 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:33 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:22 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251127
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I08

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251128
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I09

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0163 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.119 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0293 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0092 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0185 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 20.9 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0097 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.197 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0263 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0385 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251128
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I09

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:28 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:06 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 14 J | 6 | 16 | 0.66 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.66 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.66 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.66 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.66 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.66 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.66 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.66 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.66 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.66 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Toluene | 108-88-3 | 1 J | 0.8 | 4 | 0.66 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.66 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | 12 J | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 9 J | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 10 J | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 17 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 15 J | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 9 J | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 81 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 81 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 81 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 15 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 81 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 81 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 17 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | 16 J | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 9 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 6 J | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 81 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 81 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 81 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 19 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 17 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals | | SW-846 6010B | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.995 | 2.29 | 1 |
| 06935 | Arsenic | 7440-38-2 | 7.78 | 1.10 | 2.29 | 1 |
| 06946 | Barium | 7440-39-3 | 76.0 | 0.0503 | 0.572 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.911 | 0.0903 | 0.572 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.534 J | 0.0617 | 0.572 | 1 |
| 01650 | Calcium | 7440-70-2 | 60,400 | 3.81 | 22.9 | 1 |
| 06951 | Chromium | 7440-47-3 | 30.8 | 0.194 | 1.71 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.1 | 0.126 | 0.572 | 1 |
| 06953 | Copper | 7440-50-8 | 23.6 | 0.274 | 1.14 | 1 |
| 01654 | Iron | 7439-89-6 | 28,700 | 9.20 | 22.9 | 1 |
| 06955 | Lead | 7439-92-1 | 22.0 | 0.686 | 1.71 | 1 |
| 01657 | Magnesium | 7439-95-4 | 30,400 | 2.78 | 11.4 | 1 |
| 06958 | Manganese | 7439-96-5 | 483 | 0.0949 | 0.572 | 1 |
| 06961 | Nickel | 7440-02-0 | 32.7 | 0.171 | 1.14 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,090 | 19.1 | 57.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.06 | 2.29 | 1 |
| 06966 | Silver | 7440-22-4 | 0.509 J | 0.274 | 0.572 | 1 |
| 01667 | Sodium | 7440-23-5 | 828 | 19.1 | 114 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.57 | 3.43 | 1 |
| 06971 | Vanadium | 7440-62-2 | 42.0 | 0.171 | 0.572 | 1 |
| 06972 | Zinc | 7440-66-6 | 69.8 | 0.274 | 2.29 | 1 |
| | | SW-846 7471A | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0121 | 0.121 | 1 |
| Wet Chemistry | | SW-846 9045C modified | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.1 C. | n.a. | 7.97 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 19.0 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 02:16 | Stephen C Nolte | 0.66 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:50 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 14:36 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I10

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:37 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:40 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251130
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I11

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.531 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0207 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.0951 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0119 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.02 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0205 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0586 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:37 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:37 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:24 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251130
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I11

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251131
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I12

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0358 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.286 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0038 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0885 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0310 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0788 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 78.3 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0528 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.876 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0878 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0155 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.167 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00010 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251131
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I12

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:38 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:08 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 22 | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 0.8 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | 5 J | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 0.9 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 6 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 15 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 9 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | 4 J | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 7 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 30 | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | 11 J | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 39 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 8 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 7 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 39 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.986 | 2.27 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.96 | 1.09 | 2.27 | 1 |
| 06946 | Barium | 7440-39-3 | 70.7 | 0.0499 | 0.567 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.887 | 0.0896 | 0.567 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.447 J | 0.0612 | 0.567 | 1 |
| 01650 | Calcium | 7440-70-2 | 60,600 | 18.9 | 113 | 5 |
| 06951 | Chromium | 7440-47-3 | 31.3 | 0.193 | 1.70 | 1 |
| 06952 | Cobalt | 7440-48-4 | 15.0 | 0.125 | 0.567 | 1 |
| 06953 | Copper | 7440-50-8 | 19.5 | 0.272 | 1.13 | 1 |
| 01654 | Iron | 7439-89-6 | 27,300 | 9.13 | 22.7 | 1 |
| 06955 | Lead | 7439-92-1 | 13.3 | 0.680 | 1.70 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,600 | 2.76 | 11.3 | 1 |
| 06958 | Manganese | 7439-96-5 | 521 | 0.0941 | 0.567 | 1 |
| 06961 | Nickel | 7440-02-0 | 32.9 | 0.170 | 1.13 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,340 | 18.9 | 56.7 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.05 | 2.27 | 1 |
| 06966 | Silver | 7440-22-4 | 0.548 J | 0.272 | 0.567 | 1 |
| 01667 | Sodium | 7440-23-5 | 516 | 18.9 | 113 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.55 | 3.40 | 1 |
| 06971 | Vanadium | 7440-62-2 | 43.5 | 0.170 | 0.567 | 1 |
| 06972 | Zinc | 7440-66-6 | 59.0 | 0.272 | 2.27 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0115 | 0.115 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.08 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.3 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 16.0 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 18:11 | Linda C Pape | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:55 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:55 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:55 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 15:00 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:44 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I13

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:40 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:20 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251133
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I14

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.386 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0107 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.114 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0070 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.35 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0118 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0070 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:41 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:41 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:26 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251133
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I14

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251134
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I15

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0644 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0162 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0039 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0093 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 10.9 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0825 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0143 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0214 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251134
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I15

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:41 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:10 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 44 | 5 | 16 | 0.65 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.65 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.65 |
| 10237 | 2-Butanone | 78-93-3 | 9 | 3 | 8 | 0.65 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.65 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.65 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.65 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.65 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -61%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -64%

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | 5 J | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | 6 J | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | 7 J | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 19 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 22 | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 29 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 10 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 26 | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 6 J | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 21 | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | 9 J | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 11 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 8 J | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | 4 J | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 22 | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 26 | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.33 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.90 | 1.12 | 2.33 | 1 |
| 06946 | Barium | 7440-39-3 | 54.1 | 0.0513 | 0.583 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.503 J | 0.0922 | 0.583 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.403 J | 0.0630 | 0.583 | 1 |
| 01650 | Calcium | 7440-70-2 | 92,500 | 19.4 | 117 | 5 |
| 06951 | Chromium | 7440-47-3 | 22.1 | 0.198 | 1.75 | 1 |
| 06952 | Cobalt | 7440-48-4 | 8.42 | 0.128 | 0.583 | 1 |
| 06953 | Copper | 7440-50-8 | 16.7 | 0.280 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 19,300 | 9.39 | 23.3 | 1 |
| 06955 | Lead | 7439-92-1 | 12.4 | 0.700 | 1.75 | 1 |
| 01657 | Magnesium | 7439-95-4 | 53,300 | 2.84 | 11.7 | 1 |
| 06958 | Manganese | 7439-96-5 | 441 | 0.0969 | 0.583 | 1 |
| 06961 | Nickel | 7440-02-0 | 22.7 | 0.175 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 4,560 | 19.5 | 58.3 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.33 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.280 | 0.583 | 1 |
| 01667 | Sodium | 7440-23-5 | 708 | 19.5 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.60 | 3.50 | 1 |
| 06971 | Vanadium | 7440-62-2 | 32.5 | 0.175 | 0.583 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------|---|---------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 44.1 | mg/kg 0.280 | mg/kg 2.33 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg 0.0120 J | mg/kg 0.0118 | mg/kg 0.118 | 1 |
| Wet Chemistry | | | | | | |
| SW-846 9045C modified Std. Units | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.1 C. | n.a. | 8.39 | 0.0100 | 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| SM 2540 G-1997 %Moisture Calc | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 16.8 | 0.50 | 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 05:45 | Stephen C Nolte | 0.65 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:05 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:05 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:05 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 15:24 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:47 | Scott R Yanos | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I16

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:50 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:47 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:42 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251136
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I17

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.557 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0174 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.119 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0113 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.19 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0142 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.113 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:46 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:46 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:28 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251136
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I17

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251137
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I18

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0372 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.354 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0039 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0951 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0268 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0749 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 76.0 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0649 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.719 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0779 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.198 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00011 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251137
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I18

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:44 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:12 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 10 J | 6 | 17 | 0.68 |
| 10237 | Benzene | 71-43-2 | 2 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | 1 J | 0.8 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 8 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 8 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | 4 J | 0.8 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | 1 J | 0.8 | 4 | 0.68 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -53%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -56%

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 4 J | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 8 J | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 12 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 30 | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 7 J | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 81 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 81 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 81 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 15 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 5 J | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 81 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 81 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 5 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 11 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 81 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 81 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 81 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 8 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 7 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.34 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.56 | 1.12 | 2.34 | 1 |
| 06946 | Barium | 7440-39-3 | 77.5 | 0.0514 | 0.584 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.811 | 0.0923 | 0.584 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.441 J | 0.0631 | 0.584 | 1 |
| 01650 | Calcium | 7440-70-2 | 60,900 | 19.5 | 117 | 5 |
| 06951 | Chromium | 7440-47-3 | 30.2 | 0.199 | 1.75 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.5 | 0.129 | 0.584 | 1 |
| 06953 | Copper | 7440-50-8 | 17.9 | 0.280 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 25,300 | 9.41 | 23.4 | 1 |
| 06955 | Lead | 7439-92-1 | 11.2 | 0.701 | 1.75 | 1 |
| 01657 | Magnesium | 7439-95-4 | 30,100 | 2.84 | 11.7 | 1 |
| 06958 | Manganese | 7439-96-5 | 464 | 0.0970 | 0.584 | 1 |
| 06961 | Nickel | 7440-02-0 | 32.6 | 0.175 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,240 | 19.5 | 58.4 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.34 | 1 |
| 06966 | Silver | 7440-22-4 | 0.358 J | 0.280 | 0.584 | 1 |
| 01667 | Sodium | 7440-23-5 | 610 | 19.5 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.60 | 3.51 | 1 |
| 06971 | Vanadium | 7440-62-2 | 40.7 | 0.175 | 0.584 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 55.9 | mg/kg 0.280 | mg/kg 2.34 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg N.D. | mg/kg 0.0115 | mg/kg 0.115 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.1 C. | SW-846 9045C modified n.a. | Std. Units 8.13 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 18.5 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 18:58 | Linda C Pape | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:10 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:10 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:10 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 15:48 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:57 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:53 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:44 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251139
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I20

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.420 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0143 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0075 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.46 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0111 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.108 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:50 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:50 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:30 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251139
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I20

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251140
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I21

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0110 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0483 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0116 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0025 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0079 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 7.65 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0070 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0496 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0106 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0166 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251140
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I21

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:48 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:18 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 9 J | 6 | 17 | 0.76 |
| 10237 | Benzene | 71-43-2 | 0.6 J | 0.4 | 4 | 0.76 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.76 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 9 | 0.76 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.76 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.76 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 9 | 0.76 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.76 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 9 | 0.76 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.76 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Toluene | 108-88-3 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.9 | 4 | 0.76 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -51%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -50%

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 19 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 19 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 19 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 19 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 8 J | 4 | 19 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 9 J | 4 | 19 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 23 | 4 | 19 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 4 J | 4 | 19 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 19 | 38 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 76 | 190 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 76 | 190 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 38 | 76 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 19 | 38 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 19 | 38 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 37 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 19 | 38 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 19 | 38 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 18 J | 4 | 19 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 19 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 19 | 38 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 19 | 38 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 19 | 38 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 19 | 38 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 110 | 380 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 19 | 38 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 76 | 190 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 19 | 38 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 76 | 190 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 190 | 570 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 340 | 1,100 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 76 | 190 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 19 | 38 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 76 | 190 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 4 J | 4 | 19 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 19 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 19 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 19 | 38 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 190 | 570 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 38 | 190 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 6 J | 4 | 19 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 19 | 38 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 14 J | 4 | 19 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 19 | 38 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 19 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 19 | 38 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 76 | 190 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 76 | 190 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 19 | 38 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 190 | 570 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 19 | 38 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 19 | 38 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 76 | 190 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 38 | 190 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 11 J | 4 | 19 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 19 | 38 | 1 |
| 10726 | Pyrene | 129-00-0 | 12 J | 4 | 19 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 19 | 38 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 19 | 38 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 19 | 38 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.976 | 2.24 | 1 |
| 06935 | Arsenic | 7440-38-2 | 9.86 | 1.08 | 2.24 | 1 |
| 06946 | Barium | 7440-39-3 | 56.0 | 0.0493 | 0.561 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.842 | 0.0886 | 0.561 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.503 J | 0.0605 | 0.561 | 1 |
| 01650 | Calcium | 7440-70-2 | 43,500 | 3.73 | 22.4 | 1 |
| 06951 | Chromium | 7440-47-3 | 26.5 | 0.191 | 1.68 | 1 |
| 06952 | Cobalt | 7440-48-4 | 14.8 | 0.123 | 0.561 | 1 |
| 06953 | Copper | 7440-50-8 | 27.6 | 0.269 | 1.12 | 1 |
| 01654 | Iron | 7439-89-6 | 28,000 | 9.03 | 22.4 | 1 |
| 06955 | Lead | 7439-92-1 | 18.4 | 0.673 | 1.68 | 1 |
| 01657 | Magnesium | 7439-95-4 | 24,900 | 2.72 | 11.2 | 1 |
| 06958 | Manganese | 7439-96-5 | 567 | 0.0931 | 0.561 | 1 |
| 06961 | Nickel | 7440-02-0 | 35.5 | 0.168 | 1.12 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,470 | 18.7 | 56.1 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.24 | 1 |
| 06966 | Silver | 7440-22-4 | 0.380 J | 0.269 | 0.561 | 1 |
| 01667 | Sodium | 7440-23-5 | 600 | 18.7 | 112 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.54 | 3.36 | 1 |
| 06971 | Vanadium | 7440-62-2 | 35.6 | 0.168 | 0.561 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 76.4 | mg/kg 0.269 | mg/kg 2.24 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg 0.0140 J | mg/kg 0.0110 | mg/kg 0.110 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.2 C. | SW-846 9045C modified n.a. | Std. Units 8.34 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 11.7 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 19:21 | Linda C Pape | 0.76 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:25 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 16:13 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I22

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:06 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:46 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251142
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I23

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.332 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0070 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.66 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0153 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | N.D. | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:01 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:01 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:32 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251142
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I23

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251143
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I24

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0385 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.202 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0041 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0867 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0243 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0780 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 81.1 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0378 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.483 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0890 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0123 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.196 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.000092 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/20/2017 15:24 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251143
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I24

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:51 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:20 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 10 J | 6 | 17 | 0.71 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.71 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.71 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.71 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.71 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.71 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.71 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.71 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.71 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.71 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Toluene | 108-88-3 | 1 J | 0.8 | 4 | 0.71 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.71 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -61%

Internal Standard - Re-analysis % Recovery

Chlorobenzene-d5 -59%

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| | 1,4-Dichlorobenzene-d4 | | -78% | | | |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 8 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 5 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 78 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 78 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 78 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 9 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 78 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 78 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 78 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 78 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 5 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 5 J | 4 | 20 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 78 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 78 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 78 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 6 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 6 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 39 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.977 | 2.25 | 1 |
| 06935 | Arsenic | 7440-38-2 | 11.8 | 1.08 | 2.25 | 1 |
| 06946 | Barium | 7440-39-3 | 73.1 | 0.0494 | 0.562 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.808 | 0.0887 | 0.562 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.595 | 0.0606 | 0.562 | 1 |
| 01650 | Calcium | 7440-70-2 | 63,300 | 18.7 | 112 | 5 |
| 06951 | Chromium | 7440-47-3 | 27.3 | 0.191 | 1.68 | 1 |
| 06952 | Cobalt | 7440-48-4 | 13.4 | 0.124 | 0.562 | 1 |
| 06953 | Copper | 7440-50-8 | 24.7 | 0.270 | 1.12 | 1 |
| 01654 | Iron | 7439-89-6 | 30,200 | 9.04 | 22.5 | 1 |
| 06955 | Lead | 7439-92-1 | 17.5 | 0.674 | 1.68 | 1 |
| 01657 | Magnesium | 7439-95-4 | 24,500 | 2.73 | 11.2 | 1 |
| 06958 | Manganese | 7439-96-5 | 550 | 0.0932 | 0.562 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.2 | 0.168 | 1.12 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,280 | 18.8 | 56.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.25 | 1 |
| 06966 | Silver | 7440-22-4 | 0.510 J | 0.270 | 0.562 | 1 |
| 01667 | Sodium | 7440-23-5 | 180 | 18.8 | 112 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.54 | 3.37 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06971 | Vanadium | 7440-62-2 | 39.5 | 0.168 | 0.562 | 1 |
| 06972 | Zinc | 7440-66-6 | 61.2 | 0.270 | 2.25 | 1 |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0116 | 0.116 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.1 C. | n.a. | 8.12 | 0.0100 | 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 15.2 | 0.50 | 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 19:44 | Linda C Pape | 0.71 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:30 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 16:37 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I25

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:12 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:09 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:48 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251145
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I26

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------------|------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | SW-846 6010B | | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.378 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | 0.0024 J | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0228 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.143 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0128 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.15 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0206 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0103 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0912 | 0.0065 | 0.0200 | 1 |
| | SW-846 7470A | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:05 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:34 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251145
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I26

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251146
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35

Reported: 10/20/2017 21:44

63I27

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0387 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0117 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0034 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0097 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 8.66 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.124 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0106 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0219 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/20/2017 15:27 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251146
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I27

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:57 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:22 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 7 J | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 0.8 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 13 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 25 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 11 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | N.D. | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 8 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 4 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 4 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B | | | | | | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.960 | 2.21 | 1 |
| 06935 | Arsenic | 7440-38-2 | 7.59 | 1.06 | 2.21 | 1 |
| 06946 | Barium | 7440-39-3 | 86.0 | 0.0486 | 0.552 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.916 | 0.0872 | 0.552 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.467 J | 0.0596 | 0.552 | 1 |
| 01650 | Calcium | 7440-70-2 | 57,800 | 3.68 | 22.1 | 1 |
| 06951 | Chromium | 7440-47-3 | 31.2 | 0.188 | 1.66 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.2 | 0.121 | 0.552 | 1 |
| 06953 | Copper | 7440-50-8 | 20.4 | 0.265 | 1.10 | 1 |
| 01654 | Iron | 7439-89-6 | 27,400 | 8.89 | 22.1 | 1 |
| 06955 | Lead | 7439-92-1 | 13.2 | 0.662 | 1.66 | 1 |
| 01657 | Magnesium | 7439-95-4 | 24,500 | 2.68 | 11.0 | 1 |
| 06958 | Manganese | 7439-96-5 | 410 | 0.0916 | 0.552 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.9 | 0.166 | 1.10 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,860 | 18.4 | 55.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.03 | 2.21 | 1 |
| 06966 | Silver | 7440-22-4 | 0.362 J | 0.265 | 0.552 | 1 |
| 01667 | Sodium | 7440-23-5 | 733 | 18.4 | 110 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.51 | 3.31 | 1 |
| 06971 | Vanadium | 7440-62-2 | 43.2 | 0.166 | 0.552 | 1 |
| 06972 | Zinc | 7440-66-6 | 58.3 | 0.265 | 2.21 | 1 |
| SW-846 7471A | | | | | | |
| 00159 | Mercury | 7439-97-6 | 0.0127 J | 0.0116 | 0.116 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| 00394 | pH (soil) | n.a. | 7.97 | 0.0100 | 0.0100 | 1 |
| The pH was measured in water at 20.4 C. | | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 16.9 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 11:23 | Jennifer K Howe | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 13:40 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 18:13 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I37

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:31 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:56 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251157
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I38

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.522 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0285 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.664 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0089 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 4.61 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0116 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0531 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:22 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:46 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251157
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I38

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251158
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I39

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0413 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.417 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0054 | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.119 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0346 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0910 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 110 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0542 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.590 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.114 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.169 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00013 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:07 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251158
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I39

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:30 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 30 | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 0.8 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | 5 J | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 1 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 9 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 16 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 12 | J | 4 | 20 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 4 | J | 4 | 20 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 | J | 4 | 20 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 5 | J | 4 | 20 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 11 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 9 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.35 | 1 |
| 06935 | Arsenic | 7440-38-2 | 4.09 | 1.13 | 2.35 | 1 |
| 06946 | Barium | 7440-39-3 | 72.2 | 0.0516 | 0.586 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.822 | 0.0926 | 0.586 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.381 J | 0.0633 | 0.586 | 1 |
| 01650 | Calcium | 7440-70-2 | 59,600 | 3.91 | 23.5 | 1 |
| 06951 | Chromium | 7440-47-3 | 29.5 | 0.199 | 1.76 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.8 | 0.129 | 0.586 | 1 |
| 06953 | Copper | 7440-50-8 | 17.3 | 0.281 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 23,200 | 9.44 | 23.5 | 1 |
| 06955 | Lead | 7439-92-1 | 10.9 | 0.704 | 1.76 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,600 | 2.85 | 11.7 | 1 |
| 06958 | Manganese | 7439-96-5 | 421 | 0.0973 | 0.586 | 1 |
| 06961 | Nickel | 7440-02-0 | 29.7 | 0.176 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,140 | 19.6 | 58.6 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.35 | 1 |
| 06966 | Silver | 7440-22-4 | 0.283 J | 0.281 | 0.586 | 1 |
| 01667 | Sodium | 7440-23-5 | 218 | 19.6 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.61 | 3.52 | 1 |
| 06971 | Vanadium | 7440-62-2 | 38.2 | 0.176 | 0.586 | 1 |
| 06972 | Zinc | 7440-66-6 | 54.0 | 0.281 | 2.35 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0118 | 0.118 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | n.a. | 8.20 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 16.4 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 11:46 | Jennifer K Howe | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:45 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:45 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 13:45 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 22:19 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I40

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:35 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:02 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251160
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I41

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.561 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0121 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0066 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.75 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0110 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0285 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:26 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:48 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251160
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I41

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251161
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I42

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0138 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0683 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0180 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0049 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0110 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 11.5 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0063 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.108 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0150 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0232 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251161
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I42

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:32 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 33 | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | 5 J | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 4 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 7 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 10 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 8 | J | 4 | 20 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 7 | J | 4 | 20 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | N.D. | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | 4 | J | 4 | 20 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 6 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 5 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.989 | 2.27 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.80 | 1.09 | 2.27 | 1 |
| 06946 | Barium | 7440-39-3 | 121 | 0.0500 | 0.568 | 1 |
| 06947 | Beryllium | 7440-41-7 | 1.15 | 0.0898 | 0.568 | 1 |
| 06949 | Cadmium | 7440-43-9 | 2.24 | 0.0614 | 0.568 | 1 |
| 01650 | Calcium | 7440-70-2 | 17,800 | 3.78 | 22.7 | 1 |
| 06951 | Chromium | 7440-47-3 | 33.9 | 0.193 | 1.70 | 1 |
| 06952 | Cobalt | 7440-48-4 | 13.4 | 0.125 | 0.568 | 1 |
| 06953 | Copper | 7440-50-8 | 20.1 | 0.273 | 1.14 | 1 |
| 01654 | Iron | 7439-89-6 | 25,800 | 9.15 | 22.7 | 1 |
| 06955 | Lead | 7439-92-1 | 17.8 | 0.682 | 1.70 | 1 |
| 01657 | Magnesium | 7439-95-4 | 14,600 | 2.76 | 11.4 | 1 |
| 06958 | Manganese | 7439-96-5 | 217 | 0.0943 | 0.568 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.1 | 0.170 | 1.14 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,090 | 19.0 | 56.8 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.06 | 2.27 | 1 |
| 06966 | Silver | 7440-22-4 | 0.384 J | 0.273 | 0.568 | 1 |
| 01667 | Sodium | 7440-23-5 | 510 | 19.0 | 114 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.56 | 3.41 | 1 |
| 06971 | Vanadium | 7440-62-2 | 51.9 | 0.170 | 0.568 | 1 |
| 06972 | Zinc | 7440-66-6 | 181 | 0.273 | 2.27 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | 0.0162 J | 0.0113 | 0.113 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 7.79 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.3 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 17.0 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 22:03 | Linda C Pape | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:15 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:15 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:15 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 22:43 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I43

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:44 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:04 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251163
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I44

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.620 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0128 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.0939 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0174 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 6.06 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0056 J | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0468 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:23 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251163
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I44

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251164
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I45

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0207 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | N.D. | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.792 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0243 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | N.D. | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | N.D. | 0.0065 | 0.0200 | 1 |
| SW-846 7470A | | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:17 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251164
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I45

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:17 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:35 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 6 J | 5 | 16 | 0.65 |
| 10237 | Benzene | 71-43-2 | 2 J | 0.4 | 4 | 0.65 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.65 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.65 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.65 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.65 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Toluene | 108-88-3 | 3 J | 0.8 | 4 | 0.65 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Xylene (Total) | 1330-20-7 | 0.9 J | 0.8 | 4 | 0.65 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 4 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 10 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 22 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 13 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 7 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 6 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 21 | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 11 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.983 | 2.26 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.00 | 1.08 | 2.26 | 1 |
| 06946 | Barium | 7440-39-3 | 71.9 | 0.0497 | 0.565 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.761 | 0.0893 | 0.565 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.446 J | 0.0610 | 0.565 | 1 |
| 01650 | Calcium | 7440-70-2 | 59,800 | 18.8 | 113 | 5 |
| 06951 | Chromium | 7440-47-3 | 28.2 | 0.192 | 1.70 | 1 |
| 06952 | Cobalt | 7440-48-4 | 10.7 | 0.124 | 0.565 | 1 |
| 06953 | Copper | 7440-50-8 | 17.7 | 0.271 | 1.13 | 1 |
| 01654 | Iron | 7439-89-6 | 24,900 | 9.10 | 22.6 | 1 |
| 06955 | Lead | 7439-92-1 | 11.3 | 0.678 | 1.70 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,800 | 2.75 | 11.3 | 1 |
| 06958 | Manganese | 7439-96-5 | 408 | 0.0938 | 0.565 | 1 |
| 06961 | Nickel | 7440-02-0 | 29.8 | 0.170 | 1.13 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,540 | 18.9 | 56.5 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.05 | 2.26 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.271 | 0.565 | 1 |
| 01667 | Sodium | 7440-23-5 | 218 | 18.9 | 113 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.55 | 3.39 | 1 |
| 06971 | Vanadium | 7440-62-2 | 37.7 | 0.170 | 0.565 | 1 |
| 06972 | Zinc | 7440-66-6 | 55.6 | 0.271 | 2.26 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0113 | 0.113 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | n.a. | 8.32 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 17.3 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 12:09 | Jennifer K Howe | 0.65 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:20 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:20 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:20 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 23:07 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:51 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I46

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:48 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:06 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251166
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I47

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.516 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0203 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0184 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0109 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 3.01 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0157 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0121 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/17/2017 03:50 | Scott R Yanos | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/17/2017 03:50 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:29 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251166
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I47

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251167
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I48

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0624 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0142 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0031 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0085 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 9.04 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0834 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0119 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0187 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251167
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I48

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:21 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:37 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 45 | 7 | 20 | 0.81 |
| 10237 | Benzene | 71-43-2 | N.D. | 0.5 | 5 | 0.81 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | Bromoform | 75-25-2 | N.D. | 1 | 5 | 0.81 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 5 | 0.81 |
| 10237 | 2-Butanone | 78-93-3 | 4 J | 4 | 10 | 0.81 |
| 10237 | Carbon Disulfide | 75-15-0 | 5 J | 1 | 5 | 0.81 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 1 | 5 | 0.81 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 5 | 0.81 |
| 10237 | Chloroform | 67-66-3 | N.D. | 1 | 5 | 0.81 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 5 | 0.81 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 1 | 5 | 0.81 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 1 | 5 | 0.81 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 10 | 0.81 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.5 | 5 | 0.81 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 10 | 0.81 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 5 | 0.81 |
| 10237 | Styrene | 100-42-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | Toluene | 108-88-3 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 1 | 5 | 0.81 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 1 | 5 | 0.81 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -71%

Internal Standard - Re-analysis % Recovery

Chlorobenzene-d5 -52%

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| | 1,4-Dichlorobenzene-d4 | | -76% | | | |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 6 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 6 J | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 21 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 83 | 210 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 83 | 210 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 83 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 21 | 41 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 21 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 41 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 21 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 21 | 41 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 5 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 21 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 21 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 21 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 21 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 21 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 83 | 210 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 21 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 83 | 210 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 210 | 620 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 83 | 210 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 21 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 83 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 21 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 210 | 620 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 210 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | N.D. | 4 | 21 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Isophorone | 78-59-1 | N.D. | 21 | 41 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 4 J | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 21 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | 5 J | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 21 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 83 | 210 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 83 | 210 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 21 | 41 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 210 | 620 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 21 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 21 | 41 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 83 | 210 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 9 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 21 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 5 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 21 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 21 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 21 | 41 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.963 | 2.21 | 1 |
| 06935 | Arsenic | 7440-38-2 | 3.70 | 1.06 | 2.21 | 1 |
| 06946 | Barium | 7440-39-3 | 46.7 | 0.0487 | 0.553 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.516 J | 0.0874 | 0.553 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.235 J | 0.0597 | 0.553 | 1 |
| 01650 | Calcium | 7440-70-2 | 28,100 | 3.68 | 22.1 | 1 |
| 06951 | Chromium | 7440-47-3 | 16.9 | 0.188 | 1.66 | 1 |
| 06952 | Cobalt | 7440-48-4 | 6.49 | 0.122 | 0.553 | 1 |
| 06953 | Copper | 7440-50-8 | 11.8 | 0.266 | 1.11 | 1 |
| 01654 | Iron | 7439-89-6 | 15,200 | 8.91 | 22.1 | 1 |
| 06955 | Lead | 7439-92-1 | 8.63 | 0.664 | 1.66 | 1 |
| 01657 | Magnesium | 7439-95-4 | 13,900 | 2.69 | 11.1 | 1 |
| 06958 | Manganese | 7439-96-5 | 311 | 0.0918 | 0.553 | 1 |
| 06961 | Nickel | 7440-02-0 | 18.2 | 0.166 | 1.11 | 1 |
| 01662 | Potassium | 7440-09-7 | 2,970 | 18.5 | 55.3 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.03 | 2.21 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.266 | 0.553 | 1 |
| 01667 | Sodium | 7440-23-5 | 219 | 18.5 | 11.1 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.52 | 3.32 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06971 | Vanadium | 7440-62-2 | 23.6 | 0.166 | 0.553 | 1 |
| 06972 | Zinc | 7440-66-6 | 38.3 | 0.266 | 2.21 | 1 |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0124 | 0.124 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.5 C. | n.a. | 7.87 | 0.0100 | 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 19.3 | 0.50 | 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 22:49 | Linda C Pape | 0.81 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:35 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:35 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:35 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 23:31 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:54 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:08 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251169
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I50

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.658 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0145 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0094 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.90 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0074 J | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0252 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:31 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251169
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I50

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251170
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I51

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0118 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0665 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0130 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0034 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0124 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 9.75 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.110 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0121 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0199 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251170
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I51

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:00 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 18 | 5 | 15 | 0.63 |
| 10237 | Benzene | 71-43-2 | 2 J | 0.4 | 4 | 0.63 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.63 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.63 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.63 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.63 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Toluene | 108-88-3 | 3 J | 0.8 | 4 | 0.63 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.63 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

Chlorobenzene-d5 -57%
1,4-Dichlorobenzene-d4 -79%

Internal Standard - Re-analysis % Recovery

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| | 1,4-Dichlorobenzene-d4 | | -67% | | | |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 5 | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 9 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | N.D. | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | N.D. | 4 | 20 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | N.D. | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | N.D. | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.970 | 2.23 | 1 |
| 06935 | Arsenic | 7440-38-2 | 4.13 | 1.07 | 2.23 | 1 |
| 06946 | Barium | 7440-39-3 | 73.5 | 0.0490 | 0.557 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.623 | 0.0881 | 0.557 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.437 J | 0.0602 | 0.557 | 1 |
| 01650 | Calcium | 7440-70-2 | 80,600 | 18.6 | 111 | 5 |
| 06951 | Chromium | 7440-47-3 | 25.4 | 0.190 | 1.67 | 1 |
| 06952 | Cobalt | 7440-48-4 | 13.2 | 0.123 | 0.557 | 1 |
| 06953 | Copper | 7440-50-8 | 34.4 | 0.268 | 1.11 | 1 |
| 01654 | Iron | 7439-89-6 | 21,100 | 8.97 | 22.3 | 1 |
| 06955 | Lead | 7439-92-1 | 11.5 | 0.669 | 1.67 | 1 |
| 01657 | Magnesium | 7439-95-4 | 42,100 | 2.71 | 11.1 | 1 |
| 06958 | Manganese | 7439-96-5 | 407 | 0.0925 | 0.557 | 1 |
| 06961 | Nickel | 7440-02-0 | 26.7 | 0.167 | 1.11 | 1 |
| 01662 | Potassium | 7440-09-7 | 4,160 | 18.6 | 55.7 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.23 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.268 | 0.557 | 1 |
| 01667 | Sodium | 7440-23-5 | 198 | 18.6 | 111 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.53 | 3.34 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06971 | Vanadium | 7440-62-2 | 34.0 | 0.167 | 0.557 | 1 |
| 06972 | Zinc | 7440-66-6 | 46.7 | 0.268 | 2.23 | 1 |
| SW-846 6010B | | | | | | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0120 | 0.120 | 1 |
| SW-846 7471A | | | | | | |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | n.a. | 8.19 | 0.0100 | 0.0100 | 1 |
| SW-846 9045C modified | | | | | | |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 17.7 | 0.50 | 0.50 | 1 |
| SM 2540 G-1997 | | | | | | |
| %Moisture Calc | | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 23:12 | Linda C Pape | 0.63 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:40 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 23:55 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:00 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:57 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:10 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251172
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I53

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.528 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0107 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0147 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 3.72 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0140 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0121 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:33 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251172
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I53

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251173
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I54

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0137 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.156 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0411 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0104 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0267 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 29.9 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0121 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.231 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0379 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0602 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251173
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I54

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:08 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-1567 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564550

| Client Information | | | | Matrix | | | | Analysis Requested | | | | | | For Lab Use Only | | | | | |
|--|--|----------------|-------------|---|-------------------------------------|--|----------------------------------|---|----------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------|----|-------------------------------|
| Client: <u>Weston Solutions</u> | | Acct. #: | | <input type="checkbox"/> Soil | <input type="checkbox"/> Sediment | <input type="checkbox"/> Tissue | <input type="checkbox"/> Potable | <input type="checkbox"/> Ground | <input type="checkbox"/> Surface | Preservation and Filtration Codes | | | | | | FSC: _____ | SCR#: _____ | | |
| Project Name/ #: <u>IDOT-063</u> | | PWSID #: | | | | | | | | <input type="checkbox"/> Water | <input type="checkbox"/> NPDES | Other: | Total # of Containers | VOCs | SNOCs | Total Metals | TCUP/SP metals | PH | Preservation Codes |
| Project Manager: <u>S. Balasubramanian</u> | | P.O. #: | | H=HCl T=Thiosulfate | | N=HNO ₃ B=NaOH | | S=H ₂ SO ₄ P=H ₃ PO ₄ | | | | | | | | | | | F=Field Filtered O=Other |
| Sampler: <u>T. Walls</u> | | Quote #: | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Sample Identification | | Collected | | Grab | Composite | | | | | | |
| | | | | Date | Time | | | | | | | | | | | | | | |
| <u>MC-5(0-6)-100517</u> | | <u>10-5-17</u> | <u>1125</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-5(6-12)-100517</u> | | | <u>1130</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-5(6-12)-100517D</u> | | | <u>1130</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-6(0-6)-100517</u> | | | <u>1150</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-6(6-12)-100517</u> | | | <u>1155</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-7(0-6)-100517</u> | | | <u>1205</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-7(6-12)-100517</u> | | | <u>1210</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-8(0-6)-100517</u> | | | <u>1225</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>MC-8(6-12)-100517</u> | | | <u>1230</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| <u>ROW-1(0-2)-100517</u> | | <u>10-5-17</u> | <u>1250</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | <u>4</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |

| | | | | | | | |
|---|--|---|----------------------|--|--------------|-------|-------|
| Turnaround Time (TAT) Requested (please circle) Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> (Rush TAT is subject to laboratory approval and surcharge.) | | Relinquished by: <u>Z. Walls</u> | Date: <u>10-5-17</u> | Time: <u>1700</u> | Received by: | Date: | Time: |
| Date results are needed: _____ | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| E-mail address: _____ | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| Data Package Options (circle if required) Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only) Type III (Reduced non-CLP) NJ DKQP TX TRRP-13 NYSDEC Category A or B MA MCP CT RCP | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| | | EDD Required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, format: <u>DTS2010</u> | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | | | |
| | | Site-Specific QC (MS/MSD/Dup)? Yes <input type="checkbox"/> No <input type="checkbox"/> (If yes, indicate QC sample and submit triplicate sample volume.) | | Temperature upon receipt <u>0.751°C</u> | | | |

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564547

| Client Information | | | | Matrix | | | | Analysis Requested | | | | | | For Lab Use Only | | | |
|--|--|---------------------|--|-------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|---|----------------------------------|--|--|--|--|------------------|--|---|-------------|
| Client: <u>Western Solutions</u> | | Acct. #: | | <input type="checkbox"/> Soil | <input type="checkbox"/> Sediment | <input type="checkbox"/> Tissue | <input type="checkbox"/> Potable | <input type="checkbox"/> Ground | <input type="checkbox"/> Surface | Preservation and Filtration Codes | | | | | | FSC: _____ | SCR#: _____ |
| Project Name/#: <u>IDOT-063</u> | | PWSID #: | | | | | | | | NOCs SNOCs Total Metals TLD/SLP metals PH | | | | | | Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other | |
| Project Manager: <u>S. Babusukumar</u> | | P.O. #: | | Water | | NPDES | | Other: | | | | | | | | Total # of Containers NOCs SNOCs Total Metals TLD/SLP metals PH | |
| Sampler: <u>T. Walls</u> | | Quote #: | | Grab | | Composite | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| Sample Identification | | Collected | | Grab | | Composite | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | | | | | | |
| <u>MC-4 (0-6)-100517</u> | | <u>10-5-17 1320</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-4 (6-12)-100517</u> | | <u>1325</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-3 (0-6)-100517</u> | | <u>1340</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-3 (6-12)-100517</u> | | <u>1345</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-2 (0-6)-100517</u> | | <u>1415</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-2 (6-12)-100517</u> | | <u>1420</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-1 (0-6)-100517</u> | | <u>1435</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-1 (6-12)-100517</u> | | <u>1440</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>BR-1 (0-2)-100517</u> | | <u>1500</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>BR-1 (0-2)-100517D</u> | | <u>10-5-17 1500</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |

Turnaround Time (TAT) Requested (please circle)
 Standard Rush
 (Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____
 E-mail address: _____

Data Package Options (circle if required)

| | |
|---|-------------------------|
| Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only) |
| Type III (Reduced non-CLP) | NJ DKQP TX TRRP-13 |
| NYSDEC Category A or B | MA MCP CT RCP |

| | | | | | |
|--|------------------------|---------------------|--|------|------|
| Relinquished by <u>Zumeth A. Walls</u> | Date <u>10-5-17</u> | Time <u>1700</u> | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| EDD Required? <input checked="" type="radio"/> Yes <input type="radio"/> No If yes, format: <u>DIS 2010</u> | | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | | |
| Site-Specific QC (MS/MSD/Dup)? Yes No (If yes, indicate QC sample and submit triplicate sample volume.) | | | Temperature upon receipt <u>0.75.1</u> °C | | |

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

| | | | |
|-------------------------|--|-----------------|-------------------------------|
| BMQL | Below Minimum Quantitation Level | mg | milligram(s) |
| C | degrees Celsius | mL | milliliter(s) |
| cfu | colony forming units | MPN | Most Probable Number |
| CP Units | cobalt-chloroplatinate units | N.D. | non-detect |
| F | degrees Fahrenheit | ng | nanogram(s) |
| g | gram(s) | NTU | nephelometric turbidity units |
| IU | International Units | pg/L | picogram/liter |
| kg | kilogram(s) | RL | Reporting Limit |
| L | liter(s) | TNTC | Too Numerous To Count |
| lb. | pound(s) | µg | microgram(s) |
| m³ | cubic meter(s) | µL | microliter(s) |
| meq | milliequivalents | umhos/cm | micromhos/cm |
| < | less than | | |
| > | greater than | | |
| ppm | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas. | | |
| ppb | parts per billion | | |
| Dry weight basis | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis. | | |

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

| Qualifier | Definition |
|----------------|---|
| C | Result confirmed by reanalysis |
| D1 | Indicates for dual column analyses that the result is reported from column 1 |
| D2 | Indicates for dual column analyses that the result is reported from column 2 |
| E | Concentration exceeds the calibration range |
| J (or G, I, X) | Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL) |
| P | Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported. |
| U | Analyte was not detected at the value indicated |
| V | Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference. |
| W | The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L. |
| Z | Laboratory Defined - see analysis report |

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.



Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

**Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)**

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 330: US Rte. 45 - Metra Rail to 187th Street Office Phone Number, if available: _____

Physical Site Location (address, including number and street):

18900 block of S. LaGrange Rd (US Rte. 45) (ISGS Site No. 3357-7)

City: Mokena State: IL Zip Code: _____

County: Will Township: _____

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.546618589 Longitude: -87.851766501
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: BOL: _____ BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

Zip Code: 60196-1096 Phone: 847-705-4101

Contact: Sam Mead

Contact: Sam Mead

Email, if available: Sam.Mead@illinois.gov

Email, if available: Sam.Mead@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 330: US Rte. 45 - Metra Rail to 187th Street

Latitude: 41.546618589 Longitude: -87.851766501

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located [35 Ill. Adm. Code 1100.610(a)]:

LOCATION BR-1 WAS SAMPLED ADJACENT TO ISGS SITE No. 3357-7. SEE FIGURE 3-1 AND TABLE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT FOR SAMPLING DETAILS.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

EUROFINS ANALYTICAL REPORT - GROUP NUMBER: 1860028
ALSO SEE FIGURE 4-1 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

I, Michael A. Castillo, P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name: Weston Solutions, Inc.
 Street Address: 300 Circle Plaza, Suite 202
 City: Mundelein State: IL Zip Code: 60060
 Phone: (224) 864-7200

Michael A. Castillo, P.G.
 Printed Name:

Michael Castillo

Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

7 December 2017

Date:



Summary Table of ISGS Site No. 3357-7
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | BR-1(0-2)-100517 | BR-1(0-2)-100517D | Soil Reference Concentrations ^A |
|-----------------------------|------------------|-------------------|--|
| Sample Date | 10/5/2017 | 10/5/2017 | |
| Location ID | BR-1 | BR-1 | |
| Depth | 0 - 2 | 0 - 2 | |
| ISGS Site No. | 3357-7 | 3357-7 | |
| Parameter | | | |
| Laboratory pH (s.u.) | 8.24 | 8.34 | <6.25 ; >9.0 |
| VOCs (ug/kg) | | | |
| Acetone | 28 | 16 J | 25000 |
| Benzene | 1 J | 1 J | 30 |
| Methyl ethyl ketone | 4 J | ND | --- |
| Toluene | 2 J | 2 J | 12000 |
| SVOCs (ug/kg) | | | |
| 2-Methylnaphthalene | 6 J | 7 J | --- |
| Benzo(a)pyrene | ND | 6 J | 90 / 1300 / 2100 |
| Benzo(b)fluoranthene | 8 J | 8 J | 900 / 1500 / 2100 |
| Benzo(g,h,i)perylene | 12 J | 16 J | --- |
| Benzo(k)fluoranthene | ND | 4 J | 9000 |
| Chrysene | 7 J | 10 J | 88000 |
| Fluoranthene | 6 J | 7 J | 3100000 |
| Fluorene | 4 J | ND | 560000 |
| Indeno(1,2,3-cd)pyrene | 4 J | 7 J | 900 / 900 / 1600 |
| Naphthalene, SVOC | 6 J | ND | 1800 |
| Phenanthrene | 12 J | 12 J | --- |
| Pyrene | 6 J | 7 J | 2300000 |
| Total Metals (mg/kg) | | | |
| Arsenic, Total | 6.03 J | 3.23 J | 11.3 / 13.0 |
| Barium, Total | 79.9 J | 15.3 J | 1500 |
| Beryllium, Total | 0.719 | ND | 22 |
| Cadmium, Total | 0.917 | 1.23 | 5.2 |
| Calcium, Total | 83300 J | 169000 J | --- |
| Chromium, Total | 27.9 J | 8.58 J | 21 |
| Cobalt, Total | 11.9 | 8.79 | 20 |
| Copper, Total | 26.2 | 38.8 | 2900 |
| Iron, Total | 23000 J | 7380 J | 15000 / 15900 |
| Lead, Total | 11 J | 8.49 J | 107 |
| Magnesium, Total | 46800 J | 99000 J | 325000 |
| Manganese, Total | 504 J | 225 J | 630 / 636 |
| Nickel, Total | 27.7 J | 9.88 J | 100 |
| Potassium, Total | 4940 J | 2460 J | --- |
| Silver, Total | 0.876 | 1.37 | 4.4 |
| Sodium, Total | 626 J | 285 J | --- |
| Vanadium, Total | 40.6 J | 11.8 J | 550 |
| Zinc, Total | 45.1 J | 10.3 J | 5100 |
| TCLP Metals (mg/l) | | | |
| Arsenic, TCLP | ND | ND | 0.05 |
| Barium, TCLP | 0.0561 | 0.0801 | 2 |
| Chromium, TCLP | 0.013 J | 0.0199 | 0.1 |
| Cobalt, TCLP | 0.0045 J | 0.0061 | 1 |
| Copper, TCLP | 0.0128 | 0.0172 | 0.65 |
| Iron, TCLP | 8.83 | 14.2 | 5 |
| Manganese, TCLP | 0.149 | 0.156 | 0.15 |
| Nickel, TCLP | 0.0098 J | 0.0174 | 0.1 |
| Zinc, TCLP | 0.0183 J | 0.0262 | 5 |
| SPLP Metals (mg/l) | | | |
| Barium, SPLP | 0.543 | 0.419 | 2 |
| Cadmium, SPLP | ND | 0.0023 J | 0.005 |
| Cobalt, SPLP | 0.037 | 0.0498 | 1 |
| Lead, SPLP | 0.0112 J | 0.0072 J | 0.0075 |
| Manganese, SPLP | 4.07 | 2.99 | 0.15 |
| Nickel, SPLP | 0.0198 | 0.0267 | 0.1 |
| Zinc, SPLP | 0.0203 | 0.0159 J | 5 |

Summary Table of ISGS Site No. 3357-7
Comparison of Detected Constituents to Applicable Reference Concentrations
Soil Analytical Results
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois


Notes:

--- - not applicable or value not available.

^A - Soil reference concentrations from MAC Table. Background values for Chicago corporate limits and MSA counties are included, as applicable.

ND - Constituent not detected above the reporting limit.

J - Estimated concentration.

 Shaded values indicate concentration **exceeds** Reference Concentration.

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Report Date: October 20, 2017

Project: IDOT Job 063

Account #: 11924
Group Number: 1860028
PO Number: 0088208
State of Sample Origin: IL

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To Weston Solutions

Attn: Andris Slesers

Respectfully Submitted,



Bonnie Stadelmann
Senior Project Manager

(312) 590-3133

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 28 | 6 | 17 | 0.68 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | 4 J | 3 | 8 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.68 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -56%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -62%

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 8 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 12 J | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 82 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 82 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 82 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 7 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 82 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 82 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 82 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 82 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | 4 J | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 4 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 6 J | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | 6 J | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 82 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 82 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 82 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 12 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 6 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.01 | 2.32 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.03 | 1.12 | 2.32 | 1 |
| 06946 | Barium | 7440-39-3 | 79.9 | 0.0511 | 0.581 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.719 | 0.0918 | 0.581 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.917 | 0.0627 | 0.581 | 1 |
| 01650 | Calcium | 7440-70-2 | 83,300 | 19.3 | 116 | 5 |
| 06951 | Chromium | 7440-47-3 | 27.9 | 0.198 | 1.74 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.9 | 0.128 | 0.581 | 1 |
| 06953 | Copper | 7440-50-8 | 26.2 | 0.279 | 1.16 | 1 |
| 01654 | Iron | 7439-89-6 | 23,000 | 9.35 | 23.2 | 1 |
| 06955 | Lead | 7439-92-1 | 11.0 | 0.697 | 1.74 | 1 |
| 01657 | Magnesium | 7439-95-4 | 46,800 | 2.82 | 11.6 | 1 |
| 06958 | Manganese | 7439-96-5 | 504 | 0.0964 | 0.581 | 1 |
| 06961 | Nickel | 7440-02-0 | 27.7 | 0.174 | 1.16 | 1 |
| 01662 | Potassium | 7440-09-7 | 4,940 | 19.4 | 58.1 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.08 | 2.32 | 1 |
| 06966 | Silver | 7440-22-4 | 0.876 | 0.279 | 0.581 | 1 |
| 01667 | Sodium | 7440-23-5 | 626 | 19.4 | 116 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.59 | 3.49 | 1 |
| 06971 | Vanadium | 7440-62-2 | 40.6 | 0.174 | 0.581 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 45.1 | mg/kg 0.279 | mg/kg 2.32 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg N.D. | mg/kg 0.0121 | mg/kg 0.121 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.4 C. | SW-846 9045C modified n.a. | Std. Units 8.24 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 18.8 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 23:35 | Linda C Pape | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/18/2017 00:18 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I55

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:07 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:03 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:12 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251175
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I56

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.543 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0370 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0112 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 4.07 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0198 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0203 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:36 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251175
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I56

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251176
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I57

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0561 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0130 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0045 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0128 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 8.83 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.149 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0098 J | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0183 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251176
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I57

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570504 | 10/18/2017 02:56 | Scott R Yanos | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570504 | 10/18/2017 02:56 | Scott R Yanos | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:11 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570504 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-1567 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|-----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Volatiles SW-846 8260B | | | | | | |
| 10237 | Acetone | 67-64-1 | 16 J | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 6 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 8 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 16 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 4 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 10 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 7 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 7 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 7 J | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 12 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 7 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.35 | 1 |
| 06935 | Arsenic | 7440-38-2 | 3.23 | 1.13 | 2.35 | 1 |
| 06946 | Barium | 7440-39-3 | 15.3 | 0.0517 | 0.587 | 1 |
| 06947 | Beryllium | 7440-41-7 | N.D. | 0.0928 | 0.587 | 1 |
| 06949 | Cadmium | 7440-43-9 | 1.23 | 0.0634 | 0.587 | 1 |
| 01650 | Calcium | 7440-70-2 | 169,000 | 19.6 | 117 | 5 |
| 06951 | Chromium | 7440-47-3 | 8.58 | 0.200 | 1.76 | 1 |
| 06952 | Cobalt | 7440-48-4 | 8.79 | 0.129 | 0.587 | 1 |
| 06953 | Copper | 7440-50-8 | 38.8 | 0.282 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 7,380 | 9.45 | 23.5 | 1 |
| 06955 | Lead | 7439-92-1 | 8.49 | 0.705 | 1.76 | 1 |
| 01657 | Magnesium | 7439-95-4 | 99,000 | 14.3 | 58.7 | 5 |
| 06958 | Manganese | 7439-96-5 | 225 | 0.0975 | 0.587 | 1 |
| 06961 | Nickel | 7440-02-0 | 9.88 | 0.176 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 2,460 | 19.6 | 58.7 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.35 | 1 |
| 06966 | Silver | 7440-22-4 | 1.37 | 0.282 | 0.587 | 1 |
| 01667 | Sodium | 7440-23-5 | 285 | 19.6 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.61 | 3.52 | 1 |
| 06971 | Vanadium | 7440-62-2 | 11.8 | 0.176 | 0.587 | 1 |
| 06972 | Zinc | 7440-66-6 | 10.3 | 0.282 | 2.35 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0113 | 0.113 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.2 C. | n.a. | 8.34 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 15.7 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 13:44 | Jennifer K Howe | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/18/2017 00:42 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:13 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I58

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:13 | Scott R Yanos | 5 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:10 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:14 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251178
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I59

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.419 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | 0.0023 J | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0498 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0072 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.99 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0267 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0159 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/17/2017 03:57 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:38 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251178
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I59

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251179
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I60

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0801 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0199 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0061 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0172 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 14.2 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.156 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0174 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0262 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251179
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I60

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570504 | 10/18/2017 03:17 | Scott R Yanos | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570504 | 10/18/2017 03:17 | Scott R Yanos | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:17 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570504 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-1567 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564550

| Client Information | | | | Matrix | | | Analysis Requested | | | | | | | | | | For Lab Use Only | | | | |
|---|---------|--|---|---------------------------------|-----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|--|--|--|--|--|--|--|------------------|--|--|---|-------------|
| Client: <u>Weston Solutions</u> | | Acct. #: | | <input type="checkbox"/> Soil | <input type="checkbox"/> Sediment | <input type="checkbox"/> Tissue | <input type="checkbox"/> Potable | <input type="checkbox"/> Ground | <input type="checkbox"/> Surface | Preservation and Filtration Codes | | | | | | | | | | FSC: _____ | SCR#: _____ |
| Project Name/#: <u>IDOT-063</u> | | PWSID #: | | | | | | | | VOCs SNOCs Total Metals TCLP/SRP metals pH | | | | | | | | | | Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other | |
| Project Manager: <u>S. Balasubramanian</u> | | P.O. #: | | Total # of Containers Other: | | | | | | | | | | | | | | | | Remarks | |
| Sampler: <u>T. Walls</u> | | Quote #: | | | | | | | | | | | | | | | | | | | |
| State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Grab | Composite | | | | | | | | | | | | | | | | |
| Sample Identification | | Collected | | | | | | | | | | | | | | | | | | | |
| Date | Time | | | | | | | | | | | | | | | | | | | | |
| MC-5(0-6)-100517 | 10-5-17 | 1125 | X | | X | | | | | | | | | | | | | | | | |
| MC-5(6-12)-100517 | | 1130 | X | | X | | | | | | | | | | | | | | | | |
| MC-5(6-12)-100517D | | 1130 | X | | X | | | | | | | | | | | | | | | | |
| MC-6(0-6)-100517 | | 1150 | X | | X | | | | | | | | | | | | | | | | |
| MC-6(6-12)-100517 | | 1155 | X | | X | | | | | | | | | | | | | | | | |
| MC-7(0-6)-100517 | | 1205 | X | | X | | | | | | | | | | | | | | | | |
| MC-7(6-12)-100517 | | 1210 | X | | X | | | | | | | | | | | | | | | | |
| MC-8(0-6)-100517 | | 1225 | X | | X | | | | | | | | | | | | | | | | |
| MC-8(6-12)-100517 | | 1230 | X | | X | | | | | | | | | | | | | | | | |
| Row-1(0-2)-100517 | 10-5-17 | 1250 | X | | X | | | | | | | | | | | | | | | | |

| | | | | | | | |
|---|--|---|----------------------|--|--------------|---|-------|
| Turnaround Time (TAT) Requested (please circle) Standard <u>Standard</u> Rush (Rush TAT is subject to laboratory approval and surcharge.) | | Relinquished by: <u>Z. Walls</u> | Date: <u>10-5-17</u> | Time: <u>1700</u> | Received by: | Date: | Time: |
| Date results are needed: _____ | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| E-mail address: _____ | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| Data Package Options (circle if required) Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only) Type III (Reduced non-CLP) NJ DKQP TX TRRP-13 NYSDEC Category A or B MA MCP CT RCP | | Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
| | | EDD Required? <u>Yes</u> No If yes, format: <u>DTS2010</u> | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | | Temperature upon receipt <u>0.751°C</u> | |

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564547

| Client Information | | | | Matrix | | | | Analysis Requested | | | | | | For Lab Use Only | | | |
|--|--|---------------------|--|-------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|---|----------------------------------|--|--|--|--|------------------|--|---|-------------|
| Client: <u>Western Solutions</u> | | Acct. #: | | <input type="checkbox"/> Soil | <input type="checkbox"/> Sediment | <input type="checkbox"/> Tissue | <input type="checkbox"/> Potable | <input type="checkbox"/> Ground | <input type="checkbox"/> Surface | Preservation and Filtration Codes | | | | | | FSC: _____ | SCR#: _____ |
| Project Name/#: <u>IDOT-063</u> | | PWSID #: | | | | | | | | NOCs SNOCs Total Metals TLD/SLP metals PH | | | | | | Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other | |
| Project Manager: <u>S. Babusukumar</u> | | P.O. #: | | Water | | NPDES | | Other: | | | | | | | | Total # of Containers NOCs SNOCs Total Metals TLD/SLP metals PH | |
| Sampler: <u>T. Walls</u> | | Quote #: | | Grab | | Composite | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| Sample Identification | | Collected | | Grab | | Composite | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | | | | | | |
| <u>MC-4 (0-6)-100517</u> | | <u>10-5-17 1320</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-4 (6-12)-100517</u> | | <u>1325</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-3 (0-6)-100517</u> | | <u>1340</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-3 (6-12)-100517</u> | | <u>1345</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-2 (0-6)-100517</u> | | <u>1415</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-2 (6-12)-100517</u> | | <u>1420</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-1 (0-6)-100517</u> | | <u>1435</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-1 (6-12)-100517</u> | | <u>1440</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>BR-1 (0-2)-100517</u> | | <u>1500</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>BR-1 (0-2)-100517D</u> | | <u>10-5-17 1500</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |

Turnaround Time (TAT) Requested (please circle)
 Standard Rush
 (Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____
 E-mail address: _____

Data Package Options (circle if required)

| | |
|---|-------------------------|
| Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only) |
| Type III (Reduced non-CLP) | NJ DKQP TX TRRP-13 |
| NYSDEC Category A or B | MA MCP CT RCP |

| | | | | | |
|--|------------------------|---------------------|--|------|------|
| Relinquished by <u>Zumeth A. Walls</u> | Date <u>10-5-17</u> | Time <u>1700</u> | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| EDD Required? <input checked="" type="radio"/> Yes <input type="radio"/> No If yes, format: <u>DTS 2010</u> | | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | | |
| Site-Specific QC (MS/MSD/Dup)? Yes No (If yes, indicate QC sample and submit triplicate sample volume.) | | | Temperature upon receipt <u>0.75.1</u> °C | | |

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

| | | | |
|-------------------------|--|-----------------|-------------------------------|
| BMQL | Below Minimum Quantitation Level | mg | milligram(s) |
| C | degrees Celsius | mL | milliliter(s) |
| cfu | colony forming units | MPN | Most Probable Number |
| CP Units | cobalt-chloroplatinate units | N.D. | non-detect |
| F | degrees Fahrenheit | ng | nanogram(s) |
| g | gram(s) | NTU | nephelometric turbidity units |
| IU | International Units | pg/L | picogram/liter |
| kg | kilogram(s) | RL | Reporting Limit |
| L | liter(s) | TNTC | Too Numerous To Count |
| lb. | pound(s) | µg | microgram(s) |
| m³ | cubic meter(s) | µL | microliter(s) |
| meq | milliequivalents | umhos/cm | micromhos/cm |
| < | less than | | |
| > | greater than | | |
| ppm | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas. | | |
| ppb | parts per billion | | |
| Dry weight basis | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis. | | |

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

| Qualifier | Definition |
|----------------|---|
| C | Result confirmed by reanalysis |
| D1 | Indicates for dual column analyses that the result is reported from column 1 |
| D2 | Indicates for dual column analyses that the result is reported from column 2 |
| E | Concentration exceeds the calibration range |
| J (or G, I, X) | Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL) |
| P | Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported. |
| U | Analyte was not detected at the value indicated |
| V | Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference. |
| W | The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L. |
| Z | Laboratory Defined - see analysis report |

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

APPENDIX C

ANALYTICAL DATA TABLES

Abbreviations:

- B Analyte was detected in the blank and sample.
- J Estimated value.
- J+ Estimated value, biased high.
- J- Estimated value, biased low.
- R Rejected as a result of data validation.
- U Analyte not detected; reporting limit is presented.

Table C-1
Summary of VOCs - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | ROW-1(0-2)-100517 | MC-1(0-6)-100517 | MC-1(6-12)-100517 | MC-2(0-6)-100517 | MC-2(6-12)-100517 | MC-3(0-6)-100517 | MC-3(6-12)-100517 | MC-4(0-6)-100517 |
|---------------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | ROW-1 | MC-1 | MC-1 | MC-2 | MC-2 | MC-3 | MC-3 | MC-4 |
| Depth | 0 - 2 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 |
| Lab Sample ID | 9251147 | 9251168 | 9251171 | 9251162 | 9251165 | 9251156 | 9251159 | 9251150 |
| ISGS Site No. | 3357-1 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | | | | |
| VOCs (ug/kg) | | | | | | | | |
| 1,1,1-Trichloroethane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1,2,2-Tetrachloroethane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1,2-Trichloroethane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1-Dichloroethane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1-Dichloroethene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,2-Dichloroethane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,2-Dichloropropane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 2-Hexanone | 2 U | 3 U | 2 U | 2 U | 2 U | 2 U | 2 U | 3 U |
| 4-Methyl-2-pentanone | 2 U | 3 U | 2 U | 2 U | 2 U | 2 U | 2 U | 3 U |
| Acetone | 11 J | 45 | 18 | 33 | 6 J | 7 J | 30 | 30 |
| Benzene | 0.7 J | 0.5 U | 2 J | 1 J | 2 J | 0.7 J | 0.8 J | 1 J |
| Bromodichloromethane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Bromoform | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Bromomethane | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| Carbon disulfide | 0.8 U | 5 J | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Carbon tetrachloride | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Chlorobenzene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Chloroethane | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| Chloroform | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Chloromethane | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| cis-1,2-Dichloroethene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| cis-1,3-Dichloropropene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Dibromochloromethane | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Ethylbenzene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Methyl ethyl ketone | 3 U | 4 J | 3 U | 5 J | 3 U | 3 U | 5 J | 5 J |
| Methyl tert-butyl ether | 0.4 U | 0.5 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Methylene chloride | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| Styrene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Tetrachloroethene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Toluene | 0.8 U | 1 U | 3 J | 2 J | 3 J | 0.8 J | 1 J | 3 J |
| trans-1,2-Dichloroethene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| trans-1,3-Dichloropropene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Trichloroethene | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Vinyl Chloride | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Xylene (Total) | 0.8 U | 1 U | 0.8 U | 0.8 U | 0.9 J | 0.8 U | 0.8 U | 0.8 U |

Table C-1
Summary of VOCs - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-4(6-12)-100517 | MC-5(0-6)-100517 | MC-5(6-12)-100517 | MC-5(6-12)-100517D | MC-6(0-6)-100517 | MC-6(6-12)-100517 | MC-7(0-6)-100517 | MC-7(6-12)-100517 |
|---------------------------|-------------------|------------------|-------------------|--------------------|------------------|-------------------|------------------|-------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-4 | MC-5 | MC-5 | MC-5 | MC-6 | MC-6 | MC-7 | MC-7 |
| Depth | 6 - 12 | 0 - 6 | 6 - 12 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 |
| Lab Sample ID | 9251153 | 9251120 | 9251123 | 9251126 | 9251129 | 9251132 | 9251135 | 9251138 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | | | | |
| VOCs (ug/kg) | | | | | | | | |
| 1,1,1-Trichloroethane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1,2,2-Tetrachloroethane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1,2-Trichloroethane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1-Dichloroethane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1-Dichloroethene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,2-Dichloroethane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 1,2-Dichloropropane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| 2-Hexanone | 2 U | 3 U | 2 U | 2 U | 2 U | 2 U | 2 U | 3 U |
| 4-Methyl-2-pentanone | 2 U | 3 U | 2 U | 2 U | 2 U | 2 U | 2 U | 3 U |
| Acetone | 6 U | 23 | 15 J | 9 J | 14 J | 22 | 44 | 10 J |
| Benzene | 0.6 J | 1 J | 0.7 J | 0.6 J | 0.7 J | 0.8 J | 1 J | 2 J |
| Bromodichloromethane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Bromoform | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Bromomethane | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| Carbon disulfide | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Carbon tetrachloride | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Chlorobenzene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Chloroethane | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| Chloroform | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Chloromethane | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| cis-1,2-Dichloroethene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| cis-1,3-Dichloropropene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Dibromochloromethane | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Ethylbenzene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 1 J |
| Methyl ethyl ketone | 3 U | 4 J | 3 U | 3 U | 3 U | 5 J | 9 | 3 U |
| Methyl tert-butyl ether | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Methylene chloride | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| Styrene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Tetrachloroethene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Toluene | 0.8 U | 3 J | 0.8 U | 0.8 J | 1 J | 0.9 J | 2 J | 4 J |
| trans-1,2-Dichloroethene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| trans-1,3-Dichloropropene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Trichloroethene | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Vinyl Chloride | 0.8 U | 0.9 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U |
| Xylene (Total) | 0.8 U | 1 J | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 0.8 U | 1 J |

Table C-1
Summary of VOCs - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-8(0-6)-100517 | MC-8(6-12)-100517 | BR-1(0-2)-100517 | BR-1(0-2)-100517D |
|---------------------------|------------------|-------------------|------------------|-------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-8 | MC-8 | BR-1 | BR-1 |
| Depth | 0 - 6 | 6 - 12 | 0 - 2 | 0 - 2 |
| Lab Sample ID | 9251141 | 9251144 | 9251174 | 9251177 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-7 | 3357-7 |
| Parameter | | | | |
| VOCs (ug/kg) | | | | |
| 1,1,1-Trichloroethane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1,2,2-Tetrachloroethane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1,2-Trichloroethane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1-Dichloroethane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| 1,1-Dichloroethene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| 1,2-Dichloroethane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| 1,2-Dichloropropane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| 2-Hexanone | 3 U | 2 U | 2 U | 2 U |
| 4-Methyl-2-pentanone | 3 U | 2 U | 2 U | 2 U |
| Acetone | 9 J | 10 J | 28 | 16 J |
| Benzene | 0.6 J | 1 J | 1 J | 1 J |
| Bromodichloromethane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Bromoform | 0.9 UJ | 0.8 UJ | 0.8 UJ | 0.8 U |
| Bromomethane | 2 U | 2 U | 2 U | 2 U |
| Carbon disulfide | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Carbon tetrachloride | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Chlorobenzene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Chloroethane | 2 U | 2 U | 2 U | 2 U |
| Chloroform | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Chloromethane | 2 U | 2 U | 2 U | 2 U |
| cis-1,2-Dichloroethene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| cis-1,3-Dichloropropene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Dibromochloromethane | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Ethylbenzene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Methyl ethyl ketone | 3 U | 3 U | 4 J | 3 U |
| Methyl tert-butyl ether | 0.4 U | 0.4 U | 0.4 U | 0.4 U |
| Methylene chloride | 2 U | 2 U | 2 U | 2 U |
| Styrene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Tetrachloroethene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Toluene | 0.9 U | 1 J | 2 J | 2 J |
| trans-1,2-Dichloroethene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| trans-1,3-Dichloropropene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Trichloroethene | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Vinyl Chloride | 0.9 U | 0.8 U | 0.8 U | 0.8 U |
| Xylene (Total) | 0.9 U | 0.8 U | 0.8 U | 0.8 U |

Table C-2
Summary of SVOCs - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | ROW-1(0-2)-100517 | MC-1(0-6)-100517 | MC-1(6-12)-100517 | MC-2(0-6)-100517 | MC-2(6-12)-100517 |
|------------------------------|-------------------|------------------|-------------------|------------------|-------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | ROW-1 | MC-1 | MC-1 | MC-2 | MC-2 |
| Depth | 0 - 2 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 |
| Lab Sample ID | 9251147 | 9251168 | 9251171 | 9251162 | 9251165 |
| ISGS Site No. | 3357-1 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | |
| SVOCs (ug/kg) | | | | | |
| 1,2,4-Trichlorobenzene, SVOC | 19 U | 21 U | 20 U | 20 U | 20 U |
| 1,2-Dichlorobenzene, SVOC | 19 U | 21 U | 20 U | 20 U | 20 U |
| 1,3-Dichlorobenzene, SVOC | 19 U | 21 U | 20 U | 20 U | 20 U |
| 1,4-Dichlorobenzene, SVOC | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2,2-oxybis[1-chloropropane] | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2,4,5-Trichlorophenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2,4,6-Trichlorophenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2,4-Dichlorophenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2,4-Dimethylphenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2,4-Dinitrophenol | 350 U | 370 U | 360 U | 360 U | 360 U |
| 2,4-Dinitrotoluene | 78 U | 83 U | 80 U | 79 U | 80 U |
| 2,6-Dinitrotoluene | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2-Chloronaphthalene | 8 U | 8 U | 8 U | 8 U | 8 U |
| 2-Chlorophenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2-Methylnaphthalene | 4 U | 4 J | 4 U | 4 U | 4 U |
| 2-Methylphenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2-Nitroaniline | 19 U | 21 U | 20 U | 20 U | 20 U |
| 2-Nitrophenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 3,3-Dichlorobenzidine | 120 U | 120 U | 120 U | 120 U | 120 U |
| 3-Nitroaniline | 78 U | 83 U | 80 U | 79 U | 80 U |
| 4,6-Dinitro-2-methylphenol | 190 U | 210 U | 200 U | 200 U | 200 U |
| 4-Bromophenyl-phenylether | 19 U | 21 U | 20 U | 20 U | 20 U |
| 4-Chloro-3-methylphenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 4-Chloroaniline | 39 U | 41 U | 40 U | 40 U | 40 U |
| 4-Chlorophenyl-phenylether | 19 U | 21 U | 20 U | 20 U | 20 U |
| 4-Methylphenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| 4-Nitroaniline | 78 U | 83 U | 80 U | 79 U | 80 U |
| 4-Nitrophenol, SVOC | 190 U | 210 U | 200 U | 200 U | 200 U |
| Acenaphthene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Acenaphthylene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Anthracene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Benzo(a)anthracene | 4 U | 4 U | 4 U | 4 U | 5 J |
| Benzo(a)pyrene | 5 J | 4 U | 4 U | 4 J | 4 J |
| Benzo(b)fluoranthene | 7 J | 6 J | 5 J | 7 J | 10 J |
| Benzo(g,h,i)perylene | 14 J | 6 J | 9 J | 10 J | 22 |
| Benzo(k)fluoranthene | 4 U | 4 U | 4 U | 4 U | 4 U |
| bis(2-Chloroethoxy)methane | 19 U | 21 U | 20 U | 20 U | 20 U |
| bis(2-Chloroethyl)ether | 19 U | 21 U | 20 U | 20 U | 20 U |
| bis(2-Ethylhexyl)phthalate | 78 U | 83 U | 80 U | 79 U | 80 U |
| Butyl benzyl phthalate | 78 U | 83 U | 80 U | 79 U | 80 U |
| Carbazole | 19 U | 21 U | 20 U | 20 U | 20 U |
| Chrysene | 9 J | 5 J | 4 U | 8 J | 13 J |
| Dibenzo(a,h)anthracene | 4 J | 4 U | 4 U | 4 U | 4 U |
| Dibenzofuran | 19 U | 21 U | 20 U | 20 U | 20 U |
| Diethylphthalate | 78 U | 83 U | 80 U | 79 U | 80 U |
| Dimethyl phthalate | 78 U | 83 U | 80 U | 79 U | 80 U |
| Di-N-Butyl phthalate | 78 U | 83 U | 80 U | 79 U | 80 U |
| Di-N-Octyl phthalate | 78 U | 83 U | 80 U | 79 U | 80 U |
| Fluoranthene | 4 U | 6 J | 4 U | 7 J | 7 J |
| Fluorene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Hexachlorobenzene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Hexachlorobutadiene, SVOC | 19 U | 21 U | 20 U | 20 U | 20 U |
| Hexachlorocyclopentadiene | 190 U | 210 U | 200 U | 200 U | 200 U |
| Hexachloroethane | 39 U | 41 U | 40 U | 40 U | 40 U |
| Indeno(1,2,3-cd)pyrene | 5 J | 4 U | 4 U | 4 U | 6 J |
| Isophorone | 19 U | 21 U | 20 U | 20 U | 20 U |
| Naphthalene, SVOC | 4 U | 5 J | 4 U | 4 J | 4 U |
| Nitrobenzene | 19 U | 21 U | 20 U | 20 U | 20 U |
| N-Nitroso-di-N-propylamine | 19 U | 21 U | 20 U | 20 U | 20 U |
| N-Nitrosodiphenylamine | 19 U | 21 U | 20 U | 20 U | 20 U |
| Pentachlorophenol, SVOC | 39 U | 41 U | 40 U | 40 U | 40 U |
| Phenanthrene | 4 U | 9 J | 4 U | 6 J | 21 |
| Phenol | 19 U | 21 U | 20 U | 20 U | 20 U |
| Pyrene | 4 J | 5 J | 4 U | 5 J | 11 J |

