Memorandum

To:	Grant Trigger, RACER	Ref. No.:	017358
From:	Beth Landale/bw/159/Det.	Date:	September 12, 2016
cc:	Mike Reece, GHD		

Re: Focused RCRA Facility Investigation of Out-Parcel I
Former Willow Run Powertrain
Ypsilanti, Michigan

1. Introduction

GHD has prepared this memorandum to summarize a Focused RCRA Facility Investigation (FRFI) conducted for out-parcel (Parcel) I located at the Former Willow Run Powertrain located in Ypsilanti, Michigan (Site). Parcel I is located west of the former Powertrain building. The location of Parcel I is depicted on Figure 1. Figure 1 also depicts utilities located on or adjacent to Parcel I.

2. Information Review

As part of the FRFI, GHD reviewed historical aerial photographs for Parcel I, files at the Benson Ford Research Center in Dearborn, Michigan, a figure from the 1980 Hazardous Waste Part A Treatment, Storage, Disposal, Facility (TSDF) Permit for the Site, and analytical data results from a March 2016 supplementary soil sampling event.

2.1 Historical Aerial Photographs

Aerial photographs assist in the identification of out-parcel features and outdoor activities of potential environmental concern. Aerial photographs of the Site for the years 1937, 1940, 1949, 1956, 1961, 1969, 1972, 1978, 1983, 1987, 1997, 1999, 2005, 2006, 2009, 2010, and 2012 were available from Environmental Data Resources (EDR) and were reviewed by GHD. The specific details observed for the out-parcel are dependent on the scale and quality of the aerial photographs reviewed. The aerial photographs were reviewed at a scale of one inch equals approximately 500 feet. Following is a summary of observations based on the review of the aerial photographs.

1937: The 1937 aerial photograph depicts Parcel I as cultivated land.

1940: The 1940 aerial photograph depicts the parcels as essentially unchanged from the 1937 aerial photograph.

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1949: The 1949 aerial photograph depicts Parcel I with surficial scarring.

1956: The 1956 aerial photograph is essentially unchanged from the 1949 aerial photograph, with the exception that Parcel I is observed with vegetation growing.

1961: The 1961 aerial photograph is essentially unchanged from the 1956 aerial photograph.

1969: The 1969 aerial photograph is essentially unchanged from the 1961 aerial photograph.

1972: The 1972 aerial photograph is essentially unchanged from the 1969 aerial photograph.

1978: The 1978 aerial photograph is essentially unchanged from the 1969 aerial photograph, with the exception that vegetation has been removed on a portion of Parcel I and vehicles, soil piles, and material are stored on this portion of Parcel I.

1983: The 1983 aerial photograph is essentially unchanged from the 1978 aerial photograph, with the exception that the vehicles, soil piles, and material are stored on Parcel I have been removed. A concrete or asphalt pad is observed at the eastern corner of Parcel I.

1987: The 1987 aerial photograph is essentially unchanged from the 1983 aerial photograph.

1997: The 1997 aerial photograph is essentially unchanged from the 1987 aerial photograph.

1999: The 1999 aerial photograph is essentially unchanged from the 1997 aerial photograph.

2005: The 2005 aerial photograph is essentially unchanged from the 1999 aerial photograph.

2006: The 2006 aerial photograph is essentially unchanged from the 2005 aerial photograph.

2009: The 2009 aerial photograph is essentially unchanged from the 2006 aerial photograph.

2010: The 2010 aerial photograph is essentially unchanged from the 2009 aerial photograph.

2012: The 2012 aerial photograph is essentially unchanged from the 2010 aerial photograph.

No hazardous waste management units were observed at out-parcels.

Copies of the historical aerial photographs are included as Attachment A.

2.2 Benson Ford Research Center Information

GHD reviewed an undated aerial photograph believed to have been taken between 1942 and 1945. The aerial photograph depicts Army barrack-style buildings located on Parcel I. No hazardous waste management units were observed at out-parcels. A copy of this photograph is included as Attachment B.

2.3 Hazardous Waste Part A TSDF Permit Figure

A review of a figure included with the 1980 Hazardous Waste Part A TSDF Permit depicts that no hazardous waste management units were located on any of the out-parcels. The hazardous waste units were located in the eastern portion of the Former Willow Run Powertrain building, south of the building at the Waste

Treatment Plant (WTP) and adjacent to the WTP. A copy of the figure from the Part A TSDF Permit is included as Attachment C.