Table C-2
Summary of SVOCs - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-3(0-6)-100517 | MC-3(6-12)-100517 | MC-4(0-6)-100517 | MC-4(6-12)-100517 | MC-5(0-6)-100517 |
|------------------------------|------------------|-------------------|------------------|-------------------|------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-3 | MC-3 | MC-4 | MC-4 | MC-5 |
| Depth | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 |
| Lab Sample ID | 9251156 | 9251159 | 9251150 | 9251153 | 9251120 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | |
| SVOCs (ug/kg) | | | | | |
| 1,2,4-Trichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 21 U |
| 1,2-Dichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 21 U |
| 1,3-Dichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 21 UJ |
| 1,4-Dichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2,2-oxybis[1-chloropropane] | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2,4,5-Trichlorophenol | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2,4,6-Trichlorophenol | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2,4-Dichlorophenol | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2,4-Dimethylphenol | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2,4-Dinitrophenol | 360 U | 360 U | 360 U | 360 U | 380 UJ |
| 2,4-Dinitrotoluene | 80 U | 80 U | 81 U | 80 U | 85 UJ |
| 2,6-Dinitrotoluene | 20 U | 20 U | 20 U | 20 U | 21 UJ |
| 2-Chloronaphthalene | 8 U | 8 U | 8 U | 8 U | 8 U |
| 2-Chlorophenol | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2-Methylnaphthalene | 4 U | 4 U | 4 U | 4 U | 11 J |
| 2-Methylphenol | 20 U | 20 U | 20 U | 20 U | 21 UJ |
| 2-Nitroaniline | 20 U | 20 U | 20 U | 20 U | 21 U |
| 2-Nitrophenol | 20 U | 20 U | 20 U | 20 U | 21 UJ |
| 3,3-Dichlorobenzidine | 120 U | 120 U | 120 U | 120 U | 130 U |
| 3-Nitroaniline | 80 U | 80 U | 81 U | 80 U | 85 U |
| 4,6-Dinitro-2-methylphenol | 200 U | 200 U | 200 U | 200 U | 210 UJ |
| 4-Bromophenyl-phenylether | 20 U | 20 U | 20 U | 20 U | 21 U |
| 4-Chloro-3-methylphenol | 20 U | 20 U | 20 U | 20 U | 21 U |
| 4-Chloroaniline | 40 U | 40 U | 41 U | 40 U | 42 U |
| 4-Chlorophenyl-phenylether | 20 U | 20 U | 20 U | 20 U | 21 U |
| 4-Methylphenol | 20 U | 20 U | 20 U | 20 U | 260 J |
| 4-Nitroaniline | 80 U | 80 U | 81 U | 80 U | 85 U |
| 4-Nitrophenol, SVOC | 200 U | 200 U | 200 U | 200 U | 210 U |
| Acenaphthene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Acenaphthylene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Anthracene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Benzo(a)anthracene | 4 U | 4 U | 4 U | 4 J | 9 J |
| Benzo(a)pyrene | 4 U | 4 U | 5 J | 4 J | 12 J |
| Benzo(b)fluoranthene | 13 J | 9 J | 7 J | 10 J | 22 |
| Benzo(g,h,i)perylene | 25 | 16 J | 14 J | 21 | 10 J |
| Benzo(k)fluoranthene | 4 U | 4 U | 4 U | 4 U | 11 J |
| bis(2-Chloroethoxy)methane | 20 U | 20 U | 20 U | 20 U | 21 U |
| bis(2-Chloroethyl)ether | 20 U | 20 U | 20 U | 20 U | 21 U |
| bis(2-Ethylhexyl)phthalate | 80 U | 80 U | 81 U | 80 U | 85 U |
| Butyl benzyl phthalate | 80 U | 80 U | 81 U | 80 U | 85 U |
| Carbazole | 20 U | 20 U | 20 U | 20 U | 21 U |
| Chrysene | 11 J | 12 J | 8 J | 13 J | 20 J |
| Dibenzo(a,h)anthracene | 4 U | 4 J | 5 J | 4 U | 4 U |
| Dibenzofuran | 20 U | 20 U | 20 U | 20 U | 21 U |
| Diethylphthalate | 80 U | 80 U | 81 U | 80 U | 85 U |
| Dimethyl phthalate | 80 U | 80 U | 81 U | 80 U | 85 U |
| Di-N-Butyl phthalate | 80 U | 80 U | 81 U | 80 U | 85 U |
| Di-N-Octyl phthalate | 80 U | 80 U | 81 U | 80 U | 85 UJ |
| Fluoranthene | 4 U | 6 J | 4 U | 6 J | 35 |
| Fluorene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Hexachlorobenzene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Hexachlorobutadiene, SVOC | 20 U | 20 U | 20 U | 20 U | 21 U |
| Hexachlorocyclopentadiene | 200 U | 200 U | 200 U | 200 U | 210 R |
| Hexachloroethane | 40 U | 40 U | 41 U | 40 U | 42 UJ |
| Indeno(1,2,3-cd)pyrene | 8 J | 5 J | 7 J | 6 J | 8 J |
| Isophorone | 20 U | 20 U | 20 U | 20 U | 21 U |
| Naphthalene, SVOC | 4 U | 4 U | 4 U | 4 U | 28 |
| Nitrobenzene | 20 U | 20 U | 20 U | 20 U | 21 UJ |
| N-Nitroso-di-N-propylamine | 20 U | 20 U | 20 U | 20 U | 21 U |
| N-Nitrosodiphenylamine | 20 U | 20 U | 20 U | 20 U | 21 U |
| Pentachlorophenol, SVOC | 40 U | 40 U | 41 U | 40 U | 42 U |
| Phenanthrene | 4 J | 11 J | 4 U | 9 J | 35 |
| Phenol | 20 U | 20 U | 20 U | 20 U | 21 U |
| Pyrene | 4 J | 9 J | 4 J | 7 J | 20 J |

Table C-2
Summary of SVOCs - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-5(6-12)-100517 | MC-5(6-12)-100517D | MC-6(0-6)-100517 | MC-6(6-12)-100517 | MC-7(0-6)-100517 |
|------------------------------|-------------------|--------------------|------------------|-------------------|------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-5 | MC-5 | MC-6 | MC-6 | MC-7 |
| Depth | 6 - 12 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 |
| Lab Sample ID | 9251123 | 9251126 | 9251129 | 9251132 | 9251135 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | |
| SVOCs (ug/kg) | | | | | |
| 1,2,4-Trichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 20 U |
| 1,2-Dichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 20 U |
| 1,3-Dichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 20 U |
| 1,4-Dichlorobenzene, SVOC | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2,2-oxybis[1-chloropropane] | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2,4,5-Trichlorophenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2,4,6-Trichlorophenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2,4-Dichlorophenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2,4-Dimethylphenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2,4-Dinitrophenol | 350 U | 360 U | 370 U | 350 U | 360 U |
| 2,4-Dinitrotoluene | 79 U | 81 U | 81 U | 79 U | 80 U |
| 2,6-Dinitrotoluene | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2-Chloronaphthalene | 8 U | 8 U | 8 U | 8 U | 8 U |
| 2-Chlorophenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2-Methylnaphthalene | 4 U | 4 U | 6 J | 30 | 8 J |
| 2-Methylphenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2-Nitroaniline | 20 U | 20 U | 20 U | 20 U | 20 U |
| 2-Nitrophenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 3,3-Dichlorobenzidine | 120 U | 120 U | 120 U | 120 U | 120 U |
| 3-Nitroaniline | 79 U | 81 U | 81 U | 79 U | 80 U |
| 4,6-Dinitro-2-methylphenol | 200 U | 200 U | 200 U | 200 U | 200 U |
| 4-Bromophenyl-phenylether | 20 U | 20 U | 20 U | 20 U | 20 U |
| 4-Chloro-3-methylphenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 4-Chloroaniline | 39 U | 41 U | 41 U | 39 U | 40 U |
| 4-Chlorophenyl-phenylether | 20 U | 20 U | 20 U | 20 U | 20 U |
| 4-Methylphenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| 4-Nitroaniline | 79 U | 81 U | 81 U | 79 U | 80 U |
| 4-Nitrophenol, SVOC | 200 U | 200 U | 200 U | 200 U | 200 U |
| Acenaphthene | 4 U | 4 U | 12 J | 4 U | 5 J |
| Acenaphthylene | 4 U | 4 U | 4 U | 4 U | 6 J |
| Anthracene | 4 U | 4 U | 4 U | 4 U | 7 J |
| Benzo(a)anthracene | 5 J | 5 J | 9 J | 5 J | 14 J |
| Benzo(a)pyrene | 6 J | 5 J | 10 J | 6 J | 19 J |
| Benzo(b)fluoranthene | 12 J | 14 J | 17 J | 14 J | 22 |
| Benzo(g,h,i)perylene | 20 J | 25 | 15 J | 15 J | 29 |
| Benzo(k)fluoranthene | 5 J | 6 J | 9 J | 4 U | 10 J |
| bis(2-Chloroethoxy)methane | 20 U | 20 U | 20 U | 20 U | 20 U |
| bis(2-Chloroethyl)ether | 20 U | 20 U | 20 U | 20 U | 20 U |
| bis(2-Ethylhexyl)phthalate | 79 U | 81 U | 81 U | 79 U | 80 U |
| Butyl benzyl phthalate | 79 U | 81 U | 81 U | 79 U | 80 U |
| Carbazole | 20 U | 20 U | 20 U | 20 U | 20 U |
| Chrysene | 12 J | 15 J | 15 J | 9 J | 26 |
| Dibenzo(a,h)anthracene | 4 U | 4 U | 4 U | 4 U | 6 J |
| Dibenzofuran | 20 U | 20 U | 20 U | 20 U | 20 U |
| Diethylphthalate | 79 U | 81 U | 81 U | 79 U | 80 U |
| Dimethyl phthalate | 79 U | 81 U | 81 U | 79 U | 80 U |
| Di-N-Butyl phthalate | 79 U | 81 U | 81 U | 79 U | 80 U |
| Di-N-Octyl phthalate | 79 U | 81 U | 81 U | 79 U | 80 U |
| Fluoranthene | 9 J | 6 J | 17 J | 6 J | 21 |
| Fluorene | 4 U | 4 U | 16 J | 4 J | 9 J |
| Hexachlorobenzene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Hexachlorobutadiene, SVOC | 20 U | 20 U | 20 U | 20 U | 20 U |
| Hexachlorocyclopentadiene | 200 U | 200 U | 200 U | 200 U | 200 U |
| Hexachloroethane | 39 U | 41 U | 41 U | 39 U | 40 U |
| Indeno(1,2,3-cd)pyrene | 6 J | 7 J | 9 J | 7 J | 11 J |
| Isophorone | 20 U | 20 U | 20 U | 20 U | 20 U |
| Naphthalene, SVOC | 4 U | 4 U | 4 U | 11 J | 4 J |
| Nitrobenzene | 20 U | 20 U | 20 U | 20 U | 20 U |
| N-Nitroso-di-N-propylamine | 20 U | 20 U | 20 U | 20 U | 20 U |
| N-Nitrosodiphenylamine | 20 U | 20 U | 20 U | 20 U | 20 U |
| Pentachlorophenol, SVOC | 39 U | 41 U | 41 U | 39 U | 40 U |
| Phenanthrene | 7 J | 11 J | 19 J | 8 J | 22 |
| Phenol | 20 U | 20 U | 20 U | 20 U | 20 U |
| Pyrene | 9 J | 9 J | 17 J | 7 J | 26 |

Table C-2
Summary of SVOCs - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-7(6-12)-100517 | MC-8(0-6)-100517 | MC-8(6-12)-100517 | BR-1(0-2)-100517 | BR-1(0-2)-100517D |
|------------------------------|-------------------|------------------|-------------------|------------------|-------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-7 | MC-8 | MC-8 | BR-1 | BR-1 |
| Depth | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 2 | 0 - 2 |
| Lab Sample ID | 9251138 | 9251141 | 9251144 | 9251174 | 9251177 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-7 | 3357-7 |
| Parameter | | | | | |
| SVOCs (ug/kg) | | | | | |
| 1,2,4-Trichlorobenzene, SVOC | 20 U | 19 U | 20 U | 20 U | 20 U |
| 1,2-Dichlorobenzene, SVOC | 20 U | 19 U | 20 U | 20 U | 20 U |
| 1,3-Dichlorobenzene, SVOC | 20 U | 19 U | 20 U | 20 U | 20 U |
| 1,4-Dichlorobenzene, SVOC | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2,2-oxybis[1-chloropropane] | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2,4,5-Trichlorophenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2,4,6-Trichlorophenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2,4-Dichlorophenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2,4-Dimethylphenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2,4-Dinitrophenol | 370 U | 340 U | 350 U | 370 U | 360 U |
| 2,4-Dinitrotoluene | 81 U | 76 U | 78 U | 82 U | 79 U |
| 2,6-Dinitrotoluene | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2-Chloronaphthalene | 8 U | 8 U | 8 U | 8 U | 8 U |
| 2-Chlorophenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2-Methylnaphthalene | 4 U | 14 J | 4 U | 6 J | 7 J |
| 2-Methylphenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2-Nitroaniline | 20 U | 19 U | 20 U | 20 U | 20 U |
| 2-Nitrophenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 3,3-Dichlorobenzidine | 120 U | 110 U | 120 U | 120 U | 120 U |
| 3-Nitroaniline | 81 U | 76 U | 78 U | 82 U | 79 U |
| 4,6-Dinitro-2-methylphenol | 200 U | 190 U | 200 U | 200 U | 200 U |
| 4-Bromophenyl-phenylether | 20 U | 19 U | 20 U | 20 U | 20 U |
| 4-Chloro-3-methylphenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 4-Chloroaniline | 41 U | 38 U | 39 U | 41 U | 40 U |
| 4-Chlorophenyl-phenylether | 20 U | 19 U | 20 U | 20 U | 20 U |
| 4-Methylphenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| 4-Nitroaniline | 81 U | 76 U | 78 U | 82 U | 79 U |
| 4-Nitrophenol, SVOC | 200 U | 190 U | 200 U | 200 U | 200 U |
| Acenaphthene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Acenaphthylene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Anthracene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Benzo(a)anthracene | 4 J | 5 J | 4 U | 4 U | 4 U |
| Benzo(a)pyrene | 8 J | 8 J | 5 J | 4 U | 6 J |
| Benzo(b)fluoranthene | 12 J | 9 J | 8 J | 8 J | 8 J |
| Benzo(g,h,i)perylene | 30 | 23 | 14 J | 12 J | 16 J |
| Benzo(k)fluoranthene | 7 J | 4 J | 5 J | 4 U | 4 J |
| bis(2-Chloroethoxy)methane | 20 U | 19 U | 20 U | 20 U | 20 U |
| bis(2-Chloroethyl)ether | 20 U | 19 U | 20 U | 20 U | 20 U |
| bis(2-Ethylhexyl)phthalate | 81 U | 76 U | 78 U | 82 U | 79 U |
| Butyl benzyl phthalate | 81 U | 76 U | 78 U | 82 U | 79 U |
| Carbazole | 20 U | 19 U | 20 U | 20 U | 20 U |
| Chrysene | 15 J | 18 J | 9 J | 7 J | 10 J |
| Dibenzo(a,h)anthracene | 5 J | 4 U | 4 U | 4 U | 4 U |
| Dibenzofuran | 20 U | 19 U | 20 U | 20 U | 20 U |
| Diethylphthalate | 81 U | 76 U | 78 U | 82 U | 79 U |
| Dimethyl phthalate | 81 U | 76 U | 78 U | 82 U | 79 U |
| Di-N-Butyl phthalate | 81 U | 76 U | 78 U | 82 U | 79 U |
| Di-N-Octyl phthalate | 81 U | 76 U | 78 U | 82 U | 79 U |
| Fluoranthene | 5 J | 4 J | 5 J | 6 J | 7 J |
| Fluorene | 4 U | 4 U | 4 U | 4 J | 4 U |
| Hexachlorobenzene | 4 U | 4 U | 4 U | 4 U | 4 U |
| Hexachlorobutadiene, SVOC | 20 U | 19 U | 20 U | 20 U | 20 U |
| Hexachlorocyclopentadiene | 200 U | 190 U | 200 U | 200 U | 200 U |
| Hexachloroethane | 41 U | 38 U | 39 U | 41 U | 40 U |
| Indeno(1,2,3-cd)pyrene | 11 J | 6 J | 5 J | 4 J | 7 J |
| Isophorone | 20 U | 19 U | 20 U | 20 U | 20 U |
| Naphthalene, SVOC | 4 U | 4 U | 4 U | 6 J | 4 U |
| Nitrobenzene | 20 U | 19 U | 20 U | 20 U | 20 U |
| N-Nitroso-di-N-propylamine | 20 U | 19 U | 20 U | 20 U | 20 U |
| N-Nitrosodiphenylamine | 20 U | 19 U | 20 U | 20 U | 20 U |
| Pentachlorophenol, SVOC | 41 U | 38 U | 39 U | 41 U | 40 U |
| Phenanthrene | 8 J | 11 J | 6 J | 12 J | 12 J |
| Phenol | 20 U | 19 U | 20 U | 20 U | 20 U |
| Pyrene | 7 J | 12 J | 6 J | 6 J | 7 J |

Table C-3
Summary of Inorganics - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | ROW-1(0-2)-100517 | MC-1(0-6)-100517 | MC-1(6-12)-100517 | MC-2(0-6)-100517 | MC-2(6-12)-100517 |
|-----------------------------------|-------------------|------------------|-------------------|------------------|-------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | ROW-1 | MC-1 | MC-1 | MC-2 | MC-2 |
| Depth | 0 - 2 | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 |
| Lab Sample ID | 9251147 | 9251168 | 9251171 | 9251162 | 9251165 |
| ISGS Site No. | 3357-1 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | |
| Moisture (%) | 15.5 | 19.3 | 17.7 | 17 | 17.3 |
| Laboratory pH (standard pH units) | 8.46 | 7.87 | 8.19 | 7.79 | 8.32 |
| Total Metals (mg/kg) | | | | | |
| Antimony, Total | 0.953 U | 0.963 U | 0.97 U | 0.989 U | 0.983 U |
| Arsenic, Total | 8.77 | 3.7 | 4.13 | 6.8 | 8 |
| Barium, Total | 57.2 | 46.7 | 73.5 | 121 | 71.9 |
| Beryllium, Total | 0.767 | 0.516 J | 0.623 | 1.15 | 0.761 |
| Cadmium, Total | 0.467 J | 0.235 J | 0.437 J | 2.24 | 0.446 J |
| Calcium, Total | 55800 | 28100 | 80600 | 17800 | 59800 |
| Chromium, Total | 27 | 16.9 | 25.4 | 33.9 | 28.2 |
| Cobalt, Total | 11.3 | 6.49 | 13.2 | 13.4 | 10.7 |
| Copper, Total | 22.5 | 11.8 | 34.4 | 20.1 | 17.7 |
| Iron, Total | 25900 | 15200 | 21100 | 25800 | 24900 |
| Lead, Total | 17.3 J | 8.63 J | 11.5 J | 17.8 J | 11.3 J |
| Magnesium, Total | 27000 J | 13900 J | 42100 J | 14600 J | 27800 J |
| Manganese, Total | 488 J | 311 J | 407 J | 217 J | 408 J |
| Mercury, Total | 0.0115 U | 0.0124 U | 0.012 U | 0.0162 J | 0.0113 U |
| Nickel, Total | 30.1 | 18.2 | 26.7 | 31.1 | 29.8 |
| Potassium, Total | 5370 | 2970 | 4160 | 5090 | 5540 |
| Selenium, Total | 1.02 U | 1.03 U | 1.04 U | 1.06 U | 1.05 U |
| Silver, Total | 0.416 J | 0.266 U | 0.268 U | 0.384 J | 0.271 U |
| Sodium, Total | 1020 | 219 | 198 | 510 | 218 |
| Thallium, Total | 1.5 U | 1.52 U | 1.53 U | 1.56 U | 1.55 U |
| Vanadium, Total | 35.1 | 23.6 | 34 | 51.9 | 37.7 |
| Zinc, Total | 65.1 J | 38.3 J | 46.7 J | 181 J | 55.6 J |
| TCLP Metals (mg/l) | | | | | |
| Arsenic, TCLP | 0.1 | 0.0118 J | 0.0137 J | 0.0096 U | 0.0096 U |
| Barium, TCLP | 0.965 | 0.0665 | 0.156 | 0.0207 | 0.0624 |
| Beryllium, TCLP | 0.0118 | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Cadmium, TCLP | 0.003 J | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U |
| Chromium, TCLP | 0.304 | 0.013 J | 0.0411 | 0.0033 U | 0.0142 J |
| Cobalt, TCLP | 0.0855 | 0.0034 J | 0.0104 | 0.0017 U | 0.0031 J |
| Copper, TCLP | 0.171 | 0.0124 | 0.0267 | 0.004 U | 0.0085 J |
| Iron, TCLP | 235 | 9.75 | 29.9 | 0.792 | 9.04 |
| Lead, TCLP | 0.166 | 0.006 U | 0.0121 J | 0.006 U | 0.006 U |
| Manganese, TCLP | 2.3 | 0.11 | 0.231 | 0.0243 | 0.0834 |
| Mercury, TCLP | 0.00021 | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U |
| Nickel, TCLP | 0.245 | 0.0121 | 0.0379 | 0.004 U | 0.0119 |
| Selenium, TCLP | 0.0281 | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U |
| Silver, TCLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, TCLP | 0.483 | 0.0199 J | 0.0602 | 0.0065 U | 0.0187 J |
| SPLP Metals (mg/l) | | | | | |
| Arsenic, SPLP | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U |
| Barium, SPLP | 0.57 | 0.658 | 0.528 | 0.62 | 0.516 |
| Beryllium, SPLP | 0.002 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Cadmium, SPLP | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U |
| Chromium, SPLP | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Cobalt, SPLP | 0.0248 | 0.0145 | 0.0107 | 0.0128 | 0.0203 |
| Copper, SPLP | 0.004 U | 0.004 U | 0.004 U | 0.004 U | 0.0184 |
| Iron, SPLP | 0.0969 J | 0.0805 U | 0.0805 U | 0.0939 J | 0.0805 U |
| Lead, SPLP | 0.0064 J | 0.0094 J | 0.0147 J | 0.0174 | 0.0109 J |
| Manganese, SPLP | 9.05 | 5.9 | 3.72 | 6.06 | 3.01 |
| Mercury, SPLP | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U |
| Nickel, SPLP | 0.0256 | 0.0074 J | 0.014 | 0.0056 J | 0.0157 |
| Selenium, SPLP | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U |
| Silver, SPLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, SPLP | 0.0129 J | 0.0252 | 0.0121 J | 0.0468 | 0.0121 J |

Table C-3
Summary of Inorganics - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-3(0-6)-100517 | MC-3(6-12)-100517 | MC-4(0-6)-100517 | MC-4(6-12)-100517 | MC-5(0-6)-100517 |
|-----------------------------------|------------------|-------------------|------------------|-------------------|------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-3 | MC-3 | MC-4 | MC-4 | MC-5 |
| Depth | 0 - 6 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 |
| Lab Sample ID | 9251156 | 9251159 | 9251150 | 9251153 | 9251120 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | |
| Moisture (%) | 16.9 | 16.4 | 17.7 | 17 | 21.4 |
| Laboratory pH (standard pH units) | 7.97 | 8.2 | 8.17 | 8.23 | 7.67 |
| Total Metals (mg/kg) | | | | | |
| Antimony, Total | 0.96 U | 1.02 U | 0.997 U | 0.998 U | 1.1 U |
| Arsenic, Total | 7.59 | 4.09 | 6.02 | 13.8 | 6.87 |
| Barium, Total | 86 | 72.2 | 74.6 | 68.1 | 157 |
| Beryllium, Total | 0.916 | 0.822 | 0.8 | 0.727 | 1.38 |
| Cadmium, Total | 0.467 J | 0.381 J | 0.467 J | 0.466 J | 0.516 J |
| Calcium, Total | 57800 | 59600 | 66800 | 68600 | 9080 |
| Chromium, Total | 31.2 | 29.5 | 29.5 | 27.2 | 38.1 J |
| Cobalt, Total | 11.2 | 11.8 | 9.74 | 19.1 | 12.4 |
| Copper, Total | 20.4 | 17.3 | 19.7 | 19.7 | 21.9 |
| Iron, Total | 27400 | 23200 | 25100 | 29400 | 25500 |
| Lead, Total | 13.2 J | 10.9 J | 12.5 J | 14.3 J | 23.4 J |
| Magnesium, Total | 24500 J | 27600 J | 29600 J | 30100 J | 9310 J |
| Manganese, Total | 410 J | 421 J | 403 J | 566 J | 168 J |
| Mercury, Total | 0.0127 J | 0.0118 U | 0.012 U | 0.0119 U | 0.038 J |
| Nickel, Total | 31.9 | 29.7 | 29.8 | 34.3 | 30.3 |
| Potassium, Total | 5860 | 6140 | 6000 | 4850 | 5740 |
| Selenium, Total | 1.03 U | 1.09 U | 1.07 U | 1.07 U | 1.17 U |
| Silver, Total | 0.362 J | 0.283 J | 0.275 U | 0.353 J | 0.496 J |
| Sodium, Total | 733 | 218 | 281 | 207 | 611 J |
| Thallium, Total | 1.51 U | 1.61 U | 1.57 U | 1.57 U | 1.73 U |
| Vanadium, Total | 43.2 | 38.2 | 40.9 | 41 | 60.1 J |
| Zinc, Total | 58.3 J | 54 J | 57.7 J | 57.3 J | 81.2 J |
| TCLP Metals (mg/l) | | | | | |
| Arsenic, TCLP | 0.0413 | 0.0138 J | 0.0096 U | 0.0096 U | 0.0247 |
| Barium, TCLP | 0.417 | 0.0683 | 0.0229 | 0.0741 | 0.367 |
| Beryllium, TCLP | 0.0054 | 0.002 U | 0.002 U | 0.002 U | 0.0038 J |
| Cadmium, TCLP | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U |
| Chromium, TCLP | 0.119 | 0.018 | 0.0033 U | 0.0192 | 0.0968 |
| Cobalt, TCLP | 0.0346 | 0.0049 J | 0.0017 U | 0.0037 J | 0.0258 |
| Copper, TCLP | 0.091 | 0.011 | 0.004 U | 0.0124 | 0.0569 |
| Iron, TCLP | 110 | 11.5 | 1.08 | 13 | 71.3 |
| Lead, TCLP | 0.0542 | 0.0063 J | 0.006 U | 0.006 U | 0.0319 |
| Manganese, TCLP | 0.59 | 0.108 | 0.019 | 0.0862 | 0.398 |
| Mercury, TCLP | 0.00013 J | 0.00005 U | 0.00005 U | 0.00005 U | 0.000086 J |
| Nickel, TCLP | 0.114 | 0.015 | 0.004 U | 0.0163 | 0.0764 |
| Selenium, TCLP | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U | 0.0105 J |
| Silver, TCLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, TCLP | 0.169 | 0.0232 | 0.0065 U | 0.0266 | 0.133 |
| SPLP Metals (mg/l) | | | | | |
| Arsenic, SPLP | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U |
| Barium, SPLP | 0.522 | 0.561 | 0.385 | 0.411 | 0.395 |
| Beryllium, SPLP | 0.002 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Cadmium, SPLP | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U |
| Chromium, SPLP | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Cobalt, SPLP | 0.0285 | 0.0121 | 0.0117 | 0.0102 | 0.0187 |
| Copper, SPLP | 0.004 U | 0.004 U | 0.004 U | 0.004 U | 0.004 U |
| Iron, SPLP | 0.664 | 0.0805 U | 0.0805 U | 0.0963 J | 0.216 |
| Lead, SPLP | 0.0089 J | 0.0066 J | 0.006 U | 0.0078 J | 0.006 U |
| Manganese, SPLP | 4.61 | 2.75 | 2.78 | 2.17 | 2.72 |
| Mercury, SPLP | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U |
| Nickel, SPLP | 0.0116 | 0.011 | 0.0123 | 0.0162 | 0.0136 |
| Selenium, SPLP | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U |
| Silver, SPLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, SPLP | 0.0531 | 0.0285 | 0.012 J | 0.0081 J | 0.0085 J |

Table C-3
Summary of Inorganics - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-5(6-12)-100517 | MC-5(6-12)-100517D | MC-6(0-6)-100517 | MC-6(6-12)-100517 | MC-7(0-6)-100517 |
|-----------------------------------|-------------------|--------------------|------------------|-------------------|------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-5 | MC-5 | MC-6 | MC-6 | MC-7 |
| Depth | 6 - 12 | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 6 |
| Lab Sample ID | 9251123 | 9251126 | 9251129 | 9251132 | 9251135 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-4 | 3357-4 |
| Parameter | | | | | |
| Moisture (%) | 16.6 | 18.6 | 19 | 16 | 16.8 |
| Laboratory pH (standard pH units) | 8.07 | 8.14 | 7.97 | 8.08 | 8.39 |
| Total Metals (mg/kg) | | | | | |
| Antimony, Total | 0.975 U | 1.05 U | 0.995 U | 0.986 U | 1.02 U |
| Arsenic, Total | 8.43 | 8.96 | 7.78 | 6.96 | 6.9 |
| Barium, Total | 84.2 | 77.9 | 76 | 70.7 | 54.1 |
| Beryllium, Total | 0.994 | 0.907 | 0.911 | 0.887 | 0.503 J |
| Cadmium, Total | 0.42 J | 0.483 J | 0.534 J | 0.447 J | 0.403 J |
| Calcium, Total | 55900 | 65600 | 60400 | 60600 | 92500 |
| Chromium, Total | 32.8 | 32.8 | 30.8 | 31.3 | 22.1 |
| Cobalt, Total | 12.2 | 11.6 | 12.1 | 15 | 8.42 |
| Copper, Total | 18.5 | 19.8 | 23.6 | 19.5 | 16.7 |
| Iron, Total | 28800 | 27100 | 28700 | 27300 | 19300 |
| Lead, Total | 12.5 J | 12.6 J | 22 J | 13.3 J | 12.4 J |
| Magnesium, Total | 25300 J | 28900 J | 30400 J | 27600 J | 53300 J |
| Manganese, Total | 493 J | 440 J | 483 J | 521 J | 441 J |
| Mercury, Total | 0.0118 U | 0.0119 U | 0.0121 U | 0.0115 U | 0.012 J |
| Nickel, Total | 31 | 31.9 | 32.7 | 32.9 | 22.7 |
| Potassium, Total | 6880 | 7140 | 6090 | 6340 | 4560 |
| Selenium, Total | 1.04 U | 1.12 U | 1.06 U | 1.05 U | 1.09 U |
| Silver, Total | 0.58 | 0.493 J | 0.509 J | 0.548 J | 0.28 U |
| Sodium, Total | 239 | 300 | 828 | 516 | 708 |
| Thallium, Total | 1.54 U | 1.65 U | 1.57 U | 1.55 U | 1.6 U |
| Vanadium, Total | 45.1 | 45.3 | 42 | 43.5 | 32.5 |
| Zinc, Total | 55.9 J | 56.9 J | 69.8 J | 59 J | 44.1 J |
| TCLP Metals (mg/l) | | | | | |
| Arsenic, TCLP | 0.0096 U | 0.0163 J | 0.0358 | 0.0096 U | 0.0372 |
| Barium, TCLP | 0.0603 J | 0.119 J | 0.286 | 0.0644 | 0.354 |
| Beryllium, TCLP | 0.002 U | 0.002 U | 0.0038 J | 0.002 U | 0.0039 J |
| Cadmium, TCLP | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U |
| Chromium, TCLP | 0.0139 J | 0.0293 J | 0.0885 | 0.0162 | 0.0951 |
| Cobalt, TCLP | 0.0028 J | 0.0092 J | 0.031 | 0.0039 J | 0.0268 |
| Copper, TCLP | 0.0076 J | 0.0185 J | 0.0788 | 0.0093 J | 0.0749 |
| Iron, TCLP | 8.83 | 20.9 J | 78.3 | 10.9 | 76 |
| Lead, TCLP | 0.006 U | 0.0097 J | 0.0528 | 0.006 U | 0.0649 |
| Manganese, TCLP | 0.0937 | 0.197 J | 0.876 | 0.0825 | 0.719 |
| Mercury, TCLP | 0.00005 U | 0.00005 U | 0.0001 J | 0.00005 U | 0.00011 J |
| Nickel, TCLP | 0.0132 | 0.0263 J | 0.0878 | 0.0143 | 0.0779 |
| Selenium, TCLP | 0.0093 U | 0.0093 U | 0.0155 J | 0.0093 U | 0.0093 U |
| Silver, TCLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, TCLP | 0.0194 J | 0.0385 J | 0.167 | 0.0214 | 0.198 |
| SPLP Metals (mg/l) | | | | | |
| Arsenic, SPLP | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U |
| Barium, SPLP | 0.57 | 0.498 | 0.531 | 0.386 | 0.557 |
| Beryllium, SPLP | 0.002 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Cadmium, SPLP | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U |
| Chromium, SPLP | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Cobalt, SPLP | 0.0114 | 0.01 | 0.0207 | 0.0107 | 0.0174 |
| Copper, SPLP | 0.004 U | 0.004 U | 0.004 U | 0.004 U | 0.004 U |
| Iron, SPLP | 0.135 J | 0.0805 U | 0.0951 J | 0.114 J | 0.119 J |
| Lead, SPLP | 0.0069 J | 0.006 U | 0.0119 J | 0.007 J | 0.0113 J |
| Manganese, SPLP | 3.09 | 2.78 | 5.02 | 2.35 | 5.19 |
| Mercury, SPLP | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U |
| Nickel, SPLP | 0.0101 | 0.0101 | 0.0205 | 0.0118 | 0.0142 |
| Selenium, SPLP | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U | 0.0093 U |
| Silver, SPLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, SPLP | 0.0097 J | 0.0115 J | 0.0586 | 0.007 J | 0.113 |

Table C-3
Summary of Inorganics - Soil
Illinois Department of Transportation
FAP 330: US Route 45 (96th Avenue/LaGrange Road) - Metra Rail to 187th Street
Mokena, Will County, Illinois

| Field Sample ID | MC-7(6-12)-100517 | MC-8(0-6)-100517 | MC-8(6-12)-100517 | BR-1(0-2)-100517 | BR-1(0-2)-100517D |
|-----------------------------------|-------------------|------------------|-------------------|------------------|-------------------|
| Sample Date | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 | 10/5/2017 |
| Location ID | MC-7 | MC-8 | MC-8 | BR-1 | BR-1 |
| Depth | 6 - 12 | 0 - 6 | 6 - 12 | 0 - 2 | 0 - 2 |
| Lab Sample ID | 9251138 | 9251141 | 9251144 | 9251174 | 9251177 |
| ISGS Site No. | 3357-4 | 3357-4 | 3357-4 | 3357-7 | 3357-7 |
| Parameter | | | | | |
| Moisture (%) | 18.5 | 11.7 | 15.2 | 18.8 | 15.7 |
| Laboratory pH (standard pH units) | 8.13 | 8.34 | 8.12 | 8.24 | 8.34 |
| Total Metals (mg/kg) | | | | | |
| Antimony, Total | 1.02 U | 0.976 U | 0.977 U | 1.01 U | 1.02 U |
| Arsenic, Total | 6.56 | 9.86 | 11.8 | 6.03 J | 3.23 J |
| Barium, Total | 77.5 | 56 | 73.1 | 79.9 J | 15.3 J |
| Beryllium, Total | 0.811 | 0.842 | 0.808 | 0.719 | 0.0928 U |
| Cadmium, Total | 0.441 J | 0.503 J | 0.595 | 0.917 | 1.23 |
| Calcium, Total | 60900 | 43500 | 63300 | 83300 J | 169000 J |
| Chromium, Total | 30.2 | 26.5 | 27.3 | 27.9 J | 8.58 J |
| Cobalt, Total | 12.5 | 14.8 | 13.4 | 11.9 | 8.79 |
| Copper, Total | 17.9 | 27.6 | 24.7 | 26.2 | 38.8 |
| Iron, Total | 25300 | 28000 | 30200 | 23000 J | 7380 J |
| Lead, Total | 11.2 J | 18.4 J | 17.5 J | 11 J | 8.49 J |
| Magnesium, Total | 30100 J | 24900 J | 24500 J | 46800 J | 99000 J |
| Manganese, Total | 464 J | 567 J | 550 J | 504 J | 225 J |
| Mercury, Total | 0.0115 U | 0.014 J | 0.0116 U | 0.0121 U | 0.0113 U |
| Nickel, Total | 32.6 | 35.5 | 31.2 | 27.7 J | 9.88 J |
| Potassium, Total | 6240 | 5470 | 5280 | 4940 J | 2460 J |
| Selenium, Total | 1.09 U | 1.04 U | 1.04 U | 1.08 U | 1.09 U |
| Silver, Total | 0.358 J | 0.38 J | 0.51 J | 0.876 | 1.37 |
| Sodium, Total | 610 | 600 | 180 | 626 J | 285 J |
| Thallium, Total | 1.6 U | 1.54 U | 1.54 U | 1.59 U | 1.61 U |
| Vanadium, Total | 40.7 | 35.6 | 39.5 | 40.6 J | 11.8 J |
| Zinc, Total | 55.9 J | 76.4 J | 61.2 J | 45.1 J | 10.3 J |
| TCLP Metals (mg/l) | | | | | |
| Arsenic, TCLP | 0.011 J | 0.0385 | 0.0096 U | 0.0096 U | 0.0096 U |
| Barium, TCLP | 0.0483 | 0.202 | 0.0387 | 0.0561 | 0.0801 |
| Beryllium, TCLP | 0.002 U | 0.0041 J | 0.002 U | 0.002 U | 0.002 U |
| Cadmium, TCLP | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U | 0.0018 U |
| Chromium, TCLP | 0.0116 J | 0.0867 | 0.0117 J | 0.013 J | 0.0199 |
| Cobalt, TCLP | 0.0025 J | 0.0243 | 0.0034 J | 0.0045 J | 0.0061 |
| Copper, TCLP | 0.0079 J | 0.078 | 0.0097 J | 0.0128 | 0.0172 |
| Iron, TCLP | 7.65 | 81.1 | 8.66 | 8.83 | 14.2 |
| Lead, TCLP | 0.007 J | 0.0378 | 0.006 U | 0.006 U | 0.006 U |
| Manganese, TCLP | 0.0496 | 0.483 | 0.124 | 0.149 | 0.156 |
| Mercury, TCLP | 0.00005 U | 0.000092 J | 0.00005 U | 0.00005 U | 0.00005 U |
| Nickel, TCLP | 0.0106 | 0.089 | 0.0106 | 0.0098 J | 0.0174 |
| Selenium, TCLP | 0.0093 U | 0.0123 J | 0.0093 U | 0.0093 U | 0.0093 U |
| Silver, TCLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, TCLP | 0.0166 J | 0.196 | 0.0219 | 0.0183 J | 0.0262 |
| SPLP Metals (mg/l) | | | | | |
| Arsenic, SPLP | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U | 0.0096 U |
| Barium, SPLP | 0.42 | 0.332 | 0.378 | 0.543 | 0.419 |
| Beryllium, SPLP | 0.002 U | 0.002 U | 0.002 U | 0.002 U | 0.002 U |
| Cadmium, SPLP | 0.0018 U | 0.0018 U | 0.0024 J | 0.0018 U | 0.0023 J |
| Chromium, SPLP | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Cobalt, SPLP | 0.0143 | 0.007 | 0.0228 | 0.037 | 0.0498 |
| Copper, SPLP | 0.004 U | 0.004 U | 0.004 U | 0.004 U | 0.004 U |
| Iron, SPLP | 0.0805 U | 0.0805 U | 0.143 J | 0.0805 U | 0.0805 U |
| Lead, SPLP | 0.0075 J | 0.006 U | 0.0128 J | 0.0112 J | 0.0072 J |
| Manganese, SPLP | 2.46 | 2.66 | 5.15 | 4.07 | 2.99 |
| Mercury, SPLP | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U | 0.00005 U |
| Nickel, SPLP | 0.0111 | 0.0153 | 0.0206 | 0.0198 | 0.0267 |
| Selenium, SPLP | 0.0093 U | 0.0093 U | 0.0103 J | 0.0093 U | 0.0093 U |
| Silver, SPLP | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U | 0.0024 U |
| Zinc, SPLP | 0.108 | 0.0065 U | 0.0912 | 0.0203 | 0.0159 J |

APPENDIX D
ANALYTICAL DATA REPORTS

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Report Date: October 20, 2017

Project: IDOT Job 063

Account #: 11924
Group Number: 1860028
PO Number: 0088208
State of Sample Origin: IL

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To Weston Solutions

Attn: Andris Slesers

Respectfully Submitted,



Bonnie Stadelmann
Senior Project Manager

(312) 590-3133

SAMPLE INFORMATION

| <u>Client Sample Description</u> | <u>Collection Information</u> | <u>ELLE#</u> |
|----------------------------------|-------------------------------|--------------|
| MC-5(0-6)-100517 Grab Soil | 10/05/2017 11:25 | 9251120 |
| MC-5(0-6)-100517 Grab Soil | 10/05/2017 11:25 | 9251121 |
| MC-5(0-6)-100517 Grab Soil | 10/05/2017 11:25 | 9251122 |
| MC-5(6-12)-100517 Grab Soil | 10/05/2017 11:30 | 9251123 |
| MC-5(6-12)-100517 Grab Soil | 10/05/2017 11:30 | 9251124 |
| MC-5(6-12)-100517 Grab Soil | 10/05/2017 11:30 | 9251125 |
| MC-5(6-12)-100517D Grab Soil | 10/05/2017 11:30 | 9251126 |
| MC-5(6-12)-100517D Grab Soil | 10/05/2017 11:30 | 9251127 |
| MC-5(6-12)-100517D Grab Soil | 10/05/2017 11:30 | 9251128 |
| MC-6(0-6)-100517 Grab Soil | 10/05/2017 11:50 | 9251129 |
| MC-6(0-6)-100517 Grab Soil | 10/05/2017 11:50 | 9251130 |
| MC-6(0-6)-100517 Grab Soil | 10/05/2017 11:50 | 9251131 |
| MC-6(6-12)-100517 Grab Soil | 10/05/2017 11:55 | 9251132 |
| MC-6(6-12)-100517 Grab Soil | 10/05/2017 11:55 | 9251133 |
| MC-6(6-12)-100517 Grab Soil | 10/05/2017 11:55 | 9251134 |
| MC-7(0-6)-100517 Grab Soil | 10/05/2017 12:05 | 9251135 |
| MC-7(0-6)-100517 Grab Soil | 10/05/2017 12:05 | 9251136 |
| MC-7(0-6)-100517 Grab Soil | 10/05/2017 12:05 | 9251137 |
| MC-7(6-12)-100517 Grab Soil | 10/05/2017 12:10 | 9251138 |
| MC-7(6-12)-100517 Grab Soil | 10/05/2017 12:10 | 9251139 |
| MC-7(6-12)-100517 Grab Soil | 10/05/2017 12:10 | 9251140 |
| MC-8(0-6)-100517 Grab Soil | 10/05/2017 12:25 | 9251141 |
| MC-8(0-6)-100517 Grab Soil | 10/05/2017 12:25 | 9251142 |
| MC-8(0-6)-100517 Grab Soil | 10/05/2017 12:25 | 9251143 |
| MC-8(6-12)-100517 Grab Soil | 10/05/2017 12:30 | 9251144 |
| MC-8(6-12)-100517 Grab Soil | 10/05/2017 12:30 | 9251145 |
| MC-8(6-12)-100517 Grab Soil | 10/05/2017 12:30 | 9251146 |
| ROW-1(0-2)-100517 Grab Soil | 10/05/2017 12:50 | 9251147 |
| ROW-1(0-2)-100517 Grab Soil | 10/05/2017 12:50 | 9251148 |
| ROW-1(0-2)-100517 Grab Soil | 10/05/2017 12:50 | 9251149 |
| MC-4(0-6)-100517 Grab Soil | 10/05/2017 13:20 | 9251150 |
| MC-4(0-6)-100517 Grab Soil | 10/05/2017 13:20 | 9251151 |
| MC-4(0-6)-100517 Grab Soil | 10/05/2017 13:20 | 9251152 |
| MC-4(6-12)-100517 Grab Soil | 10/05/2017 13:25 | 9251153 |
| MC-4(6-12)-100517 Grab Soil | 10/05/2017 13:25 | 9251154 |
| MC-4(6-12)-100517 Grab Soil | 10/05/2017 13:25 | 9251155 |
| MC-3(0-6)-100517 Grab Soil | 10/05/2017 13:40 | 9251156 |
| MC-3(0-6)-100517 Grab Soil | 10/05/2017 13:40 | 9251157 |
| MC-3(0-6)-100517 Grab Soil | 10/05/2017 13:40 | 9251158 |
| MC-3(6-12)-100517 Grab Soil | 10/05/2017 13:45 | 9251159 |
| MC-3(6-12)-100517 Grab Soil | 10/05/2017 13:45 | 9251160 |
| MC-3(6-12)-100517 Grab Soil | 10/05/2017 13:45 | 9251161 |
| MC-2(0-6)-100517 Grab Soil | 10/05/2017 14:15 | 9251162 |
| MC-2(0-6)-100517 Grab Soil | 10/05/2017 14:15 | 9251163 |
| MC-2(0-6)-100517 Grab Soil | 10/05/2017 14:15 | 9251164 |
| MC-2(6-12)-100517 Grab Soil | 10/05/2017 14:20 | 9251165 |
| MC-2(6-12)-100517 Grab Soil | 10/05/2017 14:20 | 9251166 |
| MC-2(6-12)-100517 Grab Soil | 10/05/2017 14:20 | 9251167 |

| <u>Client Sample Description</u> | <u>Collection Information</u> | <u>ELLE#</u> |
|----------------------------------|-------------------------------|--------------|
| MC-1(0-6)-100517 Grab Soil | 10/05/2017 14:35 | 9251168 |
| MC-1(0-6)-100517 Grab Soil | 10/05/2017 14:35 | 9251169 |
| MC-1(0-6)-100517 Grab Soil | 10/05/2017 14:35 | 9251170 |
| MC-1(6-12)-100517 Grab Soil | 10/05/2017 14:40 | 9251171 |
| MC-1(6-12)-100517 Grab Soil | 10/05/2017 14:40 | 9251172 |
| MC-1(6-12)-100517 Grab Soil | 10/05/2017 14:40 | 9251173 |
| BR-1(0-2)-100517 Grab Soil | 10/05/2017 15:00 | 9251174 |
| BR-1(0-2)-100517 Grab Soil | 10/05/2017 15:00 | 9251175 |
| BR-1(0-2)-100517 Grab Soil | 10/05/2017 15:00 | 9251176 |
| BR-1(0-2)-100517D Grab Soil | 10/05/2017 15:00 | 9251177 |
| BR-1(0-2)-100517D Grab Soil | 10/05/2017 15:00 | 9251178 |
| BR-1(0-2)-100517D Grab Soil | 10/05/2017 15:00 | 9251179 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 23 | 6 | 17 | 0.68 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | 4 J | 3 | 9 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 9 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 9 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | 3 J | 0.9 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.9 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | 1 J | 0.9 | 4 | 0.68 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -51%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -59%

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 22 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 22 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 22 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 9 J | 4 | 22 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 12 J | 4 | 22 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 22 | 4 | 22 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 10 J | 4 | 22 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 11 J | 4 | 22 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 21 | 42 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 85 | 210 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 85 | 210 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 42 | 85 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 21 | 42 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 21 | 42 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 42 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 21 | 42 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 21 | 42 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 20 J | 4 | 22 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 22 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 21 | 42 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 21 | 42 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 21 | 42 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 21 | 42 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 130 | 420 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 21 | 42 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 85 | 210 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 21 | 42 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 85 | 210 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 210 | 640 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 380 | 1,300 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 85 | 210 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 21 | 42 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 85 | 220 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 35 | 4 | 22 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 22 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 22 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 21 | 42 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 210 | 640 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 42 | 210 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 8 J | 4 | 22 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 21 | 42 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|---|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 11 J | 4 | 22 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | 260 | 21 | 42 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | 28 | 4 | 22 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 21 | 42 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 85 | 210 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 85 | 210 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 21 | 42 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 21 | 42 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 210 | 640 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 21 | 42 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 21 | 42 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 85 | 210 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 42 | 220 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 35 | 4 | 22 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 21 | 42 | 1 |
| 10726 | Pyrene | 129-00-0 | 20 J | 4 | 22 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 21 | 42 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 21 | 42 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 21 | 42 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.10 | 2.52 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.87 | 1.21 | 2.52 | 1 |
| 06946 | Barium | 7440-39-3 | 157 | 0.0554 | 0.630 | 1 |
| 06947 | Beryllium | 7440-41-7 | 1.38 | 0.0995 | 0.630 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.516 J | 0.0680 | 0.630 | 1 |
| 01650 | Calcium | 7440-70-2 | 9,080 | 4.19 | 25.2 | 1 |
| 06951 | Chromium | 7440-47-3 | 38.1 | 0.214 | 1.89 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.4 | 0.139 | 0.630 | 1 |
| 06953 | Copper | 7440-50-8 | 21.9 | 0.302 | 1.26 | 1 |
| 01654 | Iron | 7439-89-6 | 25,500 | 10.1 | 25.2 | 1 |
| 06955 | Lead | 7439-92-1 | 23.4 | 0.756 | 1.89 | 1 |
| 01657 | Magnesium | 7439-95-4 | 9,310 | 3.06 | 12.6 | 1 |
| 06958 | Manganese | 7439-96-5 | 168 | 0.105 | 0.630 | 1 |
| 06961 | Nickel | 7440-02-0 | 30.3 | 0.189 | 1.26 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,740 | 21.0 | 63.0 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.17 | 2.52 | 1 |
| 06966 | Silver | 7440-22-4 | 0.496 J | 0.302 | 0.630 | 1 |
| 01667 | Sodium | 7440-23-5 | 611 | 21.0 | 126 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.73 | 3.78 | 1 |
| 06971 | Vanadium | 7440-62-2 | 60.1 | 0.189 | 0.630 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I01

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 81.2 | mg/kg 0.302 | mg/kg 2.52 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg 0.0380 J | mg/kg 0.0121 | mg/kg 0.121 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | SW-846 9045C modified n.a. | Std. Units 7.67 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 21.4 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 01:07 | Stephen C Nolte | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:25 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 13:23 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251120
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I01

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 01:58 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 17:47 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:30 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251121
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I02

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.395 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0187 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.216 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.72 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0136 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0085 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:21 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:21 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:44 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:11 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251121
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I02

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251122
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I03

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0247 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.367 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0038 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0968 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0258 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0569 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 71.3 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0319 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.398 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0764 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0105 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.133 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.000086 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street SPLP NVE
 IDOT Job 063

ELLE Sample # TL 9251122
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:25 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I03

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:05 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 18:40 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 00:56 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 15 J | 5 | 15 | 0.63 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.63 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.63 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.63 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.63 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.63 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Toluene | 108-88-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.63 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 6 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 12 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 20 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 5 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 12 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 9 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 6 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 39 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 7 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 9 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 39 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.975 | 2.24 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.43 | 1.08 | 2.24 | 1 |
| 06946 | Barium | 7440-39-3 | 84.2 | 0.0493 | 0.560 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.994 | 0.0885 | 0.560 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.420 J | 0.0605 | 0.560 | 1 |
| 01650 | Calcium | 7440-70-2 | 55,900 | 3.73 | 22.4 | 1 |
| 06951 | Chromium | 7440-47-3 | 32.8 | 0.191 | 1.68 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.2 | 0.123 | 0.560 | 1 |
| 06953 | Copper | 7440-50-8 | 18.5 | 0.269 | 1.12 | 1 |
| 01654 | Iron | 7439-89-6 | 28,800 | 9.02 | 22.4 | 1 |
| 06955 | Lead | 7439-92-1 | 12.5 | 0.672 | 1.68 | 1 |
| 01657 | Magnesium | 7439-95-4 | 25,300 | 2.72 | 11.2 | 1 |
| 06958 | Manganese | 7439-96-5 | 493 | 0.0930 | 0.560 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.0 | 0.168 | 1.12 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,880 | 18.7 | 56.0 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.24 | 1 |
| 06966 | Silver | 7440-22-4 | 0.580 | 0.269 | 0.560 | 1 |
| 01667 | Sodium | 7440-23-5 | 239 | 18.7 | 112 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.54 | 3.36 | 1 |
| 06971 | Vanadium | 7440-62-2 | 45.1 | 0.168 | 0.560 | 1 |
| 06972 | Zinc | 7440-66-6 | 55.9 | 0.269 | 2.24 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0118 | 0.118 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.6 C. | n.a. | 8.07 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I04

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 16.6 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 17:48 | Linda C Pape | 0.63 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 13:47 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251123
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I04

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:27 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:09 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:32 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251124
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I05

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.570 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0114 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.135 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0069 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 3.09 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0101 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0097 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:29 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:29 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:52 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:20 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251124
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I05

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251125
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35

Reported: 10/20/2017 21:44

63I06

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0603 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0139 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0028 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0076 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 8.83 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0937 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0132 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0194 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251125
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I06

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:25 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:17 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:04 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 9 J | 6 | 16 | 0.64 |
| 10237 | Benzene | 71-43-2 | 0.6 J | 0.4 | 4 | 0.64 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.64 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.64 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.64 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.64 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.64 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.64 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.64 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.64 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Toluene | 108-88-3 | 0.8 J | 0.8 | 4 | 0.64 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.64 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.64 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 5 J | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 14 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 25 | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 6 J | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 81 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 81 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 81 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 15 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 81 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 81 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 7 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 81 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 81 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 81 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 11 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 9 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.05 | 2.41 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.96 | 1.16 | 2.41 | 1 |
| 06946 | Barium | 7440-39-3 | 77.9 | 0.0530 | 0.602 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.907 | 0.0951 | 0.602 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.483 J | 0.0650 | 0.602 | 1 |
| 01650 | Calcium | 7440-70-2 | 65,600 | 20.1 | 120 | 5 |
| 06951 | Chromium | 7440-47-3 | 32.8 | 0.205 | 1.81 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.6 | 0.132 | 0.602 | 1 |
| 06953 | Copper | 7440-50-8 | 19.8 | 0.289 | 1.20 | 1 |
| 01654 | Iron | 7439-89-6 | 27,100 | 9.70 | 24.1 | 1 |
| 06955 | Lead | 7439-92-1 | 12.6 | 0.723 | 1.81 | 1 |
| 01657 | Magnesium | 7439-95-4 | 28,900 | 2.93 | 12.0 | 1 |
| 06958 | Manganese | 7439-96-5 | 440 | 0.100 | 0.602 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.9 | 0.181 | 1.20 | 1 |
| 01662 | Potassium | 7440-09-7 | 7,140 | 20.1 | 60.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.12 | 2.41 | 1 |
| 06966 | Silver | 7440-22-4 | 0.493 J | 0.289 | 0.602 | 1 |
| 01667 | Sodium | 7440-23-5 | 300 | 20.1 | 120 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.65 | 3.61 | 1 |
| 06971 | Vanadium | 7440-62-2 | 45.3 | 0.181 | 0.602 | 1 |
| 06972 | Zinc | 7440-66-6 | 56.9 | 0.289 | 2.41 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0119 | 0.119 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.14 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.1 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 18.6 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 01:53 | Stephen C Nolte | 0.64 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:30 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 14:11 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:34 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251126
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I07

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:31 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:13 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:38 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251127
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I08

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.498 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0100 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.78 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0101 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0115 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:33 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:33 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 17:56 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:22 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251127
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I08

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251128
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I09

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0163 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.119 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0293 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0092 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0185 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 20.9 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0097 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.197 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0263 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0385 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-5(6-12)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251128
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I09

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:28 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:21 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:06 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 14 J | 6 | 16 | 0.66 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.66 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.66 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.66 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.66 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.66 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.66 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.66 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.66 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.66 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Toluene | 108-88-3 | 1 J | 0.8 | 4 | 0.66 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.66 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.66 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | 12 J | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 9 J | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 10 J | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 17 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 15 J | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 9 J | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 81 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 81 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 81 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 15 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 81 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 81 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 17 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | 16 J | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 9 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 6 J | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 81 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 81 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D ug/kg | | | | | | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 81 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 19 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 17 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals SW-846 6010B mg/kg | | | | | | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.995 | 2.29 | 1 |
| 06935 | Arsenic | 7440-38-2 | 7.78 | 1.10 | 2.29 | 1 |
| 06946 | Barium | 7440-39-3 | 76.0 | 0.0503 | 0.572 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.911 | 0.0903 | 0.572 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.534 J | 0.0617 | 0.572 | 1 |
| 01650 | Calcium | 7440-70-2 | 60,400 | 3.81 | 22.9 | 1 |
| 06951 | Chromium | 7440-47-3 | 30.8 | 0.194 | 1.71 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.1 | 0.126 | 0.572 | 1 |
| 06953 | Copper | 7440-50-8 | 23.6 | 0.274 | 1.14 | 1 |
| 01654 | Iron | 7439-89-6 | 28,700 | 9.20 | 22.9 | 1 |
| 06955 | Lead | 7439-92-1 | 22.0 | 0.686 | 1.71 | 1 |
| 01657 | Magnesium | 7439-95-4 | 30,400 | 2.78 | 11.4 | 1 |
| 06958 | Manganese | 7439-96-5 | 483 | 0.0949 | 0.572 | 1 |
| 06961 | Nickel | 7440-02-0 | 32.7 | 0.171 | 1.14 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,090 | 19.1 | 57.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.06 | 2.29 | 1 |
| 06966 | Silver | 7440-22-4 | 0.509 J | 0.274 | 0.572 | 1 |
| 01667 | Sodium | 7440-23-5 | 828 | 19.1 | 114 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.57 | 3.43 | 1 |
| 06971 | Vanadium | 7440-62-2 | 42.0 | 0.171 | 0.572 | 1 |
| 06972 | Zinc | 7440-66-6 | 69.8 | 0.274 | 2.29 | 1 |
| SW-846 7471A mg/kg | | | | | | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0121 | 0.121 | 1 |
| Wet Chemistry SW-846 9045C modified Std. Units | | | | | | |
| 00394 | pH (soil) | n.a. | 7.97 | 0.0100 | 0.0100 | 1 |
| The pH was measured in water at 20.1 C. | | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I10

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 19.0 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 02:16 | Stephen C Nolte | 0.66 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:50 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 14:36 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251129
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I10

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:37 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:24 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:40 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251130
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I11

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.531 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0207 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.0951 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0119 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.02 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0205 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0586 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:37 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:37 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:00 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:24 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251130
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I11

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251131
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I12

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0358 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.286 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0038 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0885 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0310 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0788 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 78.3 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0528 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.876 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0878 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0155 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.167 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00010 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251131
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I12

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:38 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:24 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:08 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 22 | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 0.8 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | 5 J | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 0.9 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 6 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 15 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 9 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | 4 J | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 7 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 30 | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | 11 J | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 39 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 8 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 7 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 39 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.986 | 2.27 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.96 | 1.09 | 2.27 | 1 |
| 06946 | Barium | 7440-39-3 | 70.7 | 0.0499 | 0.567 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.887 | 0.0896 | 0.567 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.447 J | 0.0612 | 0.567 | 1 |
| 01650 | Calcium | 7440-70-2 | 60,600 | 18.9 | 113 | 5 |
| 06951 | Chromium | 7440-47-3 | 31.3 | 0.193 | 1.70 | 1 |
| 06952 | Cobalt | 7440-48-4 | 15.0 | 0.125 | 0.567 | 1 |
| 06953 | Copper | 7440-50-8 | 19.5 | 0.272 | 1.13 | 1 |
| 01654 | Iron | 7439-89-6 | 27,300 | 9.13 | 22.7 | 1 |
| 06955 | Lead | 7439-92-1 | 13.3 | 0.680 | 1.70 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,600 | 2.76 | 11.3 | 1 |
| 06958 | Manganese | 7439-96-5 | 521 | 0.0941 | 0.567 | 1 |
| 06961 | Nickel | 7440-02-0 | 32.9 | 0.170 | 1.13 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,340 | 18.9 | 56.7 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.05 | 2.27 | 1 |
| 06966 | Silver | 7440-22-4 | 0.548 J | 0.272 | 0.567 | 1 |
| 01667 | Sodium | 7440-23-5 | 516 | 18.9 | 113 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.55 | 3.40 | 1 |
| 06971 | Vanadium | 7440-62-2 | 43.5 | 0.170 | 0.567 | 1 |
| 06972 | Zinc | 7440-66-6 | 59.0 | 0.272 | 2.27 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0115 | 0.115 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.08 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.3 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 16.0 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 18:11 | Linda C Pape | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:55 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 11:55 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 11:55 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 15:00 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:44 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251132
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I13

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:40 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:27 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:20 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251133
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I14

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.386 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0107 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.114 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0070 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.35 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0118 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0070 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:41 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:41 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:03 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:26 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251133
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I14

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251134
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I15

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0644 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0162 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0039 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0093 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 10.9 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0825 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0143 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0214 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-6(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251134
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 11:55 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I15

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:41 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:28 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:10 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 44 | 5 | 16 | 0.65 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.65 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.65 |
| 10237 | 2-Butanone | 78-93-3 | 9 | 3 | 8 | 0.65 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.65 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.65 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.65 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.65 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -61%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -64%

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | 5 J | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | 6 J | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | 7 J | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 19 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 22 | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 29 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 10 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 26 | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 6 J | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 21 | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | 9 J | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 11 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 8 J | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | 4 J | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 22 | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 26 | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B | | | | | | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.33 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.90 | 1.12 | 2.33 | 1 |
| 06946 | Barium | 7440-39-3 | 54.1 | 0.0513 | 0.583 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.503 J | 0.0922 | 0.583 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.403 J | 0.0630 | 0.583 | 1 |
| 01650 | Calcium | 7440-70-2 | 92,500 | 19.4 | 117 | 5 |
| 06951 | Chromium | 7440-47-3 | 22.1 | 0.198 | 1.75 | 1 |
| 06952 | Cobalt | 7440-48-4 | 8.42 | 0.128 | 0.583 | 1 |
| 06953 | Copper | 7440-50-8 | 16.7 | 0.280 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 19,300 | 9.39 | 23.3 | 1 |
| 06955 | Lead | 7439-92-1 | 12.4 | 0.700 | 1.75 | 1 |
| 01657 | Magnesium | 7439-95-4 | 53,300 | 2.84 | 11.7 | 1 |
| 06958 | Manganese | 7439-96-5 | 441 | 0.0969 | 0.583 | 1 |
| 06961 | Nickel | 7440-02-0 | 22.7 | 0.175 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 4,560 | 19.5 | 58.3 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.33 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.280 | 0.583 | 1 |
| 01667 | Sodium | 7440-23-5 | 708 | 19.5 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.60 | 3.50 | 1 |
| 06971 | Vanadium | 7440-62-2 | 32.5 | 0.175 | 0.583 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I16

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 44.1 | mg/kg 0.280 | mg/kg 2.33 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg 0.0120 J | mg/kg 0.0118 | mg/kg 0.118 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.1 C. | SW-846 9045C modified n.a. | Std. Units 8.39 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 16.8 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172852AA | 10/13/2017 05:45 | Stephen C Nolte | 0.65 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:05 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:05 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:05 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 15:24 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:47 | Scott R Yanos | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251135
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I16

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:50 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:47 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:31 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:42 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251136
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I17

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.557 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0174 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.119 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0113 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.19 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0142 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.113 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:46 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:46 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:07 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:28 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251136
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I17

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251137
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I18

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0372 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.354 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0039 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0951 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0268 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0749 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 76.0 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0649 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.719 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0779 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.198 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00011 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251137
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:05 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I18

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:44 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:32 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:12 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 10 J | 6 | 17 | 0.68 |
| 10237 | Benzene | 71-43-2 | 2 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | 1 J | 0.8 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 8 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 8 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | 4 J | 0.8 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | 1 J | 0.8 | 4 | 0.68 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -53%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -56%

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 4 J | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 8 J | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 12 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 30 | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 7 J | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 81 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 81 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 81 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 15 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 5 J | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 81 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 81 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 5 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 11 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 81 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 81 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 81 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 8 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 7 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals SW-846 6010B | | | | | | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.34 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.56 | 1.12 | 2.34 | 1 |
| 06946 | Barium | 7440-39-3 | 77.5 | 0.0514 | 0.584 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.811 | 0.0923 | 0.584 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.441 J | 0.0631 | 0.584 | 1 |
| 01650 | Calcium | 7440-70-2 | 60,900 | 19.5 | 117 | 5 |
| 06951 | Chromium | 7440-47-3 | 30.2 | 0.199 | 1.75 | 1 |
| 06952 | Cobalt | 7440-48-4 | 12.5 | 0.129 | 0.584 | 1 |
| 06953 | Copper | 7440-50-8 | 17.9 | 0.280 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 25,300 | 9.41 | 23.4 | 1 |
| 06955 | Lead | 7439-92-1 | 11.2 | 0.701 | 1.75 | 1 |
| 01657 | Magnesium | 7439-95-4 | 30,100 | 2.84 | 11.7 | 1 |
| 06958 | Manganese | 7439-96-5 | 464 | 0.0970 | 0.584 | 1 |
| 06961 | Nickel | 7440-02-0 | 32.6 | 0.175 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,240 | 19.5 | 58.4 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.34 | 1 |
| 06966 | Silver | 7440-22-4 | 0.358 J | 0.280 | 0.584 | 1 |
| 01667 | Sodium | 7440-23-5 | 610 | 19.5 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.60 | 3.51 | 1 |
| 06971 | Vanadium | 7440-62-2 | 40.7 | 0.175 | 0.584 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 55.9 | mg/kg 0.280 | mg/kg 2.34 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg N.D. | mg/kg 0.0115 | mg/kg 0.115 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.1 C. | SW-846 9045C modified n.a. | Std. Units 8.13 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 18.5 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 18:58 | Linda C Pape | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:10 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:10 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:10 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 15:48 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251138
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I19

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:57 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 02:53 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:35 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:44 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402A | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251139
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I20

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.420 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0143 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0075 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.46 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0111 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.108 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:50 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 07:50 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:11 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:30 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251139
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I20

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251140
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I21

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0110 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0483 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0116 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0025 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0079 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 7.65 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0070 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0496 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0106 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0166 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-7(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251140
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:10 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I21

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:48 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:35 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:18 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 9 J | 6 | 17 | 0.76 |
| 10237 | Benzene | 71-43-2 | 0.6 J | 0.4 | 4 | 0.76 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.76 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 9 | 0.76 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.76 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.76 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 9 | 0.76 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.76 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 9 | 0.76 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.76 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Toluene | 108-88-3 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.9 | 4 | 0.76 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.9 | 4 | 0.76 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -51%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -50%

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 19 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 19 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 19 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 19 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 8 J | 4 | 19 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 9 J | 4 | 19 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 23 | 4 | 19 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 4 J | 4 | 19 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 19 | 38 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 76 | 190 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 76 | 190 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 38 | 76 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 19 | 38 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 19 | 38 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 37 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 19 | 38 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 19 | 38 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 18 J | 4 | 19 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 19 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 19 | 38 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 19 | 38 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 19 | 38 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 19 | 38 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 110 | 380 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 19 | 38 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 76 | 190 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 19 | 38 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 76 | 190 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 190 | 570 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 340 | 1,100 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 76 | 190 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 19 | 38 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 76 | 190 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 4 J | 4 | 19 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 19 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 19 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 19 | 38 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 190 | 570 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 38 | 190 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 6 J | 4 | 19 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 19 | 38 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 14 J | 4 | 19 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 19 | 38 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 19 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 19 | 38 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 76 | 190 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 76 | 190 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 19 | 38 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 19 | 38 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 190 | 570 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 19 | 38 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 19 | 38 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 76 | 190 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 38 | 190 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 11 J | 4 | 19 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 19 | 38 | 1 |
| 10726 | Pyrene | 129-00-0 | 12 J | 4 | 19 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 19 | 38 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 19 | 38 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 19 | 38 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.976 | 2.24 | 1 |
| 06935 | Arsenic | 7440-38-2 | 9.86 | 1.08 | 2.24 | 1 |
| 06946 | Barium | 7440-39-3 | 56.0 | 0.0493 | 0.561 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.842 | 0.0886 | 0.561 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.503 J | 0.0605 | 0.561 | 1 |
| 01650 | Calcium | 7440-70-2 | 43,500 | 3.73 | 22.4 | 1 |
| 06951 | Chromium | 7440-47-3 | 26.5 | 0.191 | 1.68 | 1 |
| 06952 | Cobalt | 7440-48-4 | 14.8 | 0.123 | 0.561 | 1 |
| 06953 | Copper | 7440-50-8 | 27.6 | 0.269 | 1.12 | 1 |
| 01654 | Iron | 7439-89-6 | 28,000 | 9.03 | 22.4 | 1 |
| 06955 | Lead | 7439-92-1 | 18.4 | 0.673 | 1.68 | 1 |
| 01657 | Magnesium | 7439-95-4 | 24,900 | 2.72 | 11.2 | 1 |
| 06958 | Manganese | 7439-96-5 | 567 | 0.0931 | 0.561 | 1 |
| 06961 | Nickel | 7440-02-0 | 35.5 | 0.168 | 1.12 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,470 | 18.7 | 56.1 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.24 | 1 |
| 06966 | Silver | 7440-22-4 | 0.380 J | 0.269 | 0.561 | 1 |
| 01667 | Sodium | 7440-23-5 | 600 | 18.7 | 112 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.54 | 3.36 | 1 |
| 06971 | Vanadium | 7440-62-2 | 35.6 | 0.168 | 0.561 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I22

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 76.4 | mg/kg 0.269 | mg/kg 2.24 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg 0.0140 J | mg/kg 0.0110 | mg/kg 0.110 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.2 C. | SW-846 9045C modified n.a. | Std. Units 8.34 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 11.7 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 19:21 | Linda C Pape | 0.76 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:25 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 16:13 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251141
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I22

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:06 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:39 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:46 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251142
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I23

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.332 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0070 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.66 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0153 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | N.D. | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:01 | Scott R Yanos | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:01 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:15 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:32 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251142
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I23

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251143
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I24

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0385 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.202 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0041 J | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0867 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0243 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0780 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 81.1 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0378 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.483 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0890 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0123 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.196 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.000092 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/20/2017 15:24 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251143
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I24

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:51 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:39 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:20 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 10 J | 6 | 17 | 0.71 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.71 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.71 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.71 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.71 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.71 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.71 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.71 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.71 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.71 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Toluene | 108-88-3 | 1 J | 0.8 | 4 | 0.71 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.71 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.71 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -61%

Internal Standard - Re-analysis % Recovery

Chlorobenzene-d5 -59%

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| | 1,4-Dichlorobenzene-d4 | | -78% | | | |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 8 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 5 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 78 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 78 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 78 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 9 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 78 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 78 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 78 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 78 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 5 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 5 J | 4 | 20 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 78 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 78 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 39 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 78 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 6 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 6 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 39 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.977 | 2.25 | 1 |
| 06935 | Arsenic | 7440-38-2 | 11.8 | 1.08 | 2.25 | 1 |
| 06946 | Barium | 7440-39-3 | 73.1 | 0.0494 | 0.562 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.808 | 0.0887 | 0.562 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.595 | 0.0606 | 0.562 | 1 |
| 01650 | Calcium | 7440-70-2 | 63,300 | 18.7 | 112 | 5 |
| 06951 | Chromium | 7440-47-3 | 27.3 | 0.191 | 1.68 | 1 |
| 06952 | Cobalt | 7440-48-4 | 13.4 | 0.124 | 0.562 | 1 |
| 06953 | Copper | 7440-50-8 | 24.7 | 0.270 | 1.12 | 1 |
| 01654 | Iron | 7439-89-6 | 30,200 | 9.04 | 22.5 | 1 |
| 06955 | Lead | 7439-92-1 | 17.5 | 0.674 | 1.68 | 1 |
| 01657 | Magnesium | 7439-95-4 | 24,500 | 2.73 | 11.2 | 1 |
| 06958 | Manganese | 7439-96-5 | 550 | 0.0932 | 0.562 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.2 | 0.168 | 1.12 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,280 | 18.8 | 56.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.25 | 1 |
| 06966 | Silver | 7440-22-4 | 0.510 J | 0.270 | 0.562 | 1 |
| 01667 | Sodium | 7440-23-5 | 180 | 18.8 | 112 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.54 | 3.37 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I25

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06971 | Vanadium | 7440-62-2 | 39.5 | 0.168 | 0.562 | 1 |
| 06972 | Zinc | 7440-66-6 | 61.2 | 0.270 | 2.25 | 1 |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0116 | 0.116 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.1 C. | n.a. | 8.12 | 0.0100 | 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 15.2 | 0.50 | 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 19:44 | Linda C Pape | 0.71 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:30 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:30 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 16:37 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251144
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I25

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:12 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:09 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:43 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:48 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251145
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I26

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.378 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | 0.0024 J | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0228 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.143 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0128 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.15 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0206 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0103 J | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0912 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:05 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:26 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:34 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251145
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I26

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251146
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35

Reported: 10/20/2017 21:44

63I27

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0387 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0117 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0034 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0097 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 8.66 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.124 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0106 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0219 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/20/2017 15:27 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-8(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251146
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:30 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I27

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 22:57 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:42 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:22 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 11 J | 6 | 16 | 0.68 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.68 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 7 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 14 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 19 | 39 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 78 | 190 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 78 | 190 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 39 | 78 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 19 | 39 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 19 | 39 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 19 | 39 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 19 | 39 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 9 | J | 4 | 20 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 4 | J | 4 | 20 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 19 | 39 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 19 | 39 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 19 | 39 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 19 | 39 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 390 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 19 | 39 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 78 | 190 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 19 | 39 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 78 | 190 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 190 | 580 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 350 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 78 | 190 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 19 | 39 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 78 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | N.D. | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 19 | 39 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 190 | 580 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 39 | 190 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 5 | J | 4 | 20 |
| 10726 | Isophorone | 78-59-1 | N.D. | 19 | 39 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 19 | 39 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 19 | 39 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 78 | 190 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 78 | 190 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 19 | 39 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 19 | 39 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 190 | 580 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 19 | 39 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 19 | 39 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 78 | 190 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 39 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | N.D. | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 19 | 39 | 1 |
| 10726 | Pyrene | 129-00-0 | 4 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 19 | 39 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 19 | 39 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 19 | 39 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.953 | 2.19 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.77 | 1.05 | 2.19 | 1 |
| 06946 | Barium | 7440-39-3 | 57.2 | 0.0482 | 0.548 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.767 | 0.0866 | 0.548 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.467 J | 0.0592 | 0.548 | 1 |
| 01650 | Calcium | 7440-70-2 | 55,800 | 3.65 | 21.9 | 1 |
| 06951 | Chromium | 7440-47-3 | 27.0 | 0.186 | 1.64 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.3 | 0.121 | 0.548 | 1 |
| 06953 | Copper | 7440-50-8 | 22.5 | 0.263 | 1.10 | 1 |
| 01654 | Iron | 7439-89-6 | 25,900 | 8.82 | 21.9 | 1 |
| 06955 | Lead | 7439-92-1 | 17.3 | 0.657 | 1.64 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,000 | 2.66 | 11.0 | 1 |
| 06958 | Manganese | 7439-96-5 | 488 | 0.0909 | 0.548 | 1 |
| 06961 | Nickel | 7440-02-0 | 30.1 | 0.164 | 1.10 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,370 | 18.3 | 54.8 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.02 | 2.19 | 1 |
| 06966 | Silver | 7440-22-4 | 0.416 J | 0.263 | 0.548 | 1 |
| 01667 | Sodium | 7440-23-5 | 1,020 | 18.3 | 110 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.50 | 3.29 | 1 |
| 06971 | Vanadium | 7440-62-2 | 35.1 | 0.164 | 0.548 | 1 |
| 06972 | Zinc | 7440-66-6 | 65.1 | 0.263 | 2.19 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0115 | 0.115 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.46 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.2 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I28

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|-----------------------|-----------------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | SM 2540 G-1997 | % | % | % |
| | | %Moisture Calc | | | | |
| 00111 | Moisture | n.a. | 15.5 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 20:07 | Linda C Pape | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 12:50 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 12:50 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 17:01 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251147
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I28

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:15 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:47 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:50 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010A | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251148
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I29

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------------|------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | SW-846 6010B | | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.570 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0248 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.0969 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0064 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 9.05 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0256 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0129 J | 0.0065 | 0.0200 | 1 |
| | SW-846 7470A | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:09 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:30 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:36 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251148
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I29

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251149
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I30

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.100 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.965 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0118 | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | 0.0030 J | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.304 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0855 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.171 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 235 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.166 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.30 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.245 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | 0.0281 | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.483 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00021 | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: ROW-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251149
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 12:50 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I30

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:01 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:46 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:24 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251150
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I31

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 30 | 6 | 17 | 0.69 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.69 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.69 |
| 10237 | 2-Butanone | 78-93-3 | 5 J | 3 | 8 | 0.69 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.69 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.69 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 8 | 0.69 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.69 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 8 | 0.69 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.69 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Toluene | 108-88-3 | 3 J | 0.8 | 4 | 0.69 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.69 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.69 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 5 J | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 7 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 14 J | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 81 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 81 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251150
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I31

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 81 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 8 | J | 4 | 21 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 5 | J | 4 | 21 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 81 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 81 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 81 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | N.D. | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 7 | J | 4 | 21 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 81 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 81 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251150
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I31