2.4 Supplementary Soil Sampling of Out-Parcel I

The supplementary soil sampling was designed to evaluate if previous activities observed in the historical aerials impacted this portion of the Site. As described above there were several activities observed in Parcel I including barrack-style buildings, signs of historical surficial scarring and a material lay down area.

Five soil borings (GHD-1024SB, GHD-1025SB, GHD-1026SB, GHD-1027SB, and GHD-1028SB) were drilled to a depth of approximately 20 feet within Parcel I to determine general soil classification and evaluate any impacts on March 30, 2016. Soil samples were collected from two intervals from each boring; 0-2 feet and the two foot interval above the water table. Field observations including elevated PID readings, visual staining, etc., were not observed during the borings. Samples collected were analyzed for Total Contaminant List (TCL) Volatile Organic Compounds (VOCs), TCL Semi Volatile Compounds (SVOCs), Total Analyte List (TAL) Metals, and Polychlorinated Biphenyls (PCBs).

The soil results were compared to Michigan Part 201 generic cleanup criteria developed by the Michigan Department of Environmental Quality (MDEQ) effective December 30, 2013 under the authority of Natural Resources and Environmental Protection Act (1994 PA 451, as amended). Due to the proximity to a property boundary, the results were compared to both residential and non-residential cleanup criteria. Results were also screened against Site-Specific Background concentrations, which were calculated and presented in the Site 2013 RCRA Facility Investigation Report. Analytical results that are above Part 201 criteria but below Site specific background concentrations are not flagged as exceedances in the table.

No VOCs or SVOCs were detected at concentrations above the screening criteria and PCBs were not detected in any of the samples. Four metals were detected above screening criteria as described below:

- Arsenic was detected in two samples (GHD-1027SB, 8-10 feet and GHD-1028SB, 7-9 feet) at concentrations (7.5 and 19 mg/kg, respectively) exceeding
  - background levels (7.26 mg/kg) and
  - screening criteria, specifically
    - residential and non-residential drinking water protection criteria (RDWPC and NRDWPC, respectively) (4.6 mg/kg)
    - groundwater surface water protection criteria (GSIPC) (4.6 mg/kg)
    - residential direct contact (7.6 mg/kg) at GHD-1028, 7-9 feet bgs
- Cobalt was detected in two samples (GHD-1027SB, 8-10 feet and GHD-1028SB, 0-2.5 feet) at concentrations (5.7 and 4.4 mg/kg, respectively) exceeding
  - background levels (4.38 mg/kg) and
  - screening criteria, specifically
    - RDWPC (0.8 mg/kg)
    - NRDWPC and GSIPC (2 mg/kg)
- Magnesium was detected in two samples (GHD-1026SB, 9-11 feet and GHD-1027SB, 8-10 feet) at concentrations (14,000 and 18,000 mg/kg) exceeding

    - screening criteria
        - RDWPC (8,000 mg/kg)
- Selenium was detected in nine samples (all but GHD-1025SB 0-2.5 feet) at concentrations ranging from 0.89 to 1.5 mg/kg) exceeding
    - background levels (0.83 mg/kg) and
    - GSIPC (0.4 mg/kg).

A table of analytical results, the soil boring logs, the data validation memorandum and a figure showing sample locations from the March 2016 sampling for Parcel I are provided in Attachment D.

3. Summary

While Parcel I was associated with historical development activities and current utilities, Parcel I does not appear to have been associated with any RCRA hazardous waste management units based on a review of historical aerial photographs, a review of undated aerial photograph believed to have been taken between 1942 and 1945, and a figure from the 1980 Hazardous Waste Part A Permit for the Former Willow Run Powertrain. The March 2016 analytical soil sampling activities indicate that the soil is not impacted by organic parameters (VOCs, SVOCs, and PCBs) and that some metals are present above screening criteria and background levels.