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 81 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | N.D. | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 4 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.997 | 2.29 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.02 | 1.10 | 2.29 | 1 |
| 06946 | Barium | 7440-39-3 | 74.6 | 0.0504 | 0.573 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.800 | 0.0906 | 0.573 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.467 J | 0.0619 | 0.573 | 1 |
| 01650 | Calcium | 7440-70-2 | 66,800 | 19.1 | 115 | 5 |
| 06951 | Chromium | 7440-47-3 | 29.5 | 0.195 | 1.72 | 1 |
| 06952 | Cobalt | 7440-48-4 | 9.74 | 0.126 | 0.573 | 1 |
| 06953 | Copper | 7440-50-8 | 19.7 | 0.275 | 1.15 | 1 |
| 01654 | Iron | 7439-89-6 | 25,100 | 9.23 | 22.9 | 1 |
| 06955 | Lead | 7439-92-1 | 12.5 | 0.688 | 1.72 | 1 |
| 01657 | Magnesium | 7439-95-4 | 29,600 | 2.79 | 11.5 | 1 |
| 06958 | Manganese | 7439-96-5 | 403 | 0.0951 | 0.573 | 1 |
| 06961 | Nickel | 7440-02-0 | 29.8 | 0.172 | 1.15 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,000 | 19.1 | 57.3 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.07 | 2.29 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.275 | 0.573 | 1 |
| 01667 | Sodium | 7440-23-5 | 281 | 19.1 | 115 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.57 | 3.44 | 1 |
| 06971 | Vanadium | 7440-62-2 | 40.9 | 0.172 | 0.573 | 1 |
| 06972 | Zinc | 7440-66-6 | 57.7 | 0.275 | 2.29 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0120 | 0.120 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.17 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.4 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251150
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I31

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|-----------------------|-----------------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | SM 2540 G-1997 | % | % | % |
| | | %Moisture Calc | | | | |
| 00111 | Moisture | n.a. | 17.7 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 20:30 | Linda C Pape | 0.69 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:20 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:20 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 13:20 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 17:25 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:19 | Scott R Yanos | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:22 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251150
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I31

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:19 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:50 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:52 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251151
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I32

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.385 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0117 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.78 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0123 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0120 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:14 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:34 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:42 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251151
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I32

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251152
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I33

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0229 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | N.D. | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 1.08 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0190 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | N.D. | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | N.D. | 0.0065 | 0.0200 | 1 |
| SW-846 7470A | | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/20/2017 15:31 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:04 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251152
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I33

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:04 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 19:49 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:26 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251153
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I34

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | N.D. | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 0.6 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 4 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 4 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 10 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 21 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251153
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I34

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 13 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 6 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251153
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I34

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 9 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 7 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.998 | 2.29 | 1 |
| 06935 | Arsenic | 7440-38-2 | 13.8 | 1.10 | 2.29 | 1 |
| 06946 | Barium | 7440-39-3 | 68.1 | 0.0505 | 0.574 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.727 | 0.0906 | 0.574 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.466 J | 0.0620 | 0.574 | 1 |
| 01650 | Calcium | 7440-70-2 | 68,600 | 19.1 | 115 | 5 |
| 06951 | Chromium | 7440-47-3 | 27.2 | 0.195 | 1.72 | 1 |
| 06952 | Cobalt | 7440-48-4 | 19.1 | 0.126 | 0.574 | 1 |
| 06953 | Copper | 7440-50-8 | 19.7 | 0.275 | 1.15 | 1 |
| 01654 | Iron | 7439-89-6 | 29,400 | 9.24 | 22.9 | 1 |
| 06955 | Lead | 7439-92-1 | 14.3 | 0.688 | 1.72 | 1 |
| 01657 | Magnesium | 7439-95-4 | 30,100 | 2.79 | 11.5 | 1 |
| 06958 | Manganese | 7439-96-5 | 566 | 0.0952 | 0.574 | 1 |
| 06961 | Nickel | 7440-02-0 | 34.3 | 0.172 | 1.15 | 1 |
| 01662 | Potassium | 7440-09-7 | 4,850 | 19.2 | 57.4 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.07 | 2.29 | 1 |
| 06966 | Silver | 7440-22-4 | 0.353 J | 0.275 | 0.574 | 1 |
| 01667 | Sodium | 7440-23-5 | 207 | 19.2 | 115 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.57 | 3.44 | 1 |
| 06971 | Vanadium | 7440-62-2 | 41.0 | 0.172 | 0.574 | 1 |
| 06972 | Zinc | 7440-66-6 | 57.3 | 0.275 | 2.29 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0119 | 0.119 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.23 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.3 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251153
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I34

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 17.0 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 20:53 | Linda C Pape | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:25 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 13:25 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 17:49 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:28 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251153
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I34

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:25 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:54 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:54 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251154
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I35

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------------|------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | SW-846 6010B | | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.411 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0102 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.0963 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0078 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.17 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0162 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0081 J | 0.0065 | 0.0200 | 1 |
| | SW-846 7470A | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:18 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:38 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:44 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251154
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I35

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251155
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I36

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0741 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0192 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0037 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0124 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 13.0 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0862 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0163 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0266 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-4(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251155
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:25 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I36

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:00 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:28 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 7 J | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 0.7 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 0.8 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 13 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 25 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 11 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | N.D. | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 8 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D ug/kg | | | | | | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 4 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 4 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B mg/kg | | | | | | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.960 | 2.21 | 1 |
| 06935 | Arsenic | 7440-38-2 | 7.59 | 1.06 | 2.21 | 1 |
| 06946 | Barium | 7440-39-3 | 86.0 | 0.0486 | 0.552 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.916 | 0.0872 | 0.552 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.467 J | 0.0596 | 0.552 | 1 |
| 01650 | Calcium | 7440-70-2 | 57,800 | 3.68 | 22.1 | 1 |
| 06951 | Chromium | 7440-47-3 | 31.2 | 0.188 | 1.66 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.2 | 0.121 | 0.552 | 1 |
| 06953 | Copper | 7440-50-8 | 20.4 | 0.265 | 1.10 | 1 |
| 01654 | Iron | 7439-89-6 | 27,400 | 8.89 | 22.1 | 1 |
| 06955 | Lead | 7439-92-1 | 13.2 | 0.662 | 1.66 | 1 |
| 01657 | Magnesium | 7439-95-4 | 24,500 | 2.68 | 11.0 | 1 |
| 06958 | Manganese | 7439-96-5 | 410 | 0.0916 | 0.552 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.9 | 0.166 | 1.10 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,860 | 18.4 | 55.2 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.03 | 2.21 | 1 |
| 06966 | Silver | 7440-22-4 | 0.362 J | 0.265 | 0.552 | 1 |
| 01667 | Sodium | 7440-23-5 | 733 | 18.4 | 110 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.51 | 3.31 | 1 |
| 06971 | Vanadium | 7440-62-2 | 43.2 | 0.166 | 0.552 | 1 |
| 06972 | Zinc | 7440-66-6 | 58.3 | 0.265 | 2.21 | 1 |
| SW-846 7471A mg/kg | | | | | | |
| 00159 | Mercury | 7439-97-6 | 0.0127 J | 0.0116 | 0.116 | 1 |
| Wet Chemistry SW-846 9045C modified Std. Units | | | | | | |
| 00394 | pH (soil) | n.a. | 7.97 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.4 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I37

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 16.9 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 11:23 | Jennifer K Howe | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 13:40 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 18:13 | Emily Gruver | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251156
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I37

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:31 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 18:58 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 17:56 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251157
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I38

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.522 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0285 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.664 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0089 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 4.61 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0116 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0531 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:22 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:42 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:46 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251157
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I38

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251158
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I39

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0413 | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.417 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | 0.0054 | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.119 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0346 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0910 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 110 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0542 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.590 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.114 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.169 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | 0.00013 J | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:07 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251158
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

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Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:04 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:30 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 30 | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 0.8 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | 5 J | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 1 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 9 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 16 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 12 | J | 4 | 20 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | 4 | J | 4 | 20 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 | J | 4 | 20 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 5 | J | 4 | 20 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 11 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 9 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.35 | 1 |
| 06935 | Arsenic | 7440-38-2 | 4.09 | 1.13 | 2.35 | 1 |
| 06946 | Barium | 7440-39-3 | 72.2 | 0.0516 | 0.586 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.822 | 0.0926 | 0.586 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.381 J | 0.0633 | 0.586 | 1 |
| 01650 | Calcium | 7440-70-2 | 59,600 | 3.91 | 23.5 | 1 |
| 06951 | Chromium | 7440-47-3 | 29.5 | 0.199 | 1.76 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.8 | 0.129 | 0.586 | 1 |
| 06953 | Copper | 7440-50-8 | 17.3 | 0.281 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 23,200 | 9.44 | 23.5 | 1 |
| 06955 | Lead | 7439-92-1 | 10.9 | 0.704 | 1.76 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,600 | 2.85 | 11.7 | 1 |
| 06958 | Manganese | 7439-96-5 | 421 | 0.0973 | 0.586 | 1 |
| 06961 | Nickel | 7440-02-0 | 29.7 | 0.176 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 6,140 | 19.6 | 58.6 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.35 | 1 |
| 06966 | Silver | 7440-22-4 | 0.283 J | 0.281 | 0.586 | 1 |
| 01667 | Sodium | 7440-23-5 | 218 | 19.6 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.61 | 3.52 | 1 |
| 06971 | Vanadium | 7440-62-2 | 38.2 | 0.176 | 0.586 | 1 |
| 06972 | Zinc | 7440-66-6 | 54.0 | 0.281 | 2.35 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0118 | 0.118 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | n.a. | 8.20 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I40

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 16.4 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 11:46 | Jennifer K Howe | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:45 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 13:45 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 13:45 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 22:19 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251159
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I40

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:35 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:09 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:02 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251160
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I41

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.561 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0121 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0066 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.75 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0110 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0285 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172820570501 | 10/11/2017 08:26 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172820570501 | 10/10/2017 18:46 | Cindy M Gehman | 1 |
| 00259 | Mercury | SW-846 7470A | 2 | 172820571302 | 10/11/2017 01:48 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251160
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I41

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------|------------------------|--------------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172820570501 | 10/09/2017 22:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172820571302 | 10/10/2017 00:30 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17281-2807-947 | 10/08/2017 12:30 | Nicholas W Shroyer | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251161
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I42

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0138 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0683 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0180 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0049 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0110 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 11.5 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0063 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.108 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0150 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0232 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-3(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251161
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 13:45 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I42

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:08 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:32 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 33 | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | 5 J | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 4 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 7 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 10 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 8 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 7 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | N.D. | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | 4 J | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 6 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 5 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.989 | 2.27 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.80 | 1.09 | 2.27 | 1 |
| 06946 | Barium | 7440-39-3 | 121 | 0.0500 | 0.568 | 1 |
| 06947 | Beryllium | 7440-41-7 | 1.15 | 0.0898 | 0.568 | 1 |
| 06949 | Cadmium | 7440-43-9 | 2.24 | 0.0614 | 0.568 | 1 |
| 01650 | Calcium | 7440-70-2 | 17,800 | 3.78 | 22.7 | 1 |
| 06951 | Chromium | 7440-47-3 | 33.9 | 0.193 | 1.70 | 1 |
| 06952 | Cobalt | 7440-48-4 | 13.4 | 0.125 | 0.568 | 1 |
| 06953 | Copper | 7440-50-8 | 20.1 | 0.273 | 1.14 | 1 |
| 01654 | Iron | 7439-89-6 | 25,800 | 9.15 | 22.7 | 1 |
| 06955 | Lead | 7439-92-1 | 17.8 | 0.682 | 1.70 | 1 |
| 01657 | Magnesium | 7439-95-4 | 14,600 | 2.76 | 11.4 | 1 |
| 06958 | Manganese | 7439-96-5 | 217 | 0.0943 | 0.568 | 1 |
| 06961 | Nickel | 7440-02-0 | 31.1 | 0.170 | 1.14 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,090 | 19.0 | 56.8 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.06 | 2.27 | 1 |
| 06966 | Silver | 7440-22-4 | 0.384 J | 0.273 | 0.568 | 1 |
| 01667 | Sodium | 7440-23-5 | 510 | 19.0 | 114 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.56 | 3.41 | 1 |
| 06971 | Vanadium | 7440-62-2 | 51.9 | 0.170 | 0.568 | 1 |
| 06972 | Zinc | 7440-66-6 | 181 | 0.273 | 2.27 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | 0.0162 J | 0.0113 | 0.113 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 7.79 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.3 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I43

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 17.0 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 22:03 | Linda C Pape | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:15 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:15 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:15 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 22:43 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251162
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I43

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:44 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:13 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:04 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251163
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I44

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.620 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0128 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.0939 J | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0174 | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 6.06 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0056 J | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0468 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:05 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:23 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251163
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I44

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251164
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35

Reported: 10/20/2017 21:44

63I45

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0207 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | N.D. | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 0.792 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0243 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | N.D. | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | N.D. | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:17 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251164
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:15 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I45

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:17 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:11 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:35 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 6 J | 5 | 16 | 0.65 |
| 10237 | Benzene | 71-43-2 | 2 J | 0.4 | 4 | 0.65 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.65 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.65 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.65 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.65 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.65 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.65 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Toluene | 108-88-3 | 3 J | 0.8 | 4 | 0.65 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.65 |
| 10237 | Xylene (Total) | 1330-20-7 | 0.9 J | 0.8 | 4 | 0.65 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | 5 J | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 4 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 10 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 22 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 13 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 7 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 6 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--|---------------------|-------------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 21 | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 11 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.983 | 2.26 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.00 | 1.08 | 2.26 | 1 |
| 06946 | Barium | 7440-39-3 | 71.9 | 0.0497 | 0.565 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.761 | 0.0893 | 0.565 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.446 J | 0.0610 | 0.565 | 1 |
| 01650 | Calcium | 7440-70-2 | 59,800 | 18.8 | 113 | 5 |
| 06951 | Chromium | 7440-47-3 | 28.2 | 0.192 | 1.70 | 1 |
| 06952 | Cobalt | 7440-48-4 | 10.7 | 0.124 | 0.565 | 1 |
| 06953 | Copper | 7440-50-8 | 17.7 | 0.271 | 1.13 | 1 |
| 01654 | Iron | 7439-89-6 | 24,900 | 9.10 | 22.6 | 1 |
| 06955 | Lead | 7439-92-1 | 11.3 | 0.678 | 1.70 | 1 |
| 01657 | Magnesium | 7439-95-4 | 27,800 | 2.75 | 11.3 | 1 |
| 06958 | Manganese | 7439-96-5 | 408 | 0.0938 | 0.565 | 1 |
| 06961 | Nickel | 7440-02-0 | 29.8 | 0.170 | 1.13 | 1 |
| 01662 | Potassium | 7440-09-7 | 5,540 | 18.9 | 56.5 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.05 | 2.26 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.271 | 0.565 | 1 |
| 01667 | Sodium | 7440-23-5 | 218 | 18.9 | 113 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.55 | 3.39 | 1 |
| 06971 | Vanadium | 7440-62-2 | 37.7 | 0.170 | 0.565 | 1 |
| 06972 | Zinc | 7440-66-6 | 55.6 | 0.271 | 2.26 | 1 |
| | SW-846 7471A | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0113 | 0.113 | 1 |
| Wet Chemistry | SW-846 9045C modified | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | n.a. | 8.32 | 0.0100 | 0.0100 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I46

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|-----------------------|-----------------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | SM 2540 G-1997 | % | % | % |
| | | %Moisture Calc | | | | |
| 00111 | Moisture | n.a. | 17.3 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 12:09 | Jennifer K Howe | 0.65 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:20 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:20 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:20 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 23:07 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:51 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251165
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I46

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:48 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:16 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:06 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251166
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I47

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.516 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0203 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0184 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0109 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 3.01 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0157 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0121 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/17/2017 03:50 | Scott R Yanos | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/17/2017 03:50 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:09 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:29 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251166
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I47

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251167
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I48

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0624 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0142 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0031 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0085 J | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 9.04 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.0834 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0119 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0187 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-2(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251167
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:20 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I48

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/18/2017 23:21 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:15 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571306 | 10/14/2017 01:37 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571306 | 10/13/2017 17:35 | JoElla L Rice | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 45 | 7 | 20 | 0.81 |
| 10237 | Benzene | 71-43-2 | N.D. | 0.5 | 5 | 0.81 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | Bromoform | 75-25-2 | N.D. | 1 | 5 | 0.81 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 5 | 0.81 |
| 10237 | 2-Butanone | 78-93-3 | 4 J | 4 | 10 | 0.81 |
| 10237 | Carbon Disulfide | 75-15-0 | 5 J | 1 | 5 | 0.81 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 1 | 5 | 0.81 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 5 | 0.81 |
| 10237 | Chloroform | 67-66-3 | N.D. | 1 | 5 | 0.81 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 5 | 0.81 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 1 | 5 | 0.81 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 1 | 5 | 0.81 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 3 | 10 | 0.81 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.5 | 5 | 0.81 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 3 | 10 | 0.81 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 5 | 0.81 |
| 10237 | Styrene | 100-42-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | Toluene | 108-88-3 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 1 | 5 | 0.81 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 1 | 5 | 0.81 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 1 | 5 | 0.81 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 1 | 5 | 0.81 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 1 | 5 | 0.81 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -71%

Internal Standard - Re-analysis % Recovery

Chlorobenzene-d5 -52%

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| | 1,4-Dichlorobenzene-d4 | | -76% | | | |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 6 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 6 J | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 21 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 83 | 210 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 83 | 210 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 83 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 21 | 41 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 21 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 41 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 21 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 21 | 41 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 5 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 21 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 21 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 21 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 21 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 21 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 83 | 210 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 21 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 83 | 210 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 210 | 620 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 83 | 210 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 21 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 83 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 21 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 210 | 620 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 210 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | N.D. | 4 | 21 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Isophorone | 78-59-1 | N.D. | 21 | 41 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 4 J | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 21 | 41 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | 5 J | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 21 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 83 | 210 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 83 | 210 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 21 | 41 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 21 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 210 | 620 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 21 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 21 | 41 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 83 | 210 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 9 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 21 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 5 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 21 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 21 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 21 | 41 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.963 | 2.21 | 1 |
| 06935 | Arsenic | 7440-38-2 | 3.70 | 1.06 | 2.21 | 1 |
| 06946 | Barium | 7440-39-3 | 46.7 | 0.0487 | 0.553 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.516 J | 0.0874 | 0.553 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.235 J | 0.0597 | 0.553 | 1 |
| 01650 | Calcium | 7440-70-2 | 28,100 | 3.68 | 22.1 | 1 |
| 06951 | Chromium | 7440-47-3 | 16.9 | 0.188 | 1.66 | 1 |
| 06952 | Cobalt | 7440-48-4 | 6.49 | 0.122 | 0.553 | 1 |
| 06953 | Copper | 7440-50-8 | 11.8 | 0.266 | 1.11 | 1 |
| 01654 | Iron | 7439-89-6 | 15,200 | 8.91 | 22.1 | 1 |
| 06955 | Lead | 7439-92-1 | 8.63 | 0.664 | 1.66 | 1 |
| 01657 | Magnesium | 7439-95-4 | 13,900 | 2.69 | 11.1 | 1 |
| 06958 | Manganese | 7439-96-5 | 311 | 0.0918 | 0.553 | 1 |
| 06961 | Nickel | 7440-02-0 | 18.2 | 0.166 | 1.11 | 1 |
| 01662 | Potassium | 7440-09-7 | 2,970 | 18.5 | 55.3 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.03 | 2.21 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.266 | 0.553 | 1 |
| 01667 | Sodium | 7440-23-5 | 219 | 18.5 | 11.1 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.52 | 3.32 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I49

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06971 | Vanadium | 7440-62-2 | 23.6 | 0.166 | 0.553 | 1 |
| 06972 | Zinc | 7440-66-6 | 38.3 | 0.266 | 2.21 | 1 |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0124 | 0.124 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.5 C. | n.a. | 7.87 | 0.0100 | 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 19.3 | 0.50 | 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 22:49 | Linda C Pape | 0.81 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:35 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:35 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:35 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 23:31 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251168
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I49

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:54 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:20 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:08 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039402B | 10/09/2017 19:15 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251169
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I50

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.658 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0145 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0094 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 5.90 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0074 J | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0252 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:13 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:31 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251169
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I50

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251170
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I51

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0118 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0665 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0130 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0034 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0124 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 9.75 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.110 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0121 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0199 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(0-6)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street SPLP NVE
 IDOT Job 063

ELLE Sample # TL 9251170
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:35 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I51

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:18 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:00 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-1567 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 18 | 5 | 15 | 0.63 |
| 10237 | Benzene | 71-43-2 | 2 J | 0.4 | 4 | 0.63 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.63 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.63 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.63 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.63 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.63 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.63 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Toluene | 108-88-3 | 3 J | 0.8 | 4 | 0.63 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.63 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.63 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

Chlorobenzene-d5 -57%
1,4-Dichlorobenzene-d4 -79%

Internal Standard - Re-analysis % Recovery

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| | 1,4-Dichlorobenzene-d4 | | -67% | | | |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 5 | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 9 | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 80 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 80 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 80 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 80 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 600 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 80 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 80 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | N.D. | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 600 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | N.D. | 4 | 20 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------|---|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 80 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 80 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 600 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 80 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | N.D. | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | N.D. | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals | SW-846 6010B | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.970 | 2.23 | 1 |
| 06935 | Arsenic | 7440-38-2 | 4.13 | 1.07 | 2.23 | 1 |
| 06946 | Barium | 7440-39-3 | 73.5 | 0.0490 | 0.557 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.623 | 0.0881 | 0.557 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.437 J | 0.0602 | 0.557 | 1 |
| 01650 | Calcium | 7440-70-2 | 80,600 | 18.6 | 111 | 5 |
| 06951 | Chromium | 7440-47-3 | 25.4 | 0.190 | 1.67 | 1 |
| 06952 | Cobalt | 7440-48-4 | 13.2 | 0.123 | 0.557 | 1 |
| 06953 | Copper | 7440-50-8 | 34.4 | 0.268 | 1.11 | 1 |
| 01654 | Iron | 7439-89-6 | 21,100 | 8.97 | 22.3 | 1 |
| 06955 | Lead | 7439-92-1 | 11.5 | 0.669 | 1.67 | 1 |
| 01657 | Magnesium | 7439-95-4 | 42,100 | 2.71 | 11.1 | 1 |
| 06958 | Manganese | 7439-96-5 | 407 | 0.0925 | 0.557 | 1 |
| 06961 | Nickel | 7440-02-0 | 26.7 | 0.167 | 1.11 | 1 |
| 01662 | Potassium | 7440-09-7 | 4,160 | 18.6 | 55.7 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.04 | 2.23 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.268 | 0.557 | 1 |
| 01667 | Sodium | 7440-23-5 | 198 | 18.6 | 111 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.53 | 3.34 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/kg | mg/kg | mg/kg | |
| 06971 | Vanadium | 7440-62-2 | 34.0 | 0.167 | 0.557 | 1 |
| 06972 | Zinc | 7440-66-6 | 46.7 | 0.268 | 2.23 | 1 |
| | | SW-846 7471A | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0120 | 0.120 | 1 |
| Wet Chemistry | | | | | | |
| | | SW-846 9045C modified | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) The pH was measured in water at 20.3 C. | n.a. | 8.19 | 0.0100 | 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| | | SM 2540 G-1997 | % | % | % | |
| | | %Moisture Calc | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 17.7 | 0.50 | 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 23:12 | Linda C Pape | 0.63 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 14:40 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 14:40 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/17/2017 23:55 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251171
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I52

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:00 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 03:57 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:24 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:10 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251172
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I53

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.528 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0107 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0147 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 3.72 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0140 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0121 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:17 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:33 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251172
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I53

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251173
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I54

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | 0.0137 J | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.156 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0411 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0104 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0267 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 29.9 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0121 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.231 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0379 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0602 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: MC-1(6-12)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251173
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 14:40 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I54

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570503 | 10/15/2017 20:22 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:08 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570503 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-1567 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 28 | 6 | 17 | 0.68 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.68 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.68 |
| 10237 | 2-Butanone | 78-93-3 | 4 J | 3 | 8 | 0.68 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.68 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.68 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.68 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.68 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.68 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.68 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.68 |

The GC/MS volatile internal standard peak areas listed below are outside the acceptance criteria of -50% to +100% for both the initial analysis and the re-analysis. The reported results are from the initial analysis of the sample.

Internal Standard - Initial Analysis % Recovery

1,4-Dichlorobenzene-d4 -56%

Internal Standard - Re-analysis % Recovery

1,4-Dichlorobenzene-d4 -62%

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 21 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 21 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | N.D. | 4 | 21 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 8 J | 4 | 21 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 12 J | 4 | 21 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | N.D. | 4 | 21 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 41 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 82 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 82 | 200 | 1 |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 41 | 82 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Chloroethyl)ether | 111-44-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 40 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 41 | 1 |
| Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | | |
| 10726 | Chrysene | 218-01-9 | 7 J | 4 | 21 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 21 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 41 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 41 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 41 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 410 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 41 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 82 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 41 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 82 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 610 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 370 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 82 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 41 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 82 | 210 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 6 J | 4 | 21 | 1 |
| 10726 | Fluorene | 86-73-7 | 4 J | 4 | 21 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 21 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 41 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 610 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 41 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 4 J | 4 | 21 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 41 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---|----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 6 J | 4 | 21 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 41 | 1 |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | | |
| 10726 | Naphthalene | 91-20-3 | 6 J | 4 | 21 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 41 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 82 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 82 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 41 | 1 |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 41 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 610 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 41 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 41 | 1 |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 82 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 41 | 210 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 12 J | 4 | 21 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 41 | 1 |
| 10726 | Pyrene | 129-00-0 | 6 J | 4 | 21 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 41 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 41 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.01 | 2.32 | 1 |
| 06935 | Arsenic | 7440-38-2 | 6.03 | 1.12 | 2.32 | 1 |
| 06946 | Barium | 7440-39-3 | 79.9 | 0.0511 | 0.581 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.719 | 0.0918 | 0.581 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.917 | 0.0627 | 0.581 | 1 |
| 01650 | Calcium | 7440-70-2 | 83,300 | 19.3 | 116 | 5 |
| 06951 | Chromium | 7440-47-3 | 27.9 | 0.198 | 1.74 | 1 |
| 06952 | Cobalt | 7440-48-4 | 11.9 | 0.128 | 0.581 | 1 |
| 06953 | Copper | 7440-50-8 | 26.2 | 0.279 | 1.16 | 1 |
| 01654 | Iron | 7439-89-6 | 23,000 | 9.35 | 23.2 | 1 |
| 06955 | Lead | 7439-92-1 | 11.0 | 0.697 | 1.74 | 1 |
| 01657 | Magnesium | 7439-95-4 | 46,800 | 2.82 | 11.6 | 1 |
| 06958 | Manganese | 7439-96-5 | 504 | 0.0964 | 0.581 | 1 |
| 06961 | Nickel | 7440-02-0 | 27.7 | 0.174 | 1.16 | 1 |
| 01662 | Potassium | 7440-09-7 | 4,940 | 19.4 | 58.1 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.08 | 2.32 | 1 |
| 06966 | Silver | 7440-22-4 | 0.876 | 0.279 | 0.581 | 1 |
| 01667 | Sodium | 7440-23-5 | 626 | 19.4 | 116 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.59 | 3.49 | 1 |
| 06971 | Vanadium | 7440-62-2 | 40.6 | 0.174 | 0.581 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I55

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|--|--------------------|-----------------------------|---------------------------|-----------------|
| Metals | | | | | | |
| 06972 | Zinc | SW-846 6010B 7440-66-6 | mg/kg 45.1 | mg/kg 0.279 | mg/kg 2.32 | 1 |
| Metals | | | | | | |
| 00159 | Mercury | SW-846 7471A 7439-97-6 | mg/kg N.D. | mg/kg 0.0121 | mg/kg 0.121 | 1 |
| Wet Chemistry | | | | | | |
| 00394 | pH (soil) The pH was measured in water at 20.4 C. | SW-846 9045C modified n.a. | Std. Units 8.24 | Std. Units 0.0100 | Std. Units 0.0100 | 1 |
| Wet Chemistry | | | | | | |
| 00111 | Moisture Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | SM 2540 G-1997 %Moisture Calc n.a. | % 18.8 | % 0.50 | % 0.50 | 1 |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172861AA | 10/13/2017 23:35 | Linda C Pape | 0.68 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/18/2017 00:18 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251174
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I55

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:07 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:03 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:27 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:12 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251175
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I56

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.543 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0370 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0112 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 4.07 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0198 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0203 | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:21 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:36 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251175
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

63I56

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251176
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I57

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0561 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0130 J | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0045 J | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0128 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 8.83 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.149 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0098 J | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0183 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517 Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251176
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I57

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570504 | 10/18/2017 02:56 | Scott R Yanos | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570504 | 10/18/2017 02:56 | Scott R Yanos | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:15 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:11 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570504 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-1567 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Volatiles | SW-846 8260B | ug/kg | ug/kg | ug/kg | |
| 10237 | Acetone | 67-64-1 | 16 J | 6 | 16 | 0.67 |
| 10237 | Benzene | 71-43-2 | 1 J | 0.4 | 4 | 0.67 |
| 10237 | Bromodichloromethane | 75-27-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromoform | 75-25-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Bromomethane | 74-83-9 | N.D. | 2 | 4 | 0.67 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 3 | 8 | 0.67 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloroethane | 75-00-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Chloromethane | 74-87-3 | N.D. | 2 | 4 | 0.67 |
| 10237 | Dibromochloromethane | 124-48-1 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethane | 75-34-3 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,2-Dichloroethene | 156-59-2 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,2-Dichloroethene | 156-60-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,2-Dichloropropane | 78-87-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | cis-1,3-Dichloropropene | 10061-01-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | trans-1,3-Dichloropropene | 10061-02-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Ethylbenzene | 100-41-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 2-Hexanone | 591-78-6 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methyl Tertiary Butyl Ether | 1634-04-4 | N.D. | 0.4 | 4 | 0.67 |
| 10237 | 4-Methyl-2-pentanone | 108-10-1 | N.D. | 2 | 8 | 0.67 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 2 | 4 | 0.67 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2,2-Tetrachloroethane | 79-34-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Toluene | 108-88-3 | 2 J | 0.8 | 4 | 0.67 |
| 10237 | 1,1,1-Trichloroethane | 71-55-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | 1,1,2-Trichloroethane | 79-00-5 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.8 | 4 | 0.67 |
| 10237 | Xylene (Total) | 1330-20-7 | N.D. | 0.8 | 4 | 0.67 |
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Acenaphthene | 83-32-9 | N.D. | 4 | 20 | 1 |
| 10726 | Acenaphthylene | 208-96-8 | N.D. | 4 | 20 | 1 |
| 10726 | Anthracene | 120-12-7 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)anthracene | 56-55-3 | N.D. | 4 | 20 | 1 |
| 10726 | Benzo(a)pyrene | 50-32-8 | 6 J | 4 | 20 | 1 |
| 10726 | Benzo(b)fluoranthene | 205-99-2 | 8 J | 4 | 20 | 1 |
| 10726 | Benzo(g,h,i)perylene | 191-24-2 | 16 J | 4 | 20 | 1 |
| 10726 | Benzo(k)fluoranthene | 207-08-9 | 4 J | 4 | 20 | 1 |
| 10726 | 4-Bromophenyl-phenylether | 101-55-3 | N.D. | 20 | 40 | 1 |
| 10726 | Butylbenzylphthalate | 85-68-7 | N.D. | 79 | 200 | 1 |
| 10726 | Di-n-butylphthalate | 84-74-2 | N.D. | 79 | 200 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS | Semivolatiles | SW-846 8270D | ug/kg | ug/kg | ug/kg | |
| 10726 | Carbazole | 86-74-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloro-3-methylphenol | 59-50-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chloroaniline | 106-47-8 | N.D. | 40 | 79 | 1 |
| 10726 | bis(2-Chloroethoxy)methane | 111-91-1 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Chloroethyl) ether | 111-44-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Chloronaphthalene | 91-58-7 | N.D. | 8 | 39 | 1 |
| 10726 | 2-Chlorophenol | 95-57-8 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Chlorophenyl-phenylether | 7005-72-3 | N.D. | 20 | 40 | 1 |
| 10726 | 2,2'-oxybis(1-Chloropropane) | 108-60-1 | N.D. | 20 | 40 | 1 |
| | Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds. | | | | | |
| 10726 | Chrysene | 218-01-9 | 10 J | 4 | 20 | 1 |
| 10726 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | 4 | 20 | 1 |
| 10726 | Dibenzofuran | 132-64-9 | N.D. | 20 | 40 | 1 |
| 10726 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 20 | 40 | 1 |
| 10726 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 20 | 40 | 1 |
| 10726 | 3,3'-Dichlorobenzidine | 91-94-1 | N.D. | 120 | 400 | 1 |
| 10726 | 2,4-Dichlorophenol | 120-83-2 | N.D. | 20 | 40 | 1 |
| 10726 | Diethylphthalate | 84-66-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 20 | 40 | 1 |
| 10726 | Dimethylphthalate | 131-11-3 | N.D. | 79 | 200 | 1 |
| 10726 | 4,6-Dinitro-2-methylphenol | 534-52-1 | N.D. | 200 | 590 | 1 |
| 10726 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 360 | 1,200 | 1 |
| 10726 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 79 | 200 | 1 |
| 10726 | 2,6-Dinitrotoluene | 606-20-2 | N.D. | 20 | 40 | 1 |
| 10726 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 79 | 200 | 1 |
| 10726 | Fluoranthene | 206-44-0 | 7 J | 4 | 20 | 1 |
| 10726 | Fluorene | 86-73-7 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobenzene | 118-74-1 | N.D. | 4 | 20 | 1 |
| 10726 | Hexachlorobutadiene | 87-68-3 | N.D. | 20 | 40 | 1 |
| 10726 | Hexachlorocyclopentadiene | 77-47-4 | N.D. | 200 | 590 | 1 |
| 10726 | Hexachloroethane | 67-72-1 | N.D. | 40 | 200 | 1 |
| 10726 | Indeno(1,2,3-cd)pyrene | 193-39-5 | 7 J | 4 | 20 | 1 |
| 10726 | Isophorone | 78-59-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2-Methylnaphthalene | 91-57-6 | 7 J | 4 | 20 | 1 |
| 10726 | 2-Methylphenol | 95-48-7 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Methylphenol | 106-44-5 | N.D. | 20 | 40 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | | |
| 10726 | Naphthalene | 91-20-3 | N.D. | 4 | 20 | 1 |
| 10726 | 2-Nitroaniline | 88-74-4 | N.D. | 20 | 40 | 1 |
| 10726 | 3-Nitroaniline | 99-09-2 | N.D. | 79 | 200 | 1 |
| 10726 | 4-Nitroaniline | 100-01-6 | N.D. | 79 | 200 | 1 |
| 10726 | Nitrobenzene | 98-95-3 | N.D. | 20 | 40 | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--|--|------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS Semivolatiles SW-846 8270D | | | | | | |
| | | | ug/kg | ug/kg | ug/kg | |
| 10726 | 2-Nitrophenol | 88-75-5 | N.D. | 20 | 40 | 1 |
| 10726 | 4-Nitrophenol | 100-02-7 | N.D. | 200 | 590 | 1 |
| 10726 | N-Nitroso-di-n-propylamine | 621-64-7 | N.D. | 20 | 40 | 1 |
| 10726 | N-Nitrosodiphenylamine | 86-30-6 | N.D. | 20 | 40 | 1 |
| | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. | | | | | |
| 10726 | Di-n-octylphthalate | 117-84-0 | N.D. | 79 | 200 | 1 |
| 10726 | Pentachlorophenol | 87-86-5 | N.D. | 40 | 200 | 1 |
| 10726 | Phenanthrene | 85-01-8 | 12 J | 4 | 20 | 1 |
| 10726 | Phenol | 108-95-2 | N.D. | 20 | 40 | 1 |
| 10726 | Pyrene | 129-00-0 | 7 J | 4 | 20 | 1 |
| 10726 | 1,2,4-Trichlorobenzene | 120-82-1 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 20 | 40 | 1 |
| 10726 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 20 | 40 | 1 |
| Metals SW-846 6010B | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 06944 | Antimony | 7440-36-0 | N.D. | 1.02 | 2.35 | 1 |
| 06935 | Arsenic | 7440-38-2 | 3.23 | 1.13 | 2.35 | 1 |
| 06946 | Barium | 7440-39-3 | 15.3 | 0.0517 | 0.587 | 1 |
| 06947 | Beryllium | 7440-41-7 | N.D. | 0.0928 | 0.587 | 1 |
| 06949 | Cadmium | 7440-43-9 | 1.23 | 0.0634 | 0.587 | 1 |
| 01650 | Calcium | 7440-70-2 | 169,000 | 19.6 | 117 | 5 |
| 06951 | Chromium | 7440-47-3 | 8.58 | 0.200 | 1.76 | 1 |
| 06952 | Cobalt | 7440-48-4 | 8.79 | 0.129 | 0.587 | 1 |
| 06953 | Copper | 7440-50-8 | 38.8 | 0.282 | 1.17 | 1 |
| 01654 | Iron | 7439-89-6 | 7,380 | 9.45 | 23.5 | 1 |
| 06955 | Lead | 7439-92-1 | 8.49 | 0.705 | 1.76 | 1 |
| 01657 | Magnesium | 7439-95-4 | 99,000 | 14.3 | 58.7 | 5 |
| 06958 | Manganese | 7439-96-5 | 225 | 0.0975 | 0.587 | 1 |
| 06961 | Nickel | 7440-02-0 | 9.88 | 0.176 | 1.17 | 1 |
| 01662 | Potassium | 7440-09-7 | 2,460 | 19.6 | 58.7 | 1 |
| 06936 | Selenium | 7782-49-2 | N.D. | 1.09 | 2.35 | 1 |
| 06966 | Silver | 7440-22-4 | 1.37 | 0.282 | 0.587 | 1 |
| 01667 | Sodium | 7440-23-5 | 285 | 19.6 | 117 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 1.61 | 3.52 | 1 |
| 06971 | Vanadium | 7440-62-2 | 11.8 | 0.176 | 0.587 | 1 |
| 06972 | Zinc | 7440-66-6 | 10.3 | 0.282 | 2.35 | 1 |
| SW-846 7471A | | | | | | |
| | | | mg/kg | mg/kg | mg/kg | |
| 00159 | Mercury | 7439-97-6 | N.D. | 0.0113 | 0.113 | 1 |
| Wet Chemistry SW-846 9045C modified | | | | | | |
| | | | Std. Units | Std. Units | Std. Units | |
| 00394 | pH (soil) | n.a. | 8.34 | 0.0100 | 0.0100 | 1 |
| | The pH was measured in water at 20.2 C. | | | | | |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I58

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---|------------|------------|-----------------------------|---------------------------|-----------------|
| Wet Chemistry | | | | | | |
| | SM 2540 G-1997 | | % | % | % | |
| | %Moisture Calc | | | | | |
| 00111 | Moisture | n.a. | 15.7 | 0.50 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | | |

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 10237 | VOCs - Solid by 8260B | SW-846 8260B | 1 | X172901AA | 10/17/2017 13:44 | Jennifer K Howe | 0.67 |
| 07579 | GC/MS-5g Field Preserv.MeOH-NC | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 1 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 02392 | Soil Volatile Field Preserv | SW-846 5035A | 2 | 201728047390 | 10/05/2017 15:00 | Client Supplied | 1 |
| 10726 | TCL 8270 (microwave) | SW-846 8270D | 1 | 17286SLF026 | 10/18/2017 00:42 | Anthony P Bauer | 1 |
| 10813 | BNA Soil Microwave APP IX | SW-846 3546 | 1 | 17286SLF026 | 10/16/2017 14:00 | Kayla A Yuditsky | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01650 | Calcium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:13 | Scott R Yanos | 5 |
| 06951 | Chromium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01654 | Iron | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street
IDOT Job 063

ELLE Sample # SW 9251177
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions

300 Plaza Circle

Submitted: 10/06/2017 09:35

Suite 202

Reported: 10/20/2017 21:44

Mundelein IL 60060

63I58

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|----------------------------|-------------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 01657 | Magnesium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:13 | Scott R Yanos | 5 |
| 06958 | Manganese | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01662 | Potassium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 01667 | Sodium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 172820570803 | 10/19/2017 04:10 | Scott R Yanos | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 172820570803 | 10/14/2017 19:31 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 172820571101 | 10/12/2017 18:14 | Parker D Lindstrom | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 172820570803 | 10/12/2017 05:30 | Barbara A Kane | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A | 1 | 172820571101 | 10/12/2017 07:00 | James L Mertz | 1 |
| 00394 | pH (soil) | SW-846 9045C modified | 1 | 17282039403A | 10/09/2017 20:00 | Jeremy L Bolf | 1 |
| 00111 | Moisture | SM 2540 G-1997 %Moisture Calc | 1 | 17284820010B | 10/11/2017 23:50 | Scott W Freisher | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street TCLP NVE
IDOT Job 063

ELLE Sample # TL 9251178
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35
Reported: 10/20/2017 21:44

63I59

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | | SW-846 6010B | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.419 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | 0.0023 J | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0498 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | N.D. | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | N.D. | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0072 J | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 2.99 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0267 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0159 J | 0.0065 | 0.0200 | 1 |
| | | SW-846 7470A | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570502 | 10/17/2017 03:57 | Scott R Yanos | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570502 | 10/15/2017 03:25 | Jonathan J Allen | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571304 | 10/14/2017 00:38 | Parker D Lindstrom | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
 FAP 330: US45 Metra Rail to 187th Street TCLP NVE
 IDOT Job 063

ELLE Sample # TL 9251178
 ELLE Group # 1860028
 Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
 300 Plaza Circle
 Submitted: 10/06/2017 09:35 Suite 202
 Reported: 10/20/2017 21:44 Mundelein IL 60060

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Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|------------------|------------------------|-----------------|-----------------|
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570502 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571304 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 17282-9169-947 A | 10/09/2017 14:30 | Craig S Pfautz | n.a. |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251179
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW

Weston Solutions
300 Plaza Circle
Suite 202
Mundelein IL 60060

Submitted: 10/06/2017 09:35

Reported: 10/20/2017 21:44

63I60

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit* | Limit of Quantitation | Dilution Factor |
|---------------|---------------------|------------|-------------|-------------------------|-----------------------|-----------------|
| Metals | | | | | | |
| | SW-846 6010B | | mg/l | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0096 | 0.0200 | 1 |
| 07046 | Barium | 7440-39-3 | 0.0801 | 0.00085 | 0.0050 | 1 |
| 07047 | Beryllium | 7440-41-7 | N.D. | 0.0020 | 0.0050 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.0018 | 0.0050 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0199 | 0.0033 | 0.0150 | 1 |
| 07052 | Cobalt | 7440-48-4 | 0.0061 | 0.0017 | 0.0050 | 1 |
| 07053 | Copper | 7440-50-8 | 0.0172 | 0.0040 | 0.0100 | 1 |
| 01754 | Iron | 7439-89-6 | 14.2 | 0.0805 | 0.200 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0060 | 0.0150 | 1 |
| 07058 | Manganese | 7439-96-5 | 0.156 | 0.0016 | 0.0050 | 1 |
| 07061 | Nickel | 7440-02-0 | 0.0174 | 0.0040 | 0.0100 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0093 | 0.0200 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0024 | 0.0050 | 1 |
| 07072 | Zinc | 7440-66-6 | 0.0262 | 0.0065 | 0.0200 | 1 |
| | SW-846 7470A | | mg/l | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 0.00020 | 1 |

Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------------|--------|--------------|------------------------|--------------------|-----------------|
| 07035 | Arsenic | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07047 | Beryllium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07052 | Cobalt | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07053 | Copper | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 01754 | Iron | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |

*=This limit was used in the evaluation of the final result

Sample Description: BR-1(0-2)-100517D Grab Soil
FAP 330: US45 Metra Rail to 187th Street SPLP NVE
IDOT Job 063

ELLE Sample # TL 9251179
ELLE Group # 1860028
Account # 11924

Project Name: IDOT Job 063

Collected: 10/05/2017 15:00 by TW Weston Solutions
300 Plaza Circle
Submitted: 10/06/2017 09:35 Suite 202
Reported: 10/20/2017 21:44 Mundelein IL 60060

63I60

Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|------------------------------|--------------|--------|----------------------|------------------------|--------------------|-----------------|
| 07055 | Lead | SW-846 6010B | 1 | 172830570504 | 10/18/2017 03:17 | Scott R Yanos | 1 |
| 07058 | Manganese | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07061 | Nickel | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 172830570504 | 10/18/2017 03:17 | Scott R Yanos | 1 |
| 07072 | Zinc | SW-846 6010B | 1 | 172830570504 | 10/15/2017 16:38 | Elaine F Stoltzfus | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 172830571307 | 10/13/2017 23:17 | Parker D Lindstrom | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 172830570504 | 10/12/2017 06:04 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 172830571307 | 10/13/2017 01:00 | Annamaria Kuhns | 1 |
| 01567 | SPLP Non-volatile Extraction | SW-846 1312 | 1 | 17282-12245-15 67 | 10/09/2017 12:47 | Tanner E Grumbling | n.a. |

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

| Analysis Name | Result | MDL** | LOQ |
|-----------------------------|--|-------|-------|
| | ug/kg | ug/kg | ug/kg |
| Batch number: X172852AA | Sample number(s): 9251120, 9251126, 9251129, 9251135 | | |
| Acetone | N.D. | 7 | 20 |
| Benzene | N.D. | 0.5 | 5 |
| Bromodichloromethane | N.D. | 1 | 5 |
| Bromoform | N.D. | 1 | 5 |
| Bromomethane | N.D. | 2 | 5 |
| 2-Butanone | N.D. | 4 | 10 |
| Carbon Disulfide | N.D. | 1 | 5 |
| Carbon Tetrachloride | N.D. | 1 | 5 |
| Chlorobenzene | N.D. | 1 | 5 |
| Chloroethane | N.D. | 2 | 5 |
| Chloroform | N.D. | 1 | 5 |
| Chloromethane | N.D. | 2 | 5 |
| Dibromochloromethane | N.D. | 1 | 5 |
| 1,1-Dichloroethane | N.D. | 1 | 5 |
| 1,2-Dichloroethane | N.D. | 1 | 5 |
| 1,1-Dichloroethene | N.D. | 1 | 5 |
| cis-1,2-Dichloroethene | N.D. | 1 | 5 |
| trans-1,2-Dichloroethene | N.D. | 1 | 5 |
| 1,2-Dichloropropane | N.D. | 1 | 5 |
| cis-1,3-Dichloropropene | N.D. | 1 | 5 |
| trans-1,3-Dichloropropene | N.D. | 1 | 5 |
| Ethylbenzene | N.D. | 1 | 5 |
| 2-Hexanone | N.D. | 3 | 10 |
| Methyl Tertiary Butyl Ether | N.D. | 0.5 | 5 |
| 4-Methyl-2-pentanone | N.D. | 3 | 10 |
| Methylene Chloride | N.D. | 2 | 5 |
| Styrene | N.D. | 1 | 5 |
| 1,1,2,2-Tetrachloroethane | N.D. | 1 | 5 |
| Tetrachloroethene | N.D. | 1 | 5 |
| Toluene | N.D. | 1 | 5 |
| 1,1,1-Trichloroethane | N.D. | 1 | 5 |
| 1,1,2-Trichloroethane | N.D. | 1 | 5 |
| Trichloroethene | N.D. | 1 | 5 |
| Vinyl Chloride | N.D. | 1 | 5 |
| Xylene (Total) | N.D. | 1 | 5 |
| Batch number: X172861AA | Sample number(s): 9251123, 9251132, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251162, 9251168, 9251171, 9251174 | | |
| Acetone | N.D. | 7 | 20 |
| Benzene | N.D. | 0.5 | 5 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Method Blank (continued)

| Analysis Name | Result | MDL** | LOQ |
|-----------------------------|-------------------|---------------------------------|-------|
| | ug/kg | ug/kg | ug/kg |
| Bromodichloromethane | N.D. | 1 | 5 |
| Bromoform | N.D. | 1 | 5 |
| Bromomethane | N.D. | 2 | 5 |
| 2-Butanone | N.D. | 4 | 10 |
| Carbon Disulfide | N.D. | 1 | 5 |
| Carbon Tetrachloride | N.D. | 1 | 5 |
| Chlorobenzene | N.D. | 1 | 5 |
| Chloroethane | N.D. | 2 | 5 |
| Chloroform | N.D. | 1 | 5 |
| Chloromethane | N.D. | 2 | 5 |
| Dibromochloromethane | N.D. | 1 | 5 |
| 1,1-Dichloroethane | N.D. | 1 | 5 |
| 1,2-Dichloroethane | N.D. | 1 | 5 |
| 1,1-Dichloroethene | N.D. | 1 | 5 |
| cis-1,2-Dichloroethene | N.D. | 1 | 5 |
| trans-1,2-Dichloroethene | N.D. | 1 | 5 |
| 1,2-Dichloropropane | N.D. | 1 | 5 |
| cis-1,3-Dichloropropene | N.D. | 1 | 5 |
| trans-1,3-Dichloropropene | N.D. | 1 | 5 |
| Ethylbenzene | N.D. | 1 | 5 |
| 2-Hexanone | N.D. | 3 | 10 |
| Methyl Tertiary Butyl Ether | N.D. | 0.5 | 5 |
| 4-Methyl-2-pentanone | N.D. | 3 | 10 |
| Methylene Chloride | N.D. | 2 | 5 |
| Styrene | N.D. | 1 | 5 |
| 1,1,2,2-Tetrachloroethane | N.D. | 1 | 5 |
| Tetrachloroethene | N.D. | 1 | 5 |
| Toluene | N.D. | 1 | 5 |
| 1,1,1-Trichloroethane | N.D. | 1 | 5 |
| 1,1,2-Trichloroethane | N.D. | 1 | 5 |
| Trichloroethene | N.D. | 1 | 5 |
| Vinyl Chloride | N.D. | 1 | 5 |
| Xylene (Total) | N.D. | 1 | 5 |
| Batch number: X172901AA | Sample number(s): | 9251156,9251159,9251165,9251177 | |
| Acetone | N.D. | 7 | 20 |
| Benzene | N.D. | 0.5 | 5 |
| Bromodichloromethane | N.D. | 1 | 5 |
| Bromoform | N.D. | 1 | 5 |
| Bromomethane | N.D. | 2 | 5 |
| 2-Butanone | N.D. | 4 | 10 |
| Carbon Disulfide | N.D. | 1 | 5 |
| Carbon Tetrachloride | N.D. | 1 | 5 |
| Chlorobenzene | N.D. | 1 | 5 |
| Chloroethane | N.D. | 2 | 5 |
| Chloroform | N.D. | 1 | 5 |
| Chloromethane | N.D. | 2 | 5 |
| Dibromochloromethane | N.D. | 1 | 5 |
| 1,1-Dichloroethane | N.D. | 1 | 5 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Method Blank (continued)

| Analysis Name | Result | MDL** | LOQ |
|-------------------------------|--|-------|-------|
| | ug/kg | ug/kg | ug/kg |
| 1,2-Dichloroethane | N.D. | 1 | 5 |
| 1,1-Dichloroethene | N.D. | 1 | 5 |
| cis-1,2-Dichloroethene | N.D. | 1 | 5 |
| trans-1,2-Dichloroethene | N.D. | 1 | 5 |
| 1,2-Dichloropropane | N.D. | 1 | 5 |
| cis-1,3-Dichloropropene | N.D. | 1 | 5 |
| trans-1,3-Dichloropropene | N.D. | 1 | 5 |
| Ethylbenzene | N.D. | 1 | 5 |
| 2-Hexanone | N.D. | 3 | 10 |
| Methyl Tertiary Butyl Ether | N.D. | 0.5 | 5 |
| 4-Methyl-2-pentanone | N.D. | 3 | 10 |
| Methylene Chloride | N.D. | 2 | 5 |
| Styrene | N.D. | 1 | 5 |
| 1,1,2,2-Tetrachloroethane | N.D. | 1 | 5 |
| Tetrachloroethene | N.D. | 1 | 5 |
| Toluene | N.D. | 1 | 5 |
| 1,1,1-Trichloroethane | N.D. | 1 | 5 |
| 1,1,2-Trichloroethane | N.D. | 1 | 5 |
| Trichloroethene | N.D. | 1 | 5 |
| Vinyl Chloride | N.D. | 1 | 5 |
| Xylene (Total) | N.D. | 1 | 5 |
| Batch number: 17286SLF026 | Sample number(s): | | |
| | 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 | | |
| Acenaphthene | N.D. | 3 | 17 |
| Acenaphthylene | N.D. | 3 | 17 |
| Anthracene | N.D. | 3 | 17 |
| Benzo (a) anthracene | N.D. | 3 | 17 |
| Benzo (a) pyrene | N.D. | 3 | 17 |
| Benzo (b) fluoranthene | N.D. | 3 | 17 |
| Benzo (g, h, i) perylene | N.D. | 3 | 17 |
| Benzo (k) fluoranthene | N.D. | 3 | 17 |
| 4-Bromophenyl-phenylether | N.D. | 17 | 33 |
| Butylbenzylphthalate | N.D. | 67 | 170 |
| Di-n-butylphthalate | N.D. | 67 | 170 |
| Carbazole | N.D. | 17 | 33 |
| 4-Chloro-3-methylphenol | N.D. | 17 | 33 |
| 4-Chloroaniline | N.D. | 33 | 67 |
| bis (2-Chloroethoxy) methane | N.D. | 17 | 33 |
| bis (2-Chloroethyl) ether | N.D. | 17 | 33 |
| 2-Chloronaphthalene | N.D. | 7 | 33 |
| 2-Chlorophenol | N.D. | 17 | 33 |
| 4-Chlorophenyl-phenylether | N.D. | 17 | 33 |
| 2,2'-oxybis (1-Chloropropane) | N.D. | 17 | 33 |
| Chrysene | N.D. | 3 | 17 |
| Dibenz (a, h) anthracene | N.D. | 3 | 17 |
| Dibenzofuran | N.D. | 17 | 33 |
| 1,2-Dichlorobenzene | N.D. | 17 | 33 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Method Blank (continued)

| Analysis Name | Result | MDL** | LOQ |
|----------------------------|--|--------|-------|
| | ug/kg | ug/kg | ug/kg |
| 1,3-Dichlorobenzene | N.D. | 17 | 33 |
| 1,4-Dichlorobenzene | N.D. | 17 | 33 |
| 3,3'-Dichlorobenzidine | N.D. | 100 | 330 |
| 2,4-Dichlorophenol | N.D. | 17 | 33 |
| Diethylphthalate | N.D. | 67 | 170 |
| 2,4-Dimethylphenol | N.D. | 17 | 33 |
| Dimethylphthalate | N.D. | 67 | 170 |
| 4,6-Dinitro-2-methylphenol | N.D. | 170 | 500 |
| 2,4-Dinitrophenol | N.D. | 300 | 1,000 |
| 2,4-Dinitrotoluene | N.D. | 67 | 170 |
| 2,6-Dinitrotoluene | N.D. | 17 | 33 |
| bis(2-Ethylhexyl)phthalate | N.D. | 67 | 170 |
| Fluoranthene | N.D. | 3 | 17 |
| Fluorene | N.D. | 3 | 17 |
| Hexachlorobenzene | N.D. | 3 | 17 |
| Hexachlorobutadiene | N.D. | 17 | 33 |
| Hexachlorocyclopentadiene | N.D. | 170 | 500 |
| Hexachloroethane | N.D. | 33 | 170 |
| Indeno(1,2,3-cd)pyrene | N.D. | 3 | 17 |
| Isophorone | N.D. | 17 | 33 |
| 2-Methylnaphthalene | N.D. | 3 | 17 |
| 2-Methylphenol | N.D. | 17 | 33 |
| 4-Methylphenol | N.D. | 17 | 33 |
| Naphthalene | N.D. | 3 | 17 |
| 2-Nitroaniline | N.D. | 17 | 33 |
| 3-Nitroaniline | N.D. | 67 | 170 |
| 4-Nitroaniline | N.D. | 67 | 170 |
| Nitrobenzene | N.D. | 17 | 33 |
| 2-Nitrophenol | N.D. | 17 | 33 |
| 4-Nitrophenol | N.D. | 170 | 500 |
| N-Nitroso-di-n-propylamine | N.D. | 17 | 33 |
| N-Nitrosodiphenylamine | N.D. | 17 | 33 |
| Di-n-octylphthalate | N.D. | 67 | 170 |
| Pentachlorophenol | N.D. | 33 | 170 |
| Phenanthrene | N.D. | 3 | 17 |
| Phenol | N.D. | 17 | 33 |
| Pyrene | N.D. | 3 | 17 |
| 1,2,4-Trichlorobenzene | N.D. | 17 | 33 |
| 2,4,5-Trichlorophenol | N.D. | 17 | 33 |
| 2,4,6-Trichlorophenol | N.D. | 17 | 33 |
| | mg/kg | mg/kg | mg/kg |
| Batch number: 172820570803 | Sample number(s): | | |
| | 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 | | |
| Antimony | N.D. | 0.870 | 2.00 |
| Arsenic | N.D. | 0.960 | 2.00 |
| Barium | N.D. | 0.0440 | 0.500 |
| Beryllium | N.D. | 0.0790 | 0.500 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Method Blank (continued)

| Analysis Name | Result | MDL** | LOQ |
|--|---------|----------|---------|
| | mg/kg | mg/kg | mg/kg |
| Cadmium | N.D. | 0.0540 | 0.500 |
| Calcium | 5.96 J | 3.33 | 20.0 |
| Chromium | N.D. | 0.170 | 1.50 |
| Cobalt | N.D. | 0.110 | 0.500 |
| Copper | N.D. | 0.240 | 1.00 |
| Iron | N.D. | 8.05 | 20.0 |
| Lead | N.D. | 0.600 | 1.50 |
| Magnesium | N.D. | 2.43 | 10.0 |
| Manganese | 0.178 J | 0.0830 | 0.500 |
| Nickel | N.D. | 0.150 | 1.00 |
| Potassium | N.D. | 16.7 | 50.0 |
| Selenium | N.D. | 0.930 | 2.00 |
| Silver | N.D. | 0.240 | 0.500 |
| Sodium | N.D. | 16.7 | 100 |
| Thallium | N.D. | 1.37 | 3.00 |
| Vanadium | N.D. | 0.150 | 0.500 |
| Zinc | N.D. | 0.240 | 2.00 |
| Batch number: 172820571101 | | | |
| Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 | | | |
| Mercury | N.D. | 0.0100 | 0.100 |
| Batch number: 172820570501 | | | |
| Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 | | | |
| Arsenic | N.D. | 0.0096 | 0.0200 |
| Barium | N.D. | 0.00085 | 0.0050 |
| Beryllium | N.D. | 0.0020 | 0.0050 |
| Cadmium | N.D. | 0.0018 | 0.0050 |
| Chromium | N.D. | 0.0033 | 0.0150 |
| Cobalt | N.D. | 0.0017 | 0.0050 |
| Copper | N.D. | 0.0040 | 0.0100 |
| Iron | N.D. | 0.0805 | 0.200 |
| Lead | N.D. | 0.0060 | 0.0150 |
| Manganese | N.D. | 0.0016 | 0.0050 |
| Nickel | N.D. | 0.0040 | 0.0100 |
| Selenium | N.D. | 0.0093 | 0.0200 |
| Silver | N.D. | 0.0024 | 0.0050 |
| Zinc | N.D. | 0.0065 | 0.0200 |
| Batch number: 172820571302 | | | |
| Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 | | | |
| Mercury | N.D. | 0.000050 | 0.00020 |
| Batch number: 172830570502 | | | |
| Sample number(s): 9251163, 9251166, 9251169, 9251172, 9251175, 9251178 | | | |
| Arsenic | N.D. | 0.0096 | 0.0200 |
| Barium | N.D. | 0.00085 | 0.0050 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Method Blank (continued)

| Analysis Name | Result | MDL** | LOQ |
|---------------|--------|--------|--------|
| | mg/l | mg/l | mg/l |
| Beryllium | N.D. | 0.0020 | 0.0050 |
| Cadmium | N.D. | 0.0018 | 0.0050 |
| Chromium | N.D. | 0.0033 | 0.0150 |
| Cobalt | N.D. | 0.0017 | 0.0050 |
| Copper | N.D. | 0.0040 | 0.0100 |
| Iron | N.D. | 0.0805 | 0.200 |
| Lead | N.D. | 0.0060 | 0.0150 |
| Manganese | N.D. | 0.0016 | 0.0050 |
| Nickel | N.D. | 0.0040 | 0.0100 |
| Selenium | N.D. | 0.0093 | 0.0200 |
| Silver | N.D. | 0.0024 | 0.0050 |
| Zinc | N.D. | 0.0065 | 0.0200 |

Batch number: 172830570503

Sample number(s):

9251122,9251125,9251128,9251131,9251134,9251137,9251140,9251143,9251146,9251149,9251152,9251155,9251158,9251161,9251164,9251167,9251170,9251173

| | | | |
|-----------|------|---------|--------|
| Arsenic | N.D. | 0.0096 | 0.0200 |
| Barium | N.D. | 0.00085 | 0.0050 |
| Beryllium | N.D. | 0.0020 | 0.0050 |
| Cadmium | N.D. | 0.0018 | 0.0050 |
| Chromium | N.D. | 0.0033 | 0.0150 |
| Cobalt | N.D. | 0.0017 | 0.0050 |
| Copper | N.D. | 0.0040 | 0.0100 |
| Iron | N.D. | 0.0805 | 0.200 |
| Lead | N.D. | 0.0060 | 0.0150 |
| Manganese | N.D. | 0.0016 | 0.0050 |
| Nickel | N.D. | 0.0040 | 0.0100 |
| Selenium | N.D. | 0.0093 | 0.0200 |
| Silver | N.D. | 0.0024 | 0.0050 |
| Zinc | N.D. | 0.0065 | 0.0200 |

Batch number: 172830570504

Sample number(s): 9251176,9251179

| | | | |
|-----------|----------|---------|--------|
| Arsenic | N.D. | 0.0096 | 0.0200 |
| Barium | N.D. | 0.00085 | 0.0050 |
| Beryllium | N.D. | 0.0020 | 0.0050 |
| Cadmium | N.D. | 0.0018 | 0.0050 |
| Chromium | N.D. | 0.0033 | 0.0150 |
| Cobalt | N.D. | 0.0017 | 0.0050 |
| Copper | N.D. | 0.0040 | 0.0100 |
| Iron | N.D. | 0.0805 | 0.200 |
| Lead | N.D. | 0.0060 | 0.0150 |
| Manganese | 0.0036 J | 0.0016 | 0.0050 |
| Nickel | N.D. | 0.0040 | 0.0100 |
| Selenium | N.D. | 0.0093 | 0.0200 |
| Silver | N.D. | 0.0024 | 0.0050 |
| Zinc | N.D. | 0.0065 | 0.0200 |

Batch number: 172830571304

Sample number(s): 9251163,9251166,9251169,9251172,9251175,9251178

| | | | |
|---------|------|----------|---------|
| Mercury | N.D. | 0.000050 | 0.00020 |
|---------|------|----------|---------|

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Method Blank (continued)

| Analysis Name | Result | MDL** | LOQ |
|----------------------------|--|----------|---------|
| | mg/l | mg/l | mg/l |
| Batch number: 172830571306 | Sample number(s): 9251122, 9251125, 9251128, 9251131, 9251134, 9251137, 9251140, 9251143, 9251146, 9251149, 9251152, 9251155, 9251158, 9251161, 9251164, 9251167 | | |
| Mercury | N.D. | 0.000050 | 0.00020 |
| Batch number: 172830571307 | Sample number(s): 9251170, 9251173, 9251176, 9251179 | | |
| Mercury | N.D. | 0.000050 | 0.00020 |

LCS/LCSD

| Analysis Name | LCS Spike Added | LCS Conc | LCSD Spike Added | LCSD Conc | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------------|--|----------|------------------|-----------|----------|-----------|-----------------|-----|---------|
| | ug/kg | ug/kg | ug/kg | ug/kg | | | | | |
| Batch number: X172852AA | Sample number(s): 9251120, 9251126, 9251129, 9251135 | | | | | | | | |
| Acetone | 150 | 161.99 | 150 | 148 | 108 | 99 | 32-144 | 9 | 30 |
| Benzene | 20 | 19.62 | 20 | 18.81 | 98 | 94 | 80-120 | 4 | 30 |
| Bromodichloromethane | 20 | 19.01 | 20 | 18.41 | 95 | 92 | 70-120 | 3 | 30 |
| Bromoform | 20 | 15.7 | 20 | 14.87 | 78 | 74 | 54-120 | 5 | 30 |
| Bromomethane | 20 | 16.9 | 20 | 16.43 | 85 | 82 | 31-160 | 3 | 30 |
| 2-Butanone | 150 | 157.59 | 150 | 141.86 | 105 | 95 | 49-128 | 11 | 30 |
| Carbon Disulfide | 20 | 18.11 | 20 | 17.08 | 91 | 85 | 60-128 | 6 | 30 |
| Carbon Tetrachloride | 20 | 18.9 | 20 | 17.59 | 94 | 88 | 62-129 | 7 | 30 |
| Chlorobenzene | 20 | 17.63 | 20 | 17.15 | 88 | 86 | 80-120 | 3 | 30 |
| Chloroethane | 20 | 18.62 | 20 | 17.66 | 93 | 88 | 43-137 | 5 | 30 |
| Chloroform | 20 | 19.88 | 20 | 19.32 | 99 | 97 | 80-120 | 3 | 30 |
| Chloromethane | 20 | 19.41 | 20 | 18.54 | 97 | 93 | 56-120 | 5 | 30 |
| Dibromochloromethane | 20 | 16.6 | 20 | 15.95 | 83 | 80 | 65-120 | 4 | 30 |
| 1,1-Dichloroethane | 20 | 19.16 | 20 | 18.46 | 96 | 92 | 77-120 | 4 | 30 |
| 1,2-Dichloroethane | 20 | 20.23 | 20 | 19.78 | 101 | 99 | 71-128 | 2 | 30 |
| 1,1-Dichloroethene | 20 | 19.61 | 20 | 18.55 | 98 | 93 | 73-129 | 6 | 30 |
| cis-1,2-Dichloroethene | 20 | 20.75 | 20 | 20.23 | 104 | 101 | 80-120 | 3 | 30 |
| trans-1,2-Dichloroethene | 20 | 20.18 | 20 | 19.14 | 101 | 96 | 80-125 | 5 | 30 |
| 1,2-Dichloropropane | 20 | 19.92 | 20 | 19.23 | 100 | 96 | 76-120 | 4 | 30 |
| cis-1,3-Dichloropropene | 20 | 18.79 | 20 | 18.07 | 94 | 90 | 66-120 | 4 | 30 |
| trans-1,3-Dichloropropene | 20 | 16.08 | 20 | 15.66 | 80 | 78 | 63-124 | 3 | 30 |
| Ethylbenzene | 20 | 17.29 | 20 | 16.62 | 86 | 83 | 80-120 | 4 | 30 |
| 2-Hexanone | 100 | 91.67 | 100 | 81.88 | 92 | 82 | 51-131 | 11 | 30 |
| Methyl Tertiary Butyl Ether | 20 | 18.99 | 20 | 18.58 | 95 | 93 | 66-123 | 2 | 30 |
| 4-Methyl-2-pentanone | 100 | 107.65 | 100 | 96.91 | 108 | 97 | 53-134 | 11 | 30 |
| Methylene Chloride | 20 | 19.94 | 20 | 19.45 | 100 | 97 | 76-122 | 2 | 30 |
| Styrene | 20 | 17.8 | 20 | 17.12 | 89 | 86 | 76-120 | 4 | 30 |
| 1,1,2,2-Tetrachloroethane | 20 | 16.97 | 20 | 16.12 | 85 | 81 | 61-131 | 5 | 30 |
| Tetrachloroethene | 20 | 17.11 | 20 | 15.97 | 86 | 80 | 73-120 | 7 | 30 |
| Toluene | 20 | 17.31 | 20 | 16.69 | 87 | 83 | 80-120 | 4 | 30 |
| 1,1,1-Trichloroethane | 20 | 19.63 | 20 | 18.54 | 98 | 93 | 61-125 | 6 | 30 |
| 1,1,2-Trichloroethane | 20 | 17.8 | 20 | 17.3 | 89 | 87 | 80-120 | 3 | 30 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

LCS/LCSD (continued)

| Analysis Name | LCS Spike Added ug/kg | LCS Conc ug/kg | LCSD Spike Added ug/kg | LCSD Conc ug/kg | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------|--------------------------|-------------------|---------------------------|--------------------|----------|-----------|-----------------|-----|---------|
| Trichloroethene | 20 | 19.42 | 20 | 18.42 | 97 | 92 | 80-120 | 5 | 30 |
| Vinyl Chloride | 20 | 19.9 | 20 | 18.33 | 99 | 92 | 59-120 | 8 | 30 |
| Xylene (Total) | 60 | 52.71 | 60 | 50.71 | 88 | 85 | 80-120 | 4 | 30 |

Batch number: X172861AA

Sample number(s):

9251123, 9251132, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251162, 9251168, 9251171, 9251174

| | | | | | | | | | |
|-----------------------------|-----|--------|-----|--------|-----|-----|--------|---|----|
| Acetone | 150 | 134.7 | 150 | 142.07 | 90 | 95 | 32-144 | 5 | 30 |
| Benzene | 20 | 19.5 | 20 | 19.63 | 97 | 98 | 80-120 | 1 | 30 |
| Bromodichloromethane | 20 | 17.94 | 20 | 18.02 | 90 | 90 | 70-120 | 0 | 30 |
| Bromoform | 20 | 15.2 | 20 | 15.79 | 76 | 79 | 54-120 | 4 | 30 |
| Bromomethane | 20 | 21.43 | 20 | 20.89 | 107 | 104 | 31-160 | 3 | 30 |
| 2-Butanone | 150 | 126.35 | 150 | 135.53 | 84 | 90 | 49-128 | 7 | 30 |
| Carbon Disulfide | 20 | 19.45 | 20 | 19.56 | 97 | 98 | 60-128 | 1 | 30 |
| Carbon Tetrachloride | 20 | 19.82 | 20 | 19.59 | 99 | 98 | 62-129 | 1 | 30 |
| Chlorobenzene | 20 | 18.95 | 20 | 18.9 | 95 | 95 | 80-120 | 0 | 30 |
| Chloroethane | 20 | 21.09 | 20 | 20.79 | 105 | 104 | 43-137 | 1 | 30 |
| Chloroform | 20 | 19.42 | 20 | 19.65 | 97 | 98 | 80-120 | 1 | 30 |
| Chloromethane | 20 | 19.87 | 20 | 19.85 | 99 | 99 | 56-120 | 0 | 30 |
| Dibromochloromethane | 20 | 16.67 | 20 | 16.95 | 83 | 85 | 65-120 | 2 | 30 |
| 1,1-Dichloroethane | 20 | 19.07 | 20 | 19.19 | 95 | 96 | 77-120 | 1 | 30 |
| 1,2-Dichloroethane | 20 | 18.97 | 20 | 19.26 | 95 | 96 | 71-128 | 2 | 30 |
| 1,1-Dichloroethene | 20 | 21.7 | 20 | 21.79 | 109 | 109 | 73-129 | 0 | 30 |
| cis-1,2-Dichloroethene | 20 | 20.41 | 20 | 20.56 | 102 | 103 | 80-120 | 1 | 30 |
| trans-1,2-Dichloroethene | 20 | 20.55 | 20 | 20.77 | 103 | 104 | 80-125 | 1 | 30 |
| 1,2-Dichloropropane | 20 | 18.96 | 20 | 19.25 | 95 | 96 | 76-120 | 2 | 30 |
| cis-1,3-Dichloropropene | 20 | 16.98 | 20 | 17.48 | 85 | 87 | 66-120 | 3 | 30 |
| trans-1,3-Dichloropropene | 20 | 15.94 | 20 | 16.33 | 80 | 82 | 63-124 | 2 | 30 |
| Ethylbenzene | 20 | 18.94 | 20 | 18.97 | 95 | 95 | 80-120 | 0 | 30 |
| 2-Hexanone | 100 | 78.36 | 100 | 83.94 | 78 | 84 | 51-131 | 7 | 30 |
| Methyl Tertiary Butyl Ether | 20 | 16.19 | 20 | 16.62 | 81 | 83 | 66-123 | 3 | 30 |
| 4-Methyl-2-pentanone | 100 | 85 | 100 | 90.76 | 85 | 91 | 53-134 | 7 | 30 |
| Methylene Chloride | 20 | 19.7 | 20 | 19.85 | 99 | 99 | 76-122 | 1 | 30 |
| Styrene | 20 | 18.88 | 20 | 18.9 | 94 | 95 | 76-120 | 0 | 30 |
| 1,1,2,2-Tetrachloroethane | 20 | 16.46 | 20 | 17.08 | 82 | 85 | 61-131 | 4 | 30 |
| Tetrachloroethene | 20 | 19.08 | 20 | 19.14 | 95 | 96 | 73-120 | 0 | 30 |
| Toluene | 20 | 18.74 | 20 | 18.86 | 94 | 94 | 80-120 | 1 | 30 |
| 1,1,1-Trichloroethane | 20 | 19.93 | 20 | 19.93 | 100 | 100 | 61-125 | 0 | 30 |
| 1,1,2-Trichloroethane | 20 | 17.88 | 20 | 18.39 | 89 | 92 | 80-120 | 3 | 30 |
| Trichloroethene | 20 | 19.35 | 20 | 19.45 | 97 | 97 | 80-120 | 0 | 30 |
| Vinyl Chloride | 20 | 20.96 | 20 | 20.62 | 105 | 103 | 59-120 | 2 | 30 |
| Xylene (Total) | 60 | 57.34 | 60 | 57.29 | 96 | 95 | 80-120 | 0 | 30 |

Batch number: X172901AA

Sample number(s): 9251156, 9251159, 9251165, 9251177

| | | | | | | | | | |
|----------------------|-----|--------|-----|--------|----|----|--------|---|----|
| Acetone | 150 | 144.24 | 150 | 145.72 | 96 | 97 | 32-144 | 1 | 30 |
| Benzene | 20 | 18.05 | 20 | 18.09 | 90 | 90 | 80-120 | 0 | 30 |
| Bromodichloromethane | 20 | 16.53 | 20 | 16.54 | 83 | 83 | 70-120 | 0 | 30 |
| Bromoform | 20 | 15.28 | 20 | 15.44 | 76 | 77 | 54-120 | 1 | 30 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

LCS/LCSD (continued)

| Analysis Name | LCS Spike Added ug/kg | LCS Conc ug/kg | LCSD Spike Added ug/kg | LCSD Conc ug/kg | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------------|--------------------------|-------------------|---------------------------|--------------------|----------|-----------|-----------------|-----|---------|
| Bromomethane | 20 | 16.41 | 20 | 16.22 | 82 | 81 | 31-160 | 1 | 30 |
| 2-Butanone | 150 | 135.73 | 150 | 136.34 | 90 | 91 | 49-128 | 0 | 30 |
| Carbon Disulfide | 20 | 16.63 | 20 | 16.42 | 83 | 82 | 60-128 | 1 | 30 |
| Carbon Tetrachloride | 20 | 17.52 | 20 | 17.29 | 88 | 86 | 62-129 | 1 | 30 |
| Chlorobenzene | 20 | 18.84 | 20 | 18.72 | 94 | 94 | 80-120 | 1 | 30 |
| Chloroethane | 20 | 17.18 | 20 | 17.13 | 86 | 86 | 43-137 | 0 | 30 |
| Chloroform | 20 | 18.02 | 20 | 17.92 | 90 | 90 | 80-120 | 1 | 30 |
| Chloromethane | 20 | 18.48 | 20 | 18.36 | 92 | 92 | 56-120 | 1 | 30 |
| Dibromochloromethane | 20 | 16.39 | 20 | 16.61 | 82 | 83 | 65-120 | 1 | 30 |
| 1,1-Dichloroethane | 20 | 17.6 | 20 | 17.57 | 88 | 88 | 77-120 | 0 | 30 |
| 1,2-Dichloroethane | 20 | 17.69 | 20 | 17.86 | 88 | 89 | 71-128 | 1 | 30 |
| 1,1-Dichloroethene | 20 | 18.67 | 20 | 18.64 | 93 | 93 | 73-129 | 0 | 30 |
| cis-1,2-Dichloroethene | 20 | 18.62 | 20 | 18.73 | 93 | 94 | 80-120 | 1 | 30 |
| trans-1,2-Dichloroethene | 20 | 18.54 | 20 | 18.45 | 93 | 92 | 80-125 | 0 | 30 |
| 1,2-Dichloropropane | 20 | 18.03 | 20 | 18.06 | 90 | 90 | 76-120 | 0 | 30 |
| cis-1,3-Dichloropropane | 20 | 16.05 | 20 | 16 | 80 | 80 | 66-120 | 0 | 30 |
| trans-1,3-Dichloropropane | 20 | 15.96 | 20 | 16.09 | 80 | 80 | 63-124 | 1 | 30 |
| Ethylbenzene | 20 | 18.58 | 20 | 18.51 | 93 | 93 | 80-120 | 0 | 30 |
| 2-Hexanone | 100 | 90.58 | 100 | 91.12 | 91 | 91 | 51-131 | 1 | 30 |
| Methyl Tertiary Butyl Ether | 20 | 15.49 | 20 | 15.68 | 77 | 78 | 66-123 | 1 | 30 |
| 4-Methyl-2-pentanone | 100 | 90.94 | 100 | 92.3 | 91 | 92 | 53-134 | 1 | 30 |
| Methylene Chloride | 20 | 17.78 | 20 | 18.19 | 89 | 91 | 76-122 | 2 | 30 |
| Styrene | 20 | 18.53 | 20 | 18.59 | 93 | 93 | 76-120 | 0 | 30 |
| 1,1,2,2-Tetrachloroethane | 20 | 17.12 | 20 | 17.29 | 86 | 86 | 61-131 | 1 | 30 |
| Tetrachloroethene | 20 | 18.88 | 20 | 18.56 | 94 | 93 | 73-120 | 2 | 30 |
| Toluene | 20 | 18.65 | 20 | 18.58 | 93 | 93 | 80-120 | 0 | 30 |
| 1,1,1-Trichloroethane | 20 | 17.94 | 20 | 17.88 | 90 | 89 | 61-125 | 0 | 30 |
| 1,1,2-Trichloroethane | 20 | 18.23 | 20 | 18.1 | 91 | 90 | 80-120 | 1 | 30 |
| Trichloroethene | 20 | 17.96 | 20 | 17.77 | 90 | 89 | 80-120 | 1 | 30 |
| Vinyl Chloride | 20 | 18.65 | 20 | 18.55 | 93 | 93 | 59-120 | 1 | 30 |
| Xylene (Total) | 60 | 56.11 | 60 | 56.19 | 94 | 94 | 80-120 | 0 | 30 |

Batch number: 17286SLF026

Sample number(s):

9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177

| | | | | | | | |
|---------------------------|---------|---------|--|--|----|--|--------|
| Acenaphthene | 1666.67 | 1423.95 | | | 85 | | 78-119 |
| Acenaphthylene | 1666.67 | 1467.73 | | | 88 | | 76-119 |
| Anthracene | 1666.67 | 1455.56 | | | 87 | | 82-118 |
| Benzo(a)anthracene | 1666.67 | 1382.97 | | | 83 | | 76-119 |
| Benzo(a)pyrene | 1666.67 | 1372.01 | | | 82 | | 78-117 |
| Benzo(b)fluoranthene | 1666.67 | 1500.61 | | | 90 | | 74-127 |
| Benzo(g,h,i)perylene | 1666.67 | 1469.33 | | | 88 | | 72-118 |
| Benzo(k)fluoranthene | 1666.67 | 1420.84 | | | 85 | | 71-123 |
| 4-Bromophenyl-phenylether | 1666.67 | 1599.3 | | | 96 | | 78-122 |
| Butylbenzylphthalate | 1666.67 | 1412.77 | | | 85 | | 75-123 |
| Di-n-butylphthalate | 1666.67 | 1408.18 | | | 84 | | 77-121 |
| Carbazole | 1666.67 | 1407.48 | | | 84 | | 74-118 |

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

LCS/LCSD (continued)

| Analysis Name | LCS Spike Added ug/kg | LCS Conc ug/kg | LCSD Spike Added ug/kg | LCSD Conc ug/kg | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|------------------------------|--------------------------|-------------------|---------------------------|--------------------|----------|-----------|-----------------|-----|---------|
| 4-Chloro-3-methylphenol | 1666.67 | 1352.88 | | | 81 | | 70-128 | | |
| 4-Chloroaniline | 1666.67 | 470.61 | | | 28 | | 10-112 | | |
| bis(2-Chloroethoxy)methane | 1666.67 | 1301.69 | | | 78 | | 69-122 | | |
| bis(2-Chloroethyl) ether | 1666.67 | 1324.42 | | | 79 | | 68-115 | | |
| 2-Chloronaphthalene | 1666.67 | 1289.41 | | | 77 | | 51-150 | | |
| 2-Chlorophenol | 1666.67 | 1448.34 | | | 87 | | 75-124 | | |
| 4-Chlorophenyl-phenylether | 1666.67 | 1409.05 | | | 85 | | 73-119 | | |
| 2,2'-oxybis(1-Chloropropane) | 1666.67 | 1441.41 | | | 86 | | 53-121 | | |
| Chrysene | 1666.67 | 1486.13 | | | 89 | | 72-121 | | |
| Dibenz(a,h)anthracene | 1666.67 | 1465.26 | | | 88 | | 72-129 | | |
| Dibenzofuran | 1666.67 | 1406.19 | | | 84 | | 79-114 | | |
| 1,2-Dichlorobenzene | 1666.67 | 1447.04 | | | 87 | | 77-113 | | |
| 1,3-Dichlorobenzene | 1666.67 | 1418.68 | | | 85 | | 79-113 | | |
| 1,4-Dichlorobenzene | 1666.67 | 1434.5 | | | 86 | | 79-112 | | |
| 3,3'-Dichlorobenzidine | 1666.67 | 1217.35 | | | 73 | | 20-121 | | |
| 2,4-Dichlorophenol | 1666.67 | 1514.3 | | | 91 | | 79-125 | | |
| Diethylphthalate | 1666.67 | 1319.88 | | | 79 | | 74-120 | | |
| 2,4-Dimethylphenol | 1666.67 | 1028.73 | | | 62 | | 57-102 | | |
| Dimethylphthalate | 1666.67 | 1346.14 | | | 81 | | 77-116 | | |
| 4,6-Dinitro-2-methylphenol | 1666.67 | 1614.28 | | | 97 | | 60-128 | | |
| 2,4-Dinitrophenol | 3333.33 | 1722.86 | | | 52 | | 27-136 | | |
| 2,4-Dinitrotoluene | 1666.67 | 1430.3 | | | 86 | | 72-127 | | |
| 2,6-Dinitrotoluene | 1666.67 | 1401 | | | 84 | | 80-120 | | |
| bis(2-Ethylhexyl)phthalate | 1666.67 | 1366.18 | | | 82 | | 73-123 | | |
| Fluoranthene | 1666.67 | 1394.64 | | | 84 | | 72-120 | | |
| Fluorene | 1666.67 | 1406.6 | | | 84 | | 75-118 | | |
| Hexachlorobenzene | 1666.67 | 1538.65 | | | 92 | | 73-120 | | |
| Hexachlorobutadiene | 1666.67 | 1327.14 | | | 80 | | 72-120 | | |
| Hexachlorocyclopentadiene | 3333.33 | 2097.69 | | | 63 | | 30-133 | | |
| Hexachloroethane | 1666.67 | 1297.49 | | | 78 | | 69-116 | | |
| Indeno(1,2,3-cd)pyrene | 1666.67 | 1450.91 | | | 87 | | 69-125 | | |
| Isophorone | 1666.67 | 1171.24 | | | 70 | | 65-120 | | |
| 2-Methylnaphthalene | 1666.67 | 1441.76 | | | 87 | | 77-116 | | |
| 2-Methylphenol | 1666.67 | 1309.67 | | | 79 | | 74-128 | | |
| 4-Methylphenol | 1666.67 | 1242.43 | | | 75 | | 66-121 | | |
| Naphthalene | 1666.67 | 1404.99 | | | 84 | | 75-113 | | |
| 2-Nitroaniline | 1666.67 | 1427.72 | | | 86 | | 75-130 | | |
| 3-Nitroaniline | 1666.67 | 1113.42 | | | 67 | | 60-125 | | |
| 4-Nitroaniline | 1666.67 | 1271.07 | | | 76 | | 50-112 | | |
| Nitrobenzene | 1666.67 | 1225.84 | | | 74 | | 70-122 | | |
| 2-Nitrophenol | 1666.67 | 1492.17 | | | 90 | | 77-123 | | |
| 4-Nitrophenol | 1666.67 | 979.73 | | | 59 | | 44-131 | | |
| N-Nitroso-di-n-propylamine | 1666.67 | 1158.81 | | | 70 | | 60-123 | | |
| N-Nitrosodiphenylamine | 1666.67 | 1524.01 | | | 91 | | 83-118 | | |
| Di-n-octylphthalate | 1666.67 | 1427.94 | | | 86 | | 76-135 | | |
| Pentachlorophenol | 1666.67 | 1436.96 | | | 86 | | 33-141 | | |
| Phenanthrene | 1666.67 | 1428.87 | | | 86 | | 74-114 | | |
| Phenol | 1666.67 | 1253.12 | | | 75 | | 63-125 | | |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

LCS/LCSD (continued)

| Analysis Name | LCS Spike Added ug/kg | LCS Conc ug/kg | LCSD Spike Added ug/kg | LCSD Conc ug/kg | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|----------------------------|--|-------------------|---------------------------|--------------------|----------|-----------|-----------------|-----|---------|
| Pyrene | 1666.67 | 1418.81 | | | 85 | | 74-112 | | |
| 1,2,4-Trichlorobenzene | 1666.67 | 1419.34 | | | 85 | | 79-114 | | |
| 2,4,5-Trichlorophenol | 1666.67 | 1562.12 | | | 94 | | 79-123 | | |
| 2,4,6-Trichlorophenol | 1666.67 | 1560.29 | | | 94 | | 81-123 | | |
| | mg/kg | mg/kg | mg/kg | mg/kg | | | | | |
| Batch number: 172820570803 | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 | | | | | | | | |
| Antimony | 50 | 55.54 | | | 111 | | 80-120 | | |
| Arsenic | 15 | 16.72 | | | 111 | | 80-120 | | |
| Barium | 200 | 213.04 | | | 107 | | 80-120 | | |
| Beryllium | 5.00 | 5.25 | | | 105 | | 80-120 | | |
| Cadmium | 5.00 | 5.36 | | | 107 | | 80-120 | | |
| Calcium | 400 | 424.93 | | | 106 | | 80-120 | | |
| Chromium | 20 | 21.2 | | | 106 | | 80-120 | | |
| Cobalt | 50 | 53.8 | | | 108 | | 80-120 | | |
| Copper | 25 | 27.23 | | | 109 | | 80-120 | | |
| Iron | 100 | 111.87 | | | 112 | | 80-120 | | |
| Lead | 15 | 15.9 | | | 106 | | 80-120 | | |
| Magnesium | 200 | 210.29 | | | 105 | | 80-120 | | |
| Manganese | 50 | 54.3 | | | 109 | | 80-120 | | |
| Nickel | 50 | 55.25 | | | 111 | | 80-120 | | |
| Potassium | 1000 | 1076.28 | | | 108 | | 80-120 | | |
| Selenium | 15 | 15.48 | | | 103 | | 80-120 | | |
| Silver | 5.00 | 5.14 | | | 103 | | 80-120 | | |
| Sodium | 1000 | 1074.42 | | | 107 | | 80-120 | | |
| Thallium | 15 | 14.36 | | | 96 | | 80-120 | | |
| Vanadium | 50 | 52.02 | | | 104 | | 80-120 | | |
| Zinc | 50 | 53.3 | | | 107 | | 80-120 | | |
| Batch number: 172820571101 | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 | | | | | | | | |
| Mercury | 0.100 | 0.0969 | | | 97 | | 80-120 | | |
| | mg/l | mg/l | mg/l | mg/l | | | | | |
| Batch number: 172820570501 | Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 | | | | | | | | |
| Arsenic | 0.150 | 0.170 | | | 113 | | 80-120 | | |
| Barium | 2.00 | 1.91 | | | 96 | | 80-120 | | |
| Beryllium | 0.0500 | 0.0501 | | | 100 | | 80-120 | | |
| Cadmium | 0.0500 | 0.0501 | | | 100 | | 80-120 | | |
| Chromium | 0.200 | 0.205 | | | 103 | | 80-120 | | |
| Cobalt | 0.500 | 0.487 | | | 97 | | 80-120 | | |
| Copper | 0.250 | 0.260 | | | 104 | | 80-120 | | |
| Iron | 1.00 | 0.985 | | | 98 | | 80-120 | | |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

LCS/LCSD (continued)

| Analysis Name | LCS Spike Added mg/l | LCS Conc mg/l | LCSD Spike Added mg/l | LCSD Conc mg/l | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|----------------------------|--|------------------|--------------------------|-------------------|----------|-----------|-----------------|-----|---------|
| Lead | 0.150 | 0.144 | | | 96 | | 80-120 | | |
| Manganese | 0.500 | 0.496 | | | 99 | | 80-120 | | |
| Nickel | 0.500 | 0.498 | | | 100 | | 80-120 | | |
| Selenium | 0.150 | 0.170 | | | 113 | | 80-120 | | |
| Silver | 0.0500 | 0.0488 | | | 98 | | 80-120 | | |
| Zinc | 0.500 | 0.507 | | | 101 | | 80-120 | | |
| Batch number: 172820571302 | Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 | | | | | | | | |
| Mercury | 0.00100 | 0.000965 | | | 96 | | 80-120 | | |
| Batch number: 172830570502 | Sample number(s): 9251163, 9251166, 9251169, 9251172, 9251175, 9251178 | | | | | | | | |
| Arsenic | 0.150 | 0.159 | | | 106 | | 80-120 | | |
| Barium | 2.00 | 1.99 | | | 100 | | 80-120 | | |
| Beryllium | 0.0500 | 0.0513 | | | 103 | | 80-120 | | |
| Cadmium | 0.0500 | 0.0510 | | | 102 | | 80-120 | | |
| Chromium | 0.200 | 0.205 | | | 102 | | 80-120 | | |
| Cobalt | 0.500 | 0.497 | | | 99 | | 80-120 | | |
| Copper | 0.250 | 0.267 | | | 107 | | 80-120 | | |
| Iron | 1.00 | 1.02 | | | 102 | | 80-120 | | |
| Lead | 0.150 | 0.152 | | | 101 | | 80-120 | | |
| Manganese | 0.500 | 0.514 | | | 103 | | 80-120 | | |
| Nickel | 0.500 | 0.506 | | | 101 | | 80-120 | | |
| Selenium | 0.150 | 0.146 | | | 97 | | 80-120 | | |
| Silver | 0.0500 | 0.0506 | | | 101 | | 80-120 | | |
| Zinc | 0.500 | 0.518 | | | 104 | | 80-120 | | |
| Batch number: 172830570503 | Sample number(s): 9251122, 9251125, 9251128, 9251131, 9251134, 9251137, 9251140, 9251143, 9251146, 9251149, 9251152, 9251155, 9251158, 9251161, 9251164, 9251167, 9251170, 9251173 | | | | | | | | |
| Arsenic | 0.150 | 0.146 | | | 97 | | 80-120 | | |
| Barium | 2.00 | 1.97 | | | 99 | | 80-120 | | |
| Beryllium | 0.0500 | 0.0479 | | | 96 | | 80-120 | | |
| Cadmium | 0.0500 | 0.0502 | | | 100 | | 80-120 | | |
| Chromium | 0.200 | 0.198 | | | 99 | | 80-120 | | |
| Cobalt | 0.500 | 0.509 | | | 102 | | 80-120 | | |
| Copper | 0.250 | 0.257 | | | 103 | | 80-120 | | |
| Iron | 1.00 | 1.02 | | | 102 | | 80-120 | | |
| Lead | 0.150 | 0.156 | | | 104 | | 80-120 | | |
| Manganese | 0.500 | 0.506 | | | 101 | | 80-120 | | |
| Nickel | 0.500 | 0.521 | | | 104 | | 80-120 | | |
| Selenium | 0.150 | 0.140 | | | 94 | | 80-120 | | |
| Silver | 0.0500 | 0.0501 | | | 100 | | 80-120 | | |
| Zinc | 0.500 | 0.495 | | | 99 | | 80-120 | | |
| Batch number: 172830570504 | Sample number(s): 9251176, 9251179 | | | | | | | | |
| Arsenic | 0.150 | 0.153 | | | 102 | | 80-120 | | |
| Barium | 2.00 | 1.94 | | | 97 | | 80-120 | | |

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(2) The unspiked result was more than four times the spike added.

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Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

LCS/LCSD (continued)

| Analysis Name | LCS Spike Added mg/l | LCS Conc mg/l | LCSD Spike Added mg/l | LCSD Conc mg/l | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|----------------------------|--|-------------------|--------------------------|-------------------|----------|-----------|-----------------|-----|---------|
| Beryllium | 0.0500 | 0.0488 | | | 98 | | 80-120 | | |
| Cadmium | 0.0500 | 0.0508 | | | 102 | | 80-120 | | |
| Chromium | 0.200 | 0.198 | | | 99 | | 80-120 | | |
| Cobalt | 0.500 | 0.505 | | | 101 | | 80-120 | | |
| Copper | 0.250 | 0.247 | | | 99 | | 80-120 | | |
| Iron | 1.00 | 0.999 | | | 100 | | 80-120 | | |
| Lead | 0.150 | 0.151 | | | 101 | | 80-120 | | |
| Manganese | 0.500 | 0.505 | | | 101 | | 80-120 | | |
| Nickel | 0.500 | 0.517 | | | 103 | | 80-120 | | |
| Selenium | 0.150 | 0.147 | | | 98 | | 80-120 | | |
| Silver | 0.0500 | 0.0503 | | | 101 | | 80-120 | | |
| Zinc | 0.500 | 0.501 | | | 100 | | 80-120 | | |
| Batch number: 172830571304 | Sample number(s): 9251163, 9251166, 9251169, 9251172, 9251175, 9251178 | | | | | | | | |
| Mercury | 0.00100 | 0.000968 | | | 97 | | 80-120 | | |
| Batch number: 172830571306 | Sample number(s): 9251122, 9251125, 9251128, 9251131, 9251134, 9251137, 9251140, 9251143, 9251146, 9251149, 9251152, 9251155, 9251158, 9251161, 9251164, 9251167 | | | | | | | | |
| Mercury | 0.00100 | 0.000950 | | | 95 | | 80-120 | | |
| Batch number: 172830571307 | Sample number(s): 9251170, 9251173, 9251176, 9251179 | | | | | | | | |
| Mercury | 0.00100 | 0.000943 | | | 94 | | 80-120 | | |
| | Std. Units | Std. Units | Std. Units | Std. Units | | | | | |
| Batch number: 17282039402A | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251138 | | | | | | | | |
| pH (soil) | 7.00 | 7.00 | | | 100 | | 95-105 | | |
| Batch number: 17282039402B | Sample number(s): 9251135, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251162, 9251165, 9251168 | | | | | | | | |
| pH (soil) | 7.00 | 7.00 | | | 100 | | 95-105 | | |
| Batch number: 17282039403A | Sample number(s): 9251159, 9251171, 9251174, 9251177 | | | | | | | | |
| pH (soil) | 7.00 | 7.01 | | | 100 | | 95-105 | | |
| | % | % | % | % | | | | | |
| Batch number: 17284820010A | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147 | | | | | | | | |
| Moisture | 89.5 | 89.39 | | | 100 | | 99-101 | | |
| Batch number: 17284820010B | Sample number(s): 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 | | | | | | | | |
| Moisture | 89.5 | 89.39 | | | 100 | | 99-101 | | |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

| Analysis Name | Unspiked Conc ug/kg | MS Spike Added ug/kg | MS Conc ug/kg | MSD Spike Added ug/kg | MSD Conc ug/kg | MS %Rec | MSD %Rec | MS/MSD Limits | RPD | RPD Max |
|-----------------------------|---|----------------------|---------------|-----------------------|----------------|----------------|----------|---------------|-----|---------|
| Batch number: X172852AA | Sample number(s): 9251120,9251126,9251129,9251135 | | | | | UNSPK: P248813 | | | | |
| Acetone | 44 | 136.11 | 186.01 | 125.63 | 171.83 | 104 | 102 | 32-144 | 8 | 30 |
| Benzene | N.D. | 18.15 | 19.96 | 16.75 | 16.96 | 110 | 101 | 80-120 | 16 | 30 |
| Bromodichloromethane | N.D. | 18.15 | 18.39 | 16.75 | 15.84 | 101 | 95 | 70-120 | 15 | 30 |
| Bromoform | N.D. | 18.15 | 15.9 | 16.75 | 14.46 | 88 | 86 | 54-120 | 9 | 30 |
| Bromomethane | N.D. | 18.15 | 18.14 | 16.75 | 13.97 | 100 | 83 | 31-160 | 26 | 30 |
| 2-Butanone | 4.25 | 136.11 | 158.4 | 125.63 | 144.92 | 113 | 112 | 49-128 | 9 | 30 |
| Carbon Disulfide | 1.83 | 18.15 | 21.75 | 16.75 | 18.45 | 110 | 99 | 60-128 | 16 | 30 |
| Carbon Tetrachloride | N.D. | 18.15 | 20.7 | 16.75 | 17.3 | 114 | 103 | 62-129 | 18 | 30 |
| Chlorobenzene | N.D. | 18.15 | 19.7 | 16.75 | 16.6 | 109 | 99 | 80-120 | 17 | 30 |
| Chloroethane | N.D. | 18.15 | 20.77 | 16.75 | 16.58 | 114 | 99 | 43-137 | 22 | 30 |
| Chloroform | N.D. | 18.15 | 20.01 | 16.75 | 16.85 | 110 | 101 | 80-120 | 17 | 30 |
| Chloromethane | N.D. | 18.15 | 20.74 | 16.75 | 17.21 | 114 | 103 | 56-120 | 19 | 30 |
| Dibromochloromethane | N.D. | 18.15 | 17.49 | 16.75 | 15 | 96 | 90 | 65-120 | 15 | 30 |
| 1,1-Dichloroethane | N.D. | 18.15 | 19.53 | 16.75 | 16.05 | 108 | 96 | 77-120 | 20 | 30 |
| 1,2-Dichloroethane | N.D. | 18.15 | 19.49 | 16.75 | 16.95 | 107 | 101 | 71-128 | 14 | 30 |
| 1,1-Dichloroethene | N.D. | 18.15 | 22.24 | 16.75 | 18.04 | 123 | 108 | 73-129 | 21 | 30 |
| cis-1,2-Dichloroethene | N.D. | 18.15 | 21.02 | 16.75 | 17.5 | 116 | 104 | 80-120 | 18 | 30 |
| trans-1,2-Dichloroethene | N.D. | 18.15 | 21.54 | 16.75 | 17.47 | 119 | 104 | 80-125 | 21 | 30 |
| 1,2-Dichloropropane | N.D. | 18.15 | 19.65 | 16.75 | 16.85 | 108 | 101 | 76-120 | 15 | 30 |
| cis-1,3-Dichloropropene | N.D. | 18.15 | 17.52 | 16.75 | 15.54 | 97 | 93 | 66-120 | 12 | 30 |
| trans-1,3-Dichloropropene | N.D. | 18.15 | 16.6 | 16.75 | 14.79 | 91 | 88 | 63-124 | 12 | 30 |
| Ethylbenzene | N.D. | 18.15 | 20.09 | 16.75 | 16.71 | 111 | 100 | 80-120 | 18 | 30 |
| 2-Hexanone | N.D. | 90.74 | 108.33 | 83.75 | 97.98 | 119 | 117 | 51-131 | 10 | 30 |
| Methyl Tertiary Butyl Ether | N.D. | 18.15 | 17.55 | 16.75 | 15.59 | 97 | 93 | 66-123 | 12 | 30 |
| 4-Methyl-2-pentanone | N.D. | 90.74 | 112.17 | 83.75 | 101.56 | 124 | 121 | 53-134 | 10 | 30 |
| Methylene Chloride | N.D. | 18.15 | 19.74 | 16.75 | 16.69 | 109 | 100 | 76-122 | 17 | 30 |
| Styrene | N.D. | 18.15 | 19.46 | 16.75 | 16.39 | 107 | 98 | 76-120 | 17 | 30 |
| 1,1,2,2-Tetrachloroethane | N.D. | 18.15 | 20.31 | 16.75 | 17.29 | 112 | 103 | 61-131 | 16 | 30 |
| Tetrachloroethene | N.D. | 18.15 | 20.66 | 16.75 | 17.22 | 114 | 103 | 73-120 | 18 | 30 |
| Toluene | N.D. | 18.15 | 20.25 | 16.75 | 16.88 | 112 | 101 | 80-120 | 18 | 30 |
| 1,1,1-Trichloroethane | N.D. | 18.15 | 20.22 | 16.75 | 17.6 | 111 | 105 | 61-125 | 14 | 30 |
| 1,1,2-Trichloroethane | N.D. | 18.15 | 22.18 | 16.75 | 18.73 | 122* | 112 | 80-120 | 17 | 30 |
| Trichloroethene | N.D. | 18.15 | 20.42 | 16.75 | 17.09 | 113 | 102 | 80-120 | 18 | 30 |
| Vinyl Chloride | N.D. | 18.15 | 22.86 | 16.75 | 18.79 | 126* | 112 | 59-120 | 20 | 30 |
| Xylene (Total) | N.D. | 54.44 | 60.32 | 50.25 | 50.11 | 111 | 100 | 80-120 | 18 | 30 |

| | | | | | | | | | | |
|---------------------------|---|---------|---------|---------|---------|----------------|----|--------|---|----|
| Batch number: 17286SLF026 | Sample number(s): 9251120,9251123,9251126,9251129,9251132,9251135,9251138,9251141,9251144,9251147,9251150,9251153,9251156,9251159,9251162,9251165,9251168,9251171,9251174,9251177 | | | | | UNSPK: 9251120 | | | | |
| Acenaphthene | N.D. | 1661.13 | 1408.29 | 1655.63 | 1392.26 | 85 | 84 | 78-119 | 1 | 30 |
| Acenaphthylene | N.D. | 1661.13 | 1409.89 | 1655.63 | 1385.75 | 85 | 84 | 76-119 | 2 | 30 |
| Anthracene | N.D. | 1661.13 | 1393.02 | 1655.63 | 1373.05 | 84 | 83 | 82-118 | 1 | 30 |
| Benzo (a) anthracene | 7.39 | 1661.13 | 1287.33 | 1655.63 | 1263.38 | 77 | 76 | 76-119 | 2 | 30 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

| Analysis Name | Unspiked Conc ug/kg | MS Spike Added ug/kg | MS Conc ug/kg | MSD Spike Added ug/kg | MSD Conc ug/kg | MS %Rec | MSD %Rec | MS/MSD Limits | RPD | RPD Max |
|------------------------------|---------------------------|----------------------------|---------------------|-----------------------------|----------------------|------------|-------------|------------------|-----|------------|
| Benzo(a)pyrene | 9.12 | 1661.13 | 1231.6 | 1655.63 | 1235.2 | 74* | 74* | 78-117 | 0 | 30 |
| Benzo(b)fluoranthene | 17.16 | 1661.13 | 1332.12 | 1655.63 | 1316.2 | 79 | 78 | 74-127 | 1 | 30 |
| Benzo(g,h,i)perylene | 7.99 | 1661.13 | 1381.26 | 1655.63 | 1368.23 | 83 | 82 | 72-118 | 1 | 30 |
| Benzo(k)fluoranthene | 8.33 | 1661.13 | 1263.12 | 1655.63 | 1312.36 | 76 | 79 | 71-123 | 4 | 30 |
| 4-Bromophenyl-phenylether | N.D. | 1661.13 | 1542.87 | 1655.63 | 1490.07 | 93 | 90 | 78-122 | 3 | 30 |
| Butylbenzylphthalate | N.D. | 1661.13 | 1318.82 | 1655.63 | 1298.81 | 79 | 78 | 75-123 | 2 | 30 |
| Di-n-butylphthalate | N.D. | 1661.13 | 1329.57 | 1655.63 | 1318.42 | 80 | 80 | 77-121 | 1 | 30 |
| Carbazole | N.D. | 1661.13 | 1341.19 | 1655.63 | 1342.98 | 81 | 81 | 74-118 | 0 | 30 |
| 4-Chloro-3-methylphenol | N.D. | 1661.13 | 1266.65 | 1655.63 | 1313.87 | 76 | 79 | 70-128 | 4 | 30 |
| 4-Chloroaniline | N.D. | 1661.13 | 751.61 | 1655.63 | 901.15 | 45 | 54 | 10-112 | 18 | 30 |
| bis(2-Chloroethoxy)methane | N.D. | 1661.13 | 1240.58 | 1655.63 | 1174.82 | 75 | 71 | 69-122 | 5 | 30 |
| bis(2-Chloroethyl)ether | N.D. | 1661.13 | 1240.96 | 1655.63 | 1247.54 | 75 | 75 | 68-115 | 1 | 30 |
| 2-Chloronaphthalene | N.D. | 1661.13 | 1253.62 | 1655.63 | 1254.44 | 75 | 76 | 51-150 | 0 | 30 |
| 2-Chlorophenol | N.D. | 1661.13 | 1360.23 | 1655.63 | 1359.18 | 82 | 82 | 75-124 | 0 | 30 |
| 4-Chlorophenyl-phenylether | N.D. | 1661.13 | 1331.5 | 1655.63 | 1353.43 | 80 | 82 | 73-119 | 2 | 30 |
| 2,2'-oxybis(1-Chloropropane) | N.D. | 1661.13 | 1342.04 | 1655.63 | 1335.38 | 81 | 81 | 53-121 | 0 | 30 |
| Chrysene | 16 | 1661.13 | 1366.06 | 1655.63 | 1321.07 | 81 | 79 | 72-121 | 3 | 30 |
| Dibenz(a,h)anthracene | N.D. | 1661.13 | 1387.3 | 1655.63 | 1373.96 | 84 | 83 | 72-129 | 1 | 30 |
| Dibenzofuran | N.D. | 1661.13 | 1348.86 | 1655.63 | 1359.37 | 81 | 82 | 79-114 | 1 | 30 |
| 1,2-Dichlorobenzene | N.D. | 1661.13 | 1333.66 | 1655.63 | 1318.03 | 80 | 80 | 77-113 | 1 | 30 |
| 1,3-Dichlorobenzene | N.D. | 1661.13 | 1295.12 | 1655.63 | 1286.56 | 78* | 78* | 79-113 | 1 | 30 |
| 1,4-Dichlorobenzene | N.D. | 1661.13 | 1312.7 | 1655.63 | 1302 | 79 | 79 | 79-112 | 1 | 30 |
| 3,3'-Dichlorobenzidine | N.D. | 1661.13 | 955.94 | 1655.63 | 1026.02 | 58 | 62 | 20-121 | 7 | 30 |
| 2,4-Dichlorophenol | N.D. | 1661.13 | 1426.13 | 1655.63 | 1444.05 | 86 | 87 | 79-125 | 1 | 30 |
| Diethylphthalate | N.D. | 1661.13 | 1240.75 | 1655.63 | 1272.01 | 75 | 77 | 74-120 | 2 | 30 |
| 2,4-Dimethylphenol | N.D. | 1661.13 | 969.4 | 1655.63 | 967.27 | 58 | 58 | 57-102 | 0 | 30 |
| Dimethylphthalate | N.D. | 1661.13 | 1277.79 | 1655.63 | 1269.47 | 77 | 77 | 77-116 | 1 | 30 |
| 4,6-Dinitro-2-methylphenol | N.D. | 1661.13 | 725.55 | 1655.63 | 1018.16 | 44* | 61 | 60-128 | 34* | 30 |
| 2,4-Dinitrophenol | N.D. | 3322.26 | 590.38 | 3311.26 | 1597.38 | 18* | 48 | 27-136 | 92* | 30 |
| 2,4-Dinitrotoluene | N.D. | 1661.13 | 991.98 | 1655.63 | 1213.99 | 60* | 73 | 72-127 | 20 | 30 |
| 2,6-Dinitrotoluene | N.D. | 1661.13 | 1033.16 | 1655.63 | 1202.8 | 62* | 73* | 80-120 | 15 | 30 |
| bis(2-Ethylhexyl)phthalate | N.D. | 1661.13 | 1256.68 | 1655.63 | 1202.42 | 76 | 73 | 73-123 | 4 | 30 |
| Fluoranthene | 27.49 | 1661.13 | 1297.32 | 1655.63 | 1302.96 | 76 | 77 | 72-120 | 0 | 30 |
| Fluorene | N.D. | 1661.13 | 1364.64 | 1655.63 | 1362.4 | 82 | 82 | 75-118 | 0 | 30 |
| Hexachlorobenzene | N.D. | 1661.13 | 1529.85 | 1655.63 | 1441.22 | 92 | 87 | 73-120 | 6 | 30 |
| Hexachlorobutadiene | N.D. | 1661.13 | 1274.17 | 1655.63 | 1233.69 | 77 | 75 | 72-120 | 3 | 30 |
| Hexachlorocyclopentadiene | N.D. | 3322.26 | N.D. | 3311.26 | N.D. | 0* | 0* | 30-133 | 0 | 30 |
| Hexachloroethane | N.D. | 1661.13 | 847.74 | 1655.63 | 933.54 | 51* | 56* | 69-116 | 10 | 30 |
| Indeno(1,2,3-cd)pyrene | 6.41 | 1661.13 | 1358.52 | 1655.63 | 1325.09 | 81 | 80 | 69-125 | 2 | 30 |
| Isophorone | N.D. | 1661.13 | 1128.24 | 1655.63 | 1074.99 | 68 | 65 | 65-120 | 5 | 30 |
| 2-Methylnaphthalene | 8.63 | 1661.13 | 1401.17 | 1655.63 | 1374.18 | 84 | 82 | 77-116 | 2 | 30 |
| 2-Methylphenol | N.D. | 1661.13 | 1202.01 | 1655.63 | 1248.29 | 72* | 75 | 74-128 | 4 | 30 |
| 4-Methylphenol | 205.51 | 1661.13 | 1160.73 | 1655.63 | 1200.36 | 58* | 60* | 66-121 | 3 | 30 |
| Naphthalene | 22.16 | 1661.13 | 1361.91 | 1655.63 | 1321.75 | 81 | 78 | 75-113 | 3 | 30 |
| 2-Nitroaniline | N.D. | 1661.13 | 1435.8 | 1655.63 | 1453.38 | 86 | 88 | 75-130 | 1 | 30 |
| 3-Nitroaniline | N.D. | 1661.13 | 1157.54 | 1655.63 | 1312.45 | 70 | 79 | 60-125 | 13 | 30 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

| Analysis Name | Unspiked Conc ug/kg | MS Spike Added ug/kg | MS Conc ug/kg | MSD Spike Added ug/kg | MSD Conc ug/kg | MS %Rec | MSD %Rec | MS/MSD Limits | RPD | RPD Max |
|----------------------------|---------------------|----------------------|---------------|-----------------------|----------------|---------|----------|---------------|-----|---------|
| 4-Nitroaniline | N.D. | 1661.13 | 1360.82 | 1655.63 | 1486.78 | 82 | 90 | 50-112 | 9 | 30 |
| Nitrobenzene | N.D. | 1661.13 | 1025.12 | 1655.63 | 1030.83 | 62* | 62* | 70-122 | 1 | 30 |
| 2-Nitrophenol | N.D. | 1661.13 | 978.97 | 1655.63 | 1213.6 | 59* | 73* | 77-123 | 21 | 30 |
| 4-Nitrophenol | N.D. | 1661.13 | 846.22 | 1655.63 | 990.59 | 51 | 60 | 44-131 | 16 | 30 |
| N-Nitroso-di-n-propylamine | N.D. | 1661.13 | 1082.49 | 1655.63 | 1040.94 | 65 | 63 | 60-123 | 4 | 30 |
| N-Nitrosodiphenylamine | N.D. | 1661.13 | 1482.19 | 1655.63 | 1447.78 | 89 | 87 | 83-118 | 2 | 30 |
| Di-n-octylphthalate | N.D. | 1661.13 | 1221.93 | 1655.63 | 1245.37 | 74* | 75* | 76-135 | 2 | 30 |
| Pentachlorophenol | N.D. | 1661.13 | 1128.65 | 1655.63 | 1399.89 | 68 | 85 | 33-141 | 21 | 30 |
| Phenanthrene | 27.29 | 1661.13 | 1369.51 | 1655.63 | 1351.56 | 81 | 80 | 74-114 | 1 | 30 |
| Phenol | N.D. | 1661.13 | 1194.12 | 1655.63 | 1236.58 | 72 | 75 | 63-125 | 3 | 30 |
| Pyrene | 15.71 | 1661.13 | 1358.24 | 1655.63 | 1290.48 | 81 | 77 | 74-112 | 5 | 30 |
| 1,2,4-Trichlorobenzene | N.D. | 1661.13 | 1368.01 | 1655.63 | 1324.36 | 82 | 80 | 79-114 | 3 | 30 |
| 2,4,5-Trichlorophenol | N.D. | 1661.13 | 1412.81 | 1655.63 | 1476.77 | 85 | 89 | 79-123 | 4 | 30 |
| 2,4,6-Trichlorophenol | N.D. | 1661.13 | 1447.88 | 1655.63 | 1460.84 | 87 | 88 | 81-123 | 1 | 30 |
| | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | | | | | |

Batch number: 172820570803

Sample number(s):

9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 UNSPK: 9251120

| | | | | | | | | | | |
|-----------|----------|------|----------|--------|----------|-------------|-------------|--------|-----|----|
| Antimony | N.D. | 50 | 24.86 | 47.17 | 23.8 | 50* | 50* | 75-125 | 4 | 20 |
| Arsenic | 5.40 | 15 | 21.25 | 14.15 | 20.47 | 106 | 107 | 75-125 | 4 | 20 |
| Barium | 123.44 | 200 | 385.1 | 188.68 | 345.55 | 131* | 118 | 75-125 | 11 | 20 |
| Beryllium | 1.08 | 5.00 | 6.43 | 4.72 | 5.84 | 107 | 101 | 75-125 | 10 | 20 |
| Cadmium | 0.406 | 5.00 | 5.26 | 4.72 | 4.85 | 97 | 94 | 75-125 | 8 | 20 |
| Calcium | 7137.59 | 400 | 6390.27 | 377.36 | 4896.03 | -187 (2) | -594 (2) | 75-125 | 26* | 20 |
| Chromium | 29.98 | 20 | 61.48 | 18.87 | 54.26 | 157* | 129* | 75-125 | 12 | 20 |
| Cobalt | 9.77 | 50 | 58.35 | 47.17 | 52.58 | 97 | 91 | 75-125 | 10 | 20 |
| Copper | 17.23 | 25 | 46.61 | 23.58 | 42.36 | 118 | 107 | 75-125 | 10 | 20 |
| Iron | 20071.98 | 100 | 27757.88 | 94.34 | 21651.68 | 7686 (2) | 1674 (2) | 75-125 | 25* | 20 |
| Lead | 18.37 | 15 | 28.12 | 14.15 | 31.75 | 65* | 95 | 75-125 | 12 | 20 |
| Magnesium | 7316.06 | 200 | 8829.96 | 188.68 | 6663.96 | 757 (2) | -346 (2) | 75-125 | 28* | 20 |
| Manganese | 132.3 | 50 | 191.16 | 47.17 | 209.42 | 118 | 164* | 75-125 | 9 | 20 |
| Nickel | 23.8 | 50 | 78.82 | 47.17 | 68.07 | 110 | 94 | 75-125 | 15 | 20 |
| Potassium | 4509.67 | 1000 | 6653.47 | 943.4 | 6770.2 | 214 (2) | 240 (2) | 75-125 | 2 | 20 |
| Selenium | N.D. | 15 | 14.63 | 14.15 | 13.93 | 98 | 98 | 75-125 | 5 | 20 |
| Silver | 0.390 | 5.00 | 5.59 | 4.72 | 4.97 | 104 | 97 | 75-125 | 12 | 20 |
| Sodium | 480.52 | 1000 | 2357.47 | 943.4 | 1655.73 | 188* | 125 | 75-125 | 35* | 20 |
| Thallium | N.D. | 15 | 14.77 | 14.15 | 12 | 98 | 85 | 75-125 | 21* | 20 |
| Vanadium | 47.21 | 50 | 116.4 | 47.17 | 105.45 | 138* | 123 | 75-125 | 10 | 20 |
| Zinc | 63.86 | 50 | 106.76 | 47.17 | 106.52 | 86 | 90 | 75-125 | 0 | 20 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

| Analysis Name | Unspiked Conc mg/kg | MS Spike Added mg/kg | MS Conc mg/kg | MSD Spike Added mg/kg | MSD Conc mg/kg | MS %Rec | MSD %Rec | MS/MSD Limits | RPD | RPD Max |
|----------------------------|---|----------------------|---------------|-----------------------|----------------|---------|----------|---------------|-----|---------|
| Batch number: 172820571101 | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 UNSPK: 9251132 | | | | | | | | | |
| Mercury | N.D. | 0.159 | 0.176 | 0.159 | 0.175 | 111 | 110 | 80-120 | 1 | 20 |
| | mg/l | mg/l | mg/l | mg/l | mg/l | | | | | |
| Batch number: 172820570501 | Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 UNSPK: P249920 | | | | | | | | | |
| Arsenic | N.D. | 5.00 | 4.71 | 5.00 | 4.68 | 94 | 94 | 75-125 | 1 | 20 |
| Barium | 3.78 | 100 | 92.34 | 100 | 88.77 | 89 | 85 | 75-125 | 4 | 20 |
| Beryllium | N.D. | 5.00 | 4.34 | 5.00 | 4.35 | 87 | 87 | 75-125 | 0 | 20 |
| Cadmium | N.D. | 1.00 | 0.869 | 1.00 | 0.862 | 87 | 86 | 75-125 | 1 | 20 |
| Chromium | N.D. | 5.00 | 4.44 | 5.00 | 4.45 | 89 | 89 | 75-125 | 0 | 20 |
| Cobalt | 0.0282 | 5.00 | 4.30 | 5.00 | 4.27 | 86 | 85 | 75-125 | 1 | 20 |
| Copper | 0.00851 | 5.00 | 4.54 | 5.00 | 4.57 | 91 | 91 | 75-125 | 1 | 20 |
| Iron | 0.160 | 5.00 | 4.53 | 5.00 | 4.48 | 87 | 86 | 75-125 | 1 | 20 |
| Lead | N.D. | 5.00 | 4.27 | 5.00 | 4.23 | 85 | 85 | 75-125 | 1 | 20 |
| Manganese | 6.41 | 5.00 | 10.42 | 5.00 | 10.45 | 80 | 81 | 75-125 | 0 | 20 |
| Nickel | 0.0269 | 5.00 | 4.21 | 5.00 | 4.19 | 84 | 83 | 75-125 | 1 | 20 |
| Selenium | N.D. | 1.00 | 0.935 | 1.00 | 0.947 | 94 | 95 | 75-125 | 1 | 20 |
| Silver | N.D. | 5.00 | 0.794 | 5.00 | 0.779 | 16* | 16* | 75-125 | 2 | 20 |
| Zinc | 0.141 | 5.00 | 4.61 | 5.00 | 4.58 | 89 | 89 | 75-125 | 1 | 20 |
| Batch number: 172820571302 | Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 UNSPK: P251284 | | | | | | | | | |
| Mercury | N.D. | 0.0200 | 0.0172 | 0.0200 | 0.0178 | 86 | 89 | 80-120 | 3 | 20 |
| Batch number: 172830570502 | Sample number(s): 9251163, 9251166, 9251169, 9251172, 9251175, 9251178 UNSPK: P248451 | | | | | | | | | |
| Arsenic | N.D. | 5.00 | 4.75 | 5.00 | 4.87 | 95 | 97 | 75-125 | 2 | 20 |
| Barium | 1.25 | 100 | 92.69 | 100 | 94.1 | 91 | 93 | 75-125 | 2 | 20 |
| Beryllium | N.D. | 5.00 | 4.47 | 5.00 | 4.62 | 89 | 92 | 75-125 | 3 | 20 |
| Cadmium | 0.00681 | 1.00 | 0.904 | 1.00 | 0.928 | 90 | 92 | 75-125 | 3 | 20 |
| Chromium | 0.00473 | 5.00 | 4.49 | 5.00 | 4.60 | 90 | 92 | 75-125 | 2 | 20 |
| Cobalt | 0.0185 | 5.00 | 4.45 | 5.00 | 4.56 | 89 | 91 | 75-125 | 2 | 20 |
| Copper | 0.0154 | 5.00 | 4.68 | 5.00 | 4.77 | 93 | 95 | 75-125 | 2 | 20 |
| Iron | 0.364 | 5.00 | 4.48 | 5.00 | 4.70 | 82 | 87 | 75-125 | 5 | 20 |
| Lead | 0.0184 | 5.00 | 4.44 | 5.00 | 4.54 | 88 | 90 | 75-125 | 2 | 20 |
| Manganese | 1.93 | 5.00 | 6.17 | 5.00 | 6.33 | 85 | 88 | 75-125 | 3 | 20 |
| Nickel | 0.0580 | 5.00 | 4.39 | 5.00 | 4.50 | 87 | 89 | 75-125 | 2 | 20 |
| Selenium | N.D. | 1.00 | 0.943 | 1.00 | 0.957 | 94 | 96 | 75-125 | 1 | 20 |
| Silver | N.D. | 5.00 | 3.02 | 5.00 | 4.11 | 60* | 82 | 75-125 | 30* | 20 |
| Zinc | 0.142 | 5.00 | 4.69 | 5.00 | 4.80 | 91 | 93 | 75-125 | 2 | 20 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

| Analysis Name | Unspiked Conc mg/l | MS Spike Added mg/l | MS Conc mg/l | MSD Spike Added mg/l | MSD Conc mg/l | MS %Rec | MSD %Rec | MS/MSD Limits | RPD | RPD Max |
|----------------------------|---|---------------------|--------------|----------------------|---------------|---------|----------|---------------|-----|---------|
| Batch number: 172830570503 | Sample number(s): 9251122, 9251125, 9251128, 9251131, 9251134, 9251137, 9251140, 9251143, 9251146, 9251149, 9251152, 9251155, 9251158, 9251161, 9251164, 9251167, 9251170, 9251173 UNSPK: 9251122 | | | | | | | | | |
| Arsenic | 0.0247 | 5.00 | 4.63 | 5.00 | 4.67 | 92 | 93 | 75-125 | 1 | 20 |
| Barium | 0.367 | 100 | 90.06 | 100 | 93.63 | 90 | 93 | 75-125 | 4 | 20 |
| Beryllium | 0.00378 | 5.00 | 4.26 | 5.00 | 4.34 | 85 | 87 | 75-125 | 2 | 20 |
| Cadmium | N.D. | 1.00 | 0.886 | 1.00 | 0.892 | 89 | 89 | 75-125 | 1 | 20 |
| Chromium | 0.0968 | 5.00 | 4.60 | 5.00 | 4.66 | 90 | 91 | 75-125 | 1 | 20 |
| Cobalt | 0.0258 | 5.00 | 4.44 | 5.00 | 4.46 | 88 | 89 | 75-125 | 0 | 20 |
| Copper | 0.0569 | 5.00 | 4.72 | 5.00 | 4.79 | 93 | 95 | 75-125 | 1 | 20 |
| Iron | 71.28 | 5.00 | 83.09 | 5.00 | 84.72 | 236 (2) | 269 (2) | 75-125 | 2 | 20 |
| Lead | 0.0319 | 5.00 | 4.40 | 5.00 | 4.43 | 87 | 88 | 75-125 | 1 | 20 |
| Manganese | 0.398 | 5.00 | 4.79 | 5.00 | 4.87 | 88 | 90 | 75-125 | 2 | 20 |
| Nickel | 0.0764 | 5.00 | 4.42 | 5.00 | 4.44 | 87 | 87 | 75-125 | 1 | 20 |
| Selenium | 0.0105 | 1.00 | 0.891 | 1.00 | 0.905 | 88 | 89 | 75-125 | 2 | 20 |
| Silver | N.D. | 5.00 | 4.45 | 5.00 | 4.53 | 89 | 91 | 75-125 | 2 | 20 |
| Zinc | 0.133 | 5.00 | 4.58 | 5.00 | 4.61 | 89 | 90 | 75-125 | 1 | 20 |
| Batch number: 172830570504 | Sample number(s): 9251176, 9251179 UNSPK: 9251176 | | | | | | | | | |
| Arsenic | N.D. | 0.150 | 0.162 | 0.150 | 0.171 | 108 | 114 | 75-125 | 6 | 20 |
| Barium | 0.0561 | 2.00 | 2.06 | 2.00 | 2.23 | 100 | 109 | 75-125 | 8 | 20 |
| Beryllium | N.D. | 0.0500 | 0.0513 | 0.0500 | 0.0544 | 103 | 109 | 75-125 | 6 | 20 |
| Cadmium | N.D. | 0.0500 | 0.0524 | 0.0500 | 0.0556 | 105 | 111 | 75-125 | 6 | 20 |
| Chromium | 0.0130 | 0.200 | 0.220 | 0.200 | 0.234 | 104 | 110 | 75-125 | 6 | 20 |
| Cobalt | 0.00445 | 0.500 | 0.520 | 0.500 | 0.546 | 103 | 108 | 75-125 | 5 | 20 |
| Copper | 0.0128 | 0.250 | 0.266 | 0.250 | 0.282 | 101 | 108 | 75-125 | 6 | 20 |
| Iron | 8.83 | 1.00 | 10.42 | 1.00 | 10.42 | 159 (2) | 158 (2) | 75-125 | 0 | 20 |
| Lead | N.D. | 0.150 | 0.155 | 0.150 | 0.167 | 103 | 112 | 75-125 | 8 | 20 |
| Manganese | 0.149 | 0.500 | 0.662 | 0.500 | 0.694 | 103 | 109 | 75-125 | 5 | 20 |
| Nickel | 0.00983 | 0.500 | 0.539 | 0.500 | 0.569 | 106 | 112 | 75-125 | 5 | 20 |
| Selenium | N.D. | 0.150 | 0.149 | 0.150 | 0.160 | 99 | 107 | 75-125 | 7 | 20 |
| Silver | N.D. | 0.0500 | 0.0486 | 0.0500 | 0.0483 | 97 | 97 | 75-125 | 1 | 20 |
| Zinc | 0.0183 | 0.500 | 0.534 | 0.500 | 0.563 | 103 | 109 | 75-125 | 5 | 20 |
| Batch number: 172830571304 | Sample number(s): 9251163, 9251166, 9251169, 9251172, 9251175, 9251178 UNSPK: P248447 | | | | | | | | | |
| Mercury | N.D. | 0.0200 | 0.0165 | 0.0200 | 0.0164 | 82 | 82 | 80-120 | 0 | 20 |
| Batch number: 172830571306 | Sample number(s): 9251122, 9251125, 9251128, 9251131, 9251134, 9251137, 9251140, 9251143, 9251146, 9251149, 9251152, 9251155, 9251158, 9251161, 9251164, 9251167 UNSPK: 9251122 | | | | | | | | | |
| Mercury | 0.0000860 | 0.0200 | 0.0177 | 0.0200 | 0.0179 | 88 | 89 | 80-120 | 1 | 20 |
| Batch number: 172830571307 | Sample number(s): 9251170, 9251173, 9251176, 9251179 UNSPK: 9251170 | | | | | | | | | |
| Mercury | N.D. | 0.00100 | 0.00105 | 0.00100 | 0.00106 | 105 | 106 | 80-120 | 1 | 20 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | BKG Conc mg/kg | DUP Conc mg/kg | DUP RPD | DUP RPD Max |
|----------------------------|---|-------------------|----------|-------------|
| Batch number: 172820570803 | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 BKG: 9251120 | | | |
| Antimony | N.D. | N.D. | 0 (1) | 20 |
| Arsenic | 5.40 | 6.35 | 16 (1) | 20 |
| Barium | 123.44 | 111.49 | 10 | 20 |
| Beryllium | 1.08 | 1.08 | 0 (1) | 20 |
| Cadmium | 0.406 | 0.354 | 14 (1) | 20 |
| Calcium | 7137.59 | 14745.15 | 70* | 20 |
| Chromium | 29.98 | 31.99 | 6 | 20 |
| Cobalt | 9.77 | 11.47 | 16 | 20 |
| Copper | 17.23 | 16.95 | 2 | 20 |
| Iron | 20071.98 | 23946.68 | 18 | 20 |
| Lead | 18.37 | 14.27 | 25* | 20 |
| Magnesium | 7316.06 | 10198.71 | 33* | 20 |
| Manganese | 132.3 | 278.3 | 71* | 20 |
| Nickel | 23.8 | 25 | 5 | 20 |
| Potassium | 4509.67 | 4331.29 | 4 | 20 |
| Selenium | N.D. | N.D. | 0 (1) | 20 |
| Silver | 0.390 | 0.460 | 16 (1) | 20 |
| Sodium | 480.52 | 914.22 | 62* (1) | 20 |
| Thallium | N.D. | N.D. | 0 (1) | 20 |
| Vanadium | 47.21 | 48.73 | 3 | 20 |
| Zinc | 63.86 | 51.52 | 21* | 20 |
| Batch number: 172820571101 | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 BKG: 9251132 | | | |
| Mercury | N.D. | N.D. | 0 (1) | 20 |
| | mg/l | mg/l | | |
| Batch number: 172820570501 | Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 BKG: P249920 | | | |
| Arsenic | N.D. | N.D. | 0 (1) | 20 |
| Barium | 3.78 | 3.74 | 1 | 20 |
| Beryllium | N.D. | N.D. | 0 (1) | 20 |
| Cadmium | N.D. | N.D. | 0 (1) | 20 |
| Chromium | N.D. | N.D. | 0 (1) | 20 |
| Cobalt | 0.0282 | 0.0276 | 2 | 20 |
| Copper | 0.00851 | 0.00784 | 8 (1) | 20 |
| Iron | 0.160 | 0.170 | 6 (1) | 20 |
| Lead | N.D. | 0.00774 | 200* (1) | 20 |
| Manganese | 6.41 | 6.49 | 1 | 20 |

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | BKG Conc mg/l | DUP Conc mg/l | DUP RPD | DUP RPD Max |
|---|------------------|------------------|---------|-------------|
| Nickel | 0.0269 | 0.0265 | 1 (1) | 20 |
| Selenium | N.D. | N.D. | 0 (1) | 20 |
| Silver | N.D. | N.D. | 0 (1) | 20 |
| Zinc | 0.141 | 0.140 | 1 | 20 |
| Batch number: 172820571302 Sample number(s): 9251121, 9251124, 9251127, 9251130, 9251133, 9251136, 9251139, 9251142, 9251145, 9251148, 9251151, 9251154, 9251157, 9251160 BKG: P251284 | | | | |
| Mercury | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 172830570502 Sample number(s): 9251163, 9251166, 9251169, 9251172, 9251175, 9251178 BKG: P248451 | | | | |
| Arsenic | N.D. | N.D. | 0 (1) | 20 |
| Barium | 1.25 | 1.22 | 2 | 20 |
| Beryllium | N.D. | N.D. | 0 (1) | 20 |
| Cadmium | 0.00681 | 0.00702 | 3 (1) | 20 |
| Chromium | 0.00473 | 0.00441 | 7 (1) | 20 |
| Cobalt | 0.0185 | 0.0191 | 3 (1) | 20 |
| Copper | 0.0154 | 0.0138 | 11 (1) | 20 |
| Iron | 0.364 | 0.354 | 3 (1) | 20 |
| Lead | 0.0184 | 0.0203 | 10 (1) | 20 |
| Manganese | 1.93 | 1.90 | 2 | 20 |
| Nickel | 0.0580 | 0.0585 | 1 | 20 |
| Selenium | N.D. | N.D. | 0 (1) | 20 |
| Silver | N.D. | N.D. | 0 (1) | 20 |
| Zinc | 0.142 | 0.140 | 1 | 20 |
| Batch number: 172830570503 Sample number(s): 9251122, 9251125, 9251128, 9251131, 9251134, 9251137, 9251140, 9251143, 9251146, 9251149, 9251152, 9251155, 9251158, 9251161, 9251164, 9251167, 9251170, 9251173 BKG: 9251122 | | | | |
| Arsenic | 0.0247 | 0.0291 | 16 (1) | 20 |
| Barium | 0.367 | 0.374 | 2 | 20 |
| Beryllium | 0.00378 | 0.00390 | 3 (1) | 20 |
| Cadmium | N.D. | N.D. | 0 (1) | 20 |
| Chromium | 0.0968 | 0.100 | 3 | 20 |
| Cobalt | 0.0258 | 0.0253 | 2 | 20 |
| Copper | 0.0569 | 0.0584 | 3 | 20 |
| Iron | 71.28 | 73.64 | 3 | 20 |
| Lead | 0.0319 | 0.0297 | 7 (1) | 20 |
| Manganese | 0.398 | 0.405 | 2 | 20 |
| Nickel | 0.0764 | 0.0774 | 1 | 20 |
| Selenium | 0.0105 | 0.0102 | 3 (1) | 20 |
| Silver | N.D. | N.D. | 0 (1) | 20 |
| Zinc | 0.133 | 0.134 | 1 | 20 |
| Batch number: 172830570504 Sample number(s): 9251176, 9251179 BKG: 9251176 | | | | |
| Arsenic | N.D. | N.D. | 0 (1) | 20 |
| Barium | 0.0561 | 0.0546 | 3 | 20 |
| Beryllium | N.D. | N.D. | 0 (1) | 20 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | BKG Conc mg/l | DUP Conc mg/l | DUP RPD | DUP RPD Max |
|----------------------------|---|-------------------|---------|-------------|
| Cadmium | N.D. | N.D. | 0 (1) | 20 |
| Chromium | 0.0130 | 0.0123 | 5 (1) | 20 |
| Cobalt | 0.00445 | 0.00374 | 17 (1) | 20 |
| Copper | 0.0128 | 0.0124 | 3 (1) | 20 |
| Iron | 8.83 | 8.59 | 3 | 20 |
| Lead | N.D. | N.D. | 0 (1) | 20 |
| Manganese | 0.149 | 0.146 | 2 | 20 |
| Nickel | 0.00983 | 0.0106 | 8 (1) | 20 |
| Selenium | N.D. | N.D. | 0 (1) | 20 |
| Silver | N.D. | N.D. | 0 (1) | 20 |
| Zinc | 0.0183 | 0.0187 | 2 (1) | 20 |
| Batch number: 172830571304 | Sample number(s): 9251163, 9251166, 9251169, 9251172, 9251175, 9251178 BKG: P248447 | | | |
| Mercury | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 172830571306 | Sample number(s): 9251122, 9251125, 9251128, 9251131, 9251134, 9251137, 9251140, 9251143, 9251146, 9251149, 9251152, 9251155, 9251158, 9251161, 9251164, 9251167 BKG: 9251122 | | | |
| Mercury | 0.0000860 | 0.0000927 | 7 (1) | 20 |
| Batch number: 172830571307 | Sample number(s): 9251170, 9251173, 9251176, 9251179 BKG: 9251170 | | | |
| Mercury | N.D. | N.D. | 0 (1) | 20 |
| | Std. Units | Std. Units | | |
| Batch number: 17282039402A | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251138 BKG: P250909 | | | |
| pH (soil) | 8.36 | 8.38 | 0 | 3 |
| Batch number: 17282039402B | Sample number(s): 9251135, 9251141, 9251144, 9251147, 9251150, 9251153, 9251156, 9251162, 9251165, 9251168 BKG: 9251135 | | | |
| pH (soil) | 8.39 | 8.31 | 1 | 3 |
| Batch number: 17282039403A | Sample number(s): 9251159, 9251171, 9251174, 9251177 BKG: 9251159 | | | |
| pH (soil) | 8.20 | 8.20 | 0 | 3 |
| | % | % | | |
| Batch number: 17284820010A | Sample number(s): 9251120, 9251123, 9251126, 9251129, 9251132, 9251135, 9251138, 9251141, 9251144, 9251147 BKG: 9251135 | | | |
| Moisture | 16.77 | 16.24 | 3 | 5 |
| Batch number: 17284820010B | Sample number(s): 9251150, 9251153, 9251156, 9251159, 9251162, 9251165, 9251168, 9251171, 9251174, 9251177 BKG: 9251159 | | | |
| Moisture | 16.35 | 17.93 | 9* | 5 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: VOCs - Solid by 8260B
Batch number: X172852AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 9251120 | 98 | 100 | 101 | 85 |
| 9251126 | 102 | 108 | 96 | 94 |
| 9251129 | 99 | 102 | 98 | 88 |
| 9251135 | 97 | 98 | 107 | 80 |
| Blank | 105 | 100 | 91 | 97 |
| LCS | 106 | 101 | 93 | 101 |
| LCSD | 106 | 99 | 93 | 101 |
| MS | 100 | 99 | 99 | 96 |
| MSD | 102 | 100 | 98 | 97 |
| Limits: | 50-141 | 54-135 | 52-141 | 50-131 |

Analysis Name: VOCs - Solid by 8260B
Batch number: X172861AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 9251123 | 100 | 110 | 96 | 91 |
| 9251132 | 101 | 106 | 94 | 98 |
| 9251138 | 98 | 101 | 100 | 82 |
| 9251141 | 102 | 109 | 98 | 83 |
| 9251144 | 99 | 97 | 105 | 78 |
| 9251147 | 102 | 110 | 94 | 91 |
| 9251150 | 100 | 105 | 95 | 91 |
| 9251153 | 104 | 111 | 94 | 91 |
| 9251162 | 102 | 107 | 95 | 87 |
| 9251168 | 113 | 108 | 118 | 66 |
| 9251171 | 104 | 106 | 115 | 64 |
| 9251174 | 101 | 103 | 100 | 81 |
| Blank | 103 | 100 | 96 | 94 |
| LCS | 102 | 97 | 98 | 98 |
| LCSD | 101 | 98 | 98 | 98 |
| Limits: | 50-141 | 54-135 | 52-141 | 50-131 |

Analysis Name: VOCs - Solid by 8260B
Batch number: X172901AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 9251156 | 97 | 108 | 98 | 90 |
| 9251159 | 99 | 110 | 98 | 90 |
| 9251165 | 94 | 98 | 101 | 85 |
| 9251177 | 99 | 106 | 99 | 85 |
| Blank | 99 | 99 | 99 | 92 |
| LCS | 99 | 98 | 101 | 98 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Weston Solutions
Reported: 10/20/2017 21:44

Group Number: 1860028

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: VOCs - Solid by 8260B
Batch number: X172901AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| LCSD | 99 | 98 | 100 | 97 |
| Limits: | 50-141 | 54-135 | 52-141 | 50-131 |

Analysis Name: TCL 8270 (microwave)
Batch number: 17286SLF026

| | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 9251120 | 80 | 84 | 92 | 62 | 84 | 84 |
| 9251123 | 71 | 76 | 73 | 67 | 78 | 81 |
| 9251126 | 75 | 79 | 71 | 67 | 80 | 81 |
| 9251129 | 73 | 77 | 78 | 68 | 79 | 80 |
| 9251132 | 78 | 83 | 80 | 71 | 88 | 86 |
| 9251135 | 72 | 78 | 72 | 67 | 81 | 80 |
| 9251138 | 71 | 77 | 68 | 67 | 83 | 79 |
| 9251141 | 75 | 78 | 70 | 69 | 83 | 82 |
| 9251144 | 77 | 82 | 75 | 69 | 86 | 83 |
| 9251147 | 73 | 79 | 70 | 68 | 84 | 81 |
| 9251150 | 75 | 81 | 68 | 67 | 85 | 83 |
| 9251153 | 75 | 81 | 65 | 69 | 84 | 80 |
| 9251156 | 74 | 79 | 57 | 68 | 84 | 83 |
| 9251159 | 74 | 76 | 76 | 64 | 74 | 77 |
| 9251162 | 83 | 85 | 87 | 69 | 81 | 85 |
| 9251165 | 67 | 69 | 70 | 57 | 66 | 64 |
| 9251168 | 84 | 87 | 84 | 63 | 79 | 80 |
| 9251171 | 72 | 75 | 69 | 61 | 70 | 73 |
| 9251174 | 82 | 84 | 61 | 66 | 77 | 78 |
| 9251177 | 82 | 84 | 78 | 66 | 78 | 82 |
| Blank | 84 | 90 | 93 | 75 | 88 | 93 |
| LCS | 81 | 85 | 95 | 71 | 83 | 86 |
| MS | 74 | 78 | 76 | 59 | 78 | 82 |
| MSD | 76 | 79 | 80 | 62 | 77 | 78 |
| Limits: | 46-125 | 51-123 | 34-129 | 49-118 | 57-116 | 55-118 |

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564550

| Client Information | | | | Matrix | | | Analysis Requested | | | | | | | | | | For Lab Use Only | | |
|---|----------------|--|----------|--|-----------------------|--|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|--------------------|------------------|--|--|
| Client: <u>Weston Solutions</u> | | Acct. #: | | <input type="checkbox"/> Sediment <input type="checkbox"/> Tissue <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Water <input type="checkbox"/> NPDES <input type="checkbox"/> Other: | Total # of Containers | Preservation and Filtration Codes | | | | | | | | | | FSC: _____ | | | |
| Project Name/#: <u>IDOT-063</u> | | PWSID #: | | | | VOCs SNOCs Total Metals TCLP/SRP metals pH | | | | | | | | | | SCR#: _____ | | | |
| Project Manager: <u>S. Balasubramanian</u> | | P.O. #: | | | | | | | | | | | | | | | | | |
| Sampler: <u>T. Walls</u> | | Quote #: | | | | | | | | | | | | | | | | | |
| State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Grab | Composite | | | | | | | | | | | Preservation Codes | | | |
| Sample Identification | | Collected | | | | | | | | | | | | | | Remarks | | | |
| Date | Time | | | | | | | | | | | | | | | | | | |
| <u>MC-5(0-6)-100517</u> | <u>10-5-17</u> | <u>1125</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-5(6-12)-100517</u> | | <u>1130</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-5(6-12)-100517D</u> | | <u>1130</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-6(0-6)-100517</u> | | <u>1150</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-6(6-12)-100517</u> | | <u>1155</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-7(0-6)-100517</u> | | <u>1205</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-7(6-12)-100517</u> | | <u>1210</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-8(0-6)-100517</u> | | <u>1225</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>MC-8(6-12)-100517</u> | | <u>1230</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |
| <u>ROW-1(0-2)-100517</u> | <u>10-5-17</u> | <u>1250</u> | <u>X</u> | <u>X</u> | | <u>4</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | <u>X</u> | | |

| | | | | | | | | | |
|---|--|-------------------------|--|--|--|---|--|--|--|
| Turnaround Time (TAT) Requested (please circle) Standard <input checked="" type="radio"/> Rush <input type="radio"/> (Rush TAT is subject to laboratory approval and surcharge.) | | | | Relinquished by <u>T. Walls</u> Date <u>10-5-17</u> Time <u>1700</u> | | Received by _____ Date _____ Time _____ | | | |
| Date results are needed: _____ | | | | Relinquished by _____ Date _____ Time _____ | | Received by _____ Date _____ Time _____ | | | |
| E-mail address: _____ | | | | Relinquished by _____ Date _____ Time _____ | | Received by _____ Date _____ Time _____ | | | |
| Data Package Options (circle if required) | | | | Relinquished by _____ Date _____ Time _____ | | Received by _____ Date <u>10-6-17</u> Time <u>935</u> | | | |
| Type I (EPA Level 3 Equivalent/non-CLP) | | Type VI (Raw Data Only) | | EDD Required? <input checked="" type="radio"/> Yes <input type="radio"/> No If yes, format: <u>DTS2010</u> | | | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | |
| Type III (Reduced non-CLP) | | NJ DKQP TX TRRP-13 | | Site-Specific QC (MS/MSD/Dup)? Yes <input type="checkbox"/> No <input type="checkbox"/> (If yes, indicate QC sample and submit triplicate sample volume.) | | | | Temperature upon receipt <u>0.751°C</u> | |
| NYSDEC Category A or B | | MA MCP CT RCP | | | | | | | |

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The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0717

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 11924 Group # 1860028 Sample # 9251120-79

COC # 564547

| Client Information | | | | Matrix | | | | Analysis Requested | | | | | | For Lab Use Only | | | |
|--|--|---------------------|--|-------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|---|----------------------------------|--|--|--|--|------------------|--|---|-------------|
| Client: <u>Western Solutions</u> | | Acct. #: | | <input type="checkbox"/> Soil | <input type="checkbox"/> Sediment | <input type="checkbox"/> Tissue | <input type="checkbox"/> Potable | <input type="checkbox"/> Ground | <input type="checkbox"/> Surface | Preservation and Filtration Codes | | | | | | FSC: _____ | SCR#: _____ |
| Project Name/#: <u>IDOT-063</u> | | PWSID #: | | | | | | | | NOCs SNOCs Total Metals TLD/SLP metals PH | | | | | | Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other | |
| Project Manager: <u>S. Babusukumar</u> | | P.O. #: | | Water | | NPDES | | Other: | | | | | | | | Total # of Containers NOCs SNOCs Total Metals TLD/SLP metals PH | |
| Sampler: <u>T. Walls</u> | | Quote #: | | Grab | | Composite | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| Sample Identification | | Collected | | Grab | | Composite | | State where samples were collected: <u>IL</u> | | For Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> | | | | | | | |
| <u>MC-4 (0-6)-100517</u> | | <u>10-5-17 1320</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-4 (6-12)-100517</u> | | <u>1325</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-3 (0-6)-100517</u> | | <u>1340</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-3 (6-12)-100517</u> | | <u>1345</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-2 (0-6)-100517</u> | | <u>1415</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-2 (6-12)-100517</u> | | <u>1420</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>MC-1 (0-6)-100517</u> | | <u>1435</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>MC-1 (6-12)-100517</u> | | <u>1440</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |
| <u>BR-1 (0-2)-100517</u> | | <u>1500</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | Sample Identification Collected Date Time | | | | | |
| <u>BR-1 (0-2)-100517D</u> | | <u>10-5-17 1500</u> | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | <u>IL</u> | | <input type="checkbox"/> | | | | | | | |

Turnaround Time (TAT) Requested (please circle)
 Standard Rush
 (Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: _____
 E-mail address: _____

Data Package Options (circle if required)

| | |
|---|-------------------------|
| Type I (EPA Level 3 Equivalent/non-CLP) | Type VI (Raw Data Only) |
| Type III (Reduced non-CLP) | NJ DKQP TX TRRP-13 |
| NYSDEC Category A or B | MA MCP CT RCP |

| | | | | | |
|--|------------------------|---------------------|--|------|------|
| Relinquished by <u>Zumeth A. Wiley</u> | Date <u>10-5-17</u> | Time <u>1700</u> | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| Relinquished by | Date | Time | Received by | Date | Time |
| EDD Required? <input checked="" type="radio"/> Yes <input type="radio"/> No If yes, format: <u>DTS 2010</u> | | | Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____ | | |
| Site-Specific QC (MS/MSD/Dup)? Yes No (If yes, indicate QC sample and submit triplicate sample volume.) | | | Temperature upon receipt <u>0.75.1</u> °C | | |



Client: Weston Solutions

Delivery and Receipt Information

| | | | |
|---------------------------|---------------|---------------------|------------------------|
| Delivery Method: | <u>Fed Ex</u> | Arrival Timestamp: | <u>10/06/2017 9:35</u> |
| Number of Packages: | <u>2</u> | Number of Projects: | <u>1</u> |
| State/Province of Origin: | <u>IL</u> | | |

Arrival Condition Summary

| | | | |
|--------------------------------------|-----|-------------------------------------|-----|
| Shipping Container Sealed: | Yes | Sample IDs on COC match Containers: | Yes |
| Custody Seal Present: | Yes | Sample Date/Times match COC: | Yes |
| Custody Seal Intact: | Yes | VOA Vial Headspace \geq 6mm: | N/A |
| Samples Chilled: | Yes | Total Trip Blank Qty: | 0 |
| Paperwork Enclosed: | Yes | Air Quality Samples Present: | No |
| Samples Intact: | No | | |
| Missing Samples: | No | | |
| Extra Samples: | No | | |
| Discrepancy in Container Qty on COC: | No | | |

Unpacked by Melvin Sanchez (8943) at 15:16 on 10/06/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

| Cooler # | Thermometer ID | Corrected Temp | Therm. Type | Ice Type | Ice Present? | Ice Container | Elevated Temp? |
|----------|----------------|----------------|-------------|----------|--------------|---------------|----------------|
| 1 | DT131 | 0.7 | DT | Wet | Y | Bagged | N |
| 2 | DT131 | 5.1 | DT | Wet | Y | Bagged | N |

Samples Not Intact Details

| Sample ID on Label | Bottle Code | Bottle Quantity | Container Salvageable? | Comments |
|--------------------|--------------------------------|-----------------|------------------------|--|
| MC-4(0-6)-100517 | 500 ml wide mouth glass - None | 1 | Y | Received with cracked lid but septum was still in place. |
| MC-2(6-12)-100517 | 500 ml wide mouth glass - None | 1 | Y | Received with cracked lid but septum was still in place. |
| MC-1(6-12)-100517 | 500 ml wide mouth glass - None | 1 | Y | Received with cracked lid but septum was still in place. |

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

| | | | |
|-------------------------|--|-----------------|-------------------------------|
| BMQL | Below Minimum Quantitation Level | mg | milligram(s) |
| C | degrees Celsius | mL | milliliter(s) |
| cfu | colony forming units | MPN | Most Probable Number |
| CP Units | cobalt-chloroplatinate units | N.D. | non-detect |
| F | degrees Fahrenheit | ng | nanogram(s) |
| g | gram(s) | NTU | nephelometric turbidity units |
| IU | International Units | pg/L | picogram/liter |
| kg | kilogram(s) | RL | Reporting Limit |
| L | liter(s) | TNTC | Too Numerous To Count |
| lb. | pound(s) | µg | microgram(s) |
| m³ | cubic meter(s) | µL | microliter(s) |
| meq | milliequivalents | umhos/cm | micromhos/cm |
| < | less than | | |
| > | greater than | | |
| ppm | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas. | | |
| ppb | parts per billion | | |
| Dry weight basis | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis. | | |

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

| Qualifier | Definition |
|----------------|---|
| C | Result confirmed by reanalysis |
| D1 | Indicates for dual column analyses that the result is reported from column 1 |
| D2 | Indicates for dual column analyses that the result is reported from column 2 |
| E | Concentration exceeds the calibration range |
| J (or G, I, X) | Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL) |
| P | Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported. |
| U | Analyte was not detected at the value indicated |
| V | Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference. |
| W | The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L. |
| Z | Laboratory Defined - see analysis report |

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.