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0 125 250 ft

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Client
FORMER POWERTRAIN PLANT YPSILANTI, MICHIGAN

Project
REDEVELOPMENT SUPPORT

No.	Issue	Drawn	Approved	Date
-	-	-	-	-

Drawn **DMG**	Designer
Drafting Check **MR**	Design Check **MR**
Project Manager **B.L.**	Date **Sep 12, 2016**
This document shall not be used for construction unless signed and sealed for construction.	Scale **AS SHOWN**
Original Size **Arch D**	Bar is one inch on original size drawing 0 1"

Project No. **017358-T01**

Title
OUT-PARCELS I

Sheet No.
FIGURE 1

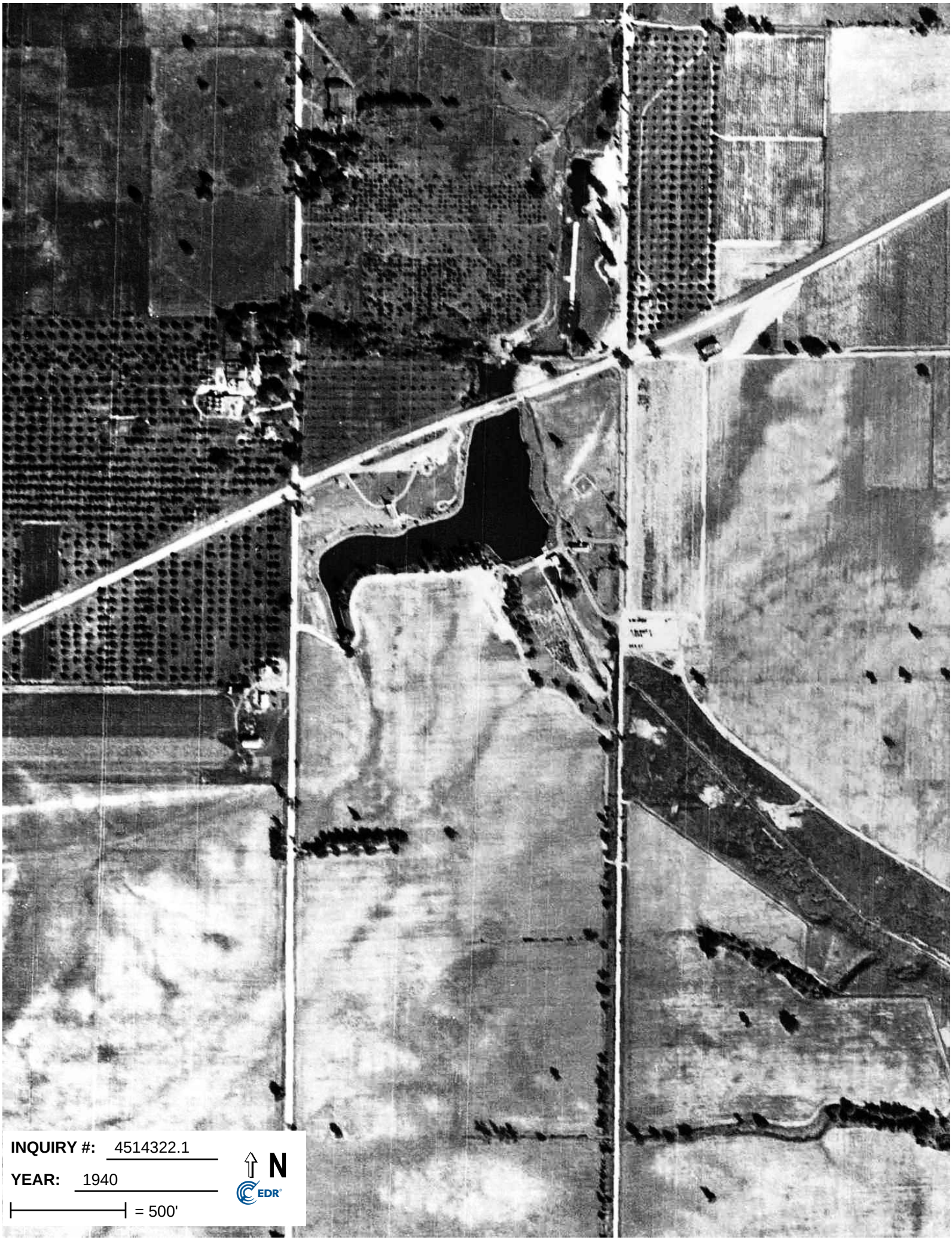
Sheet 1 of 1

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Attachment A
Historical Aerial Photos


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EDR


INQUIRY #: 4514327.1
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N
EDR



INQUIRY #: 4514322.1

YEAR: 1940

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N

EDR



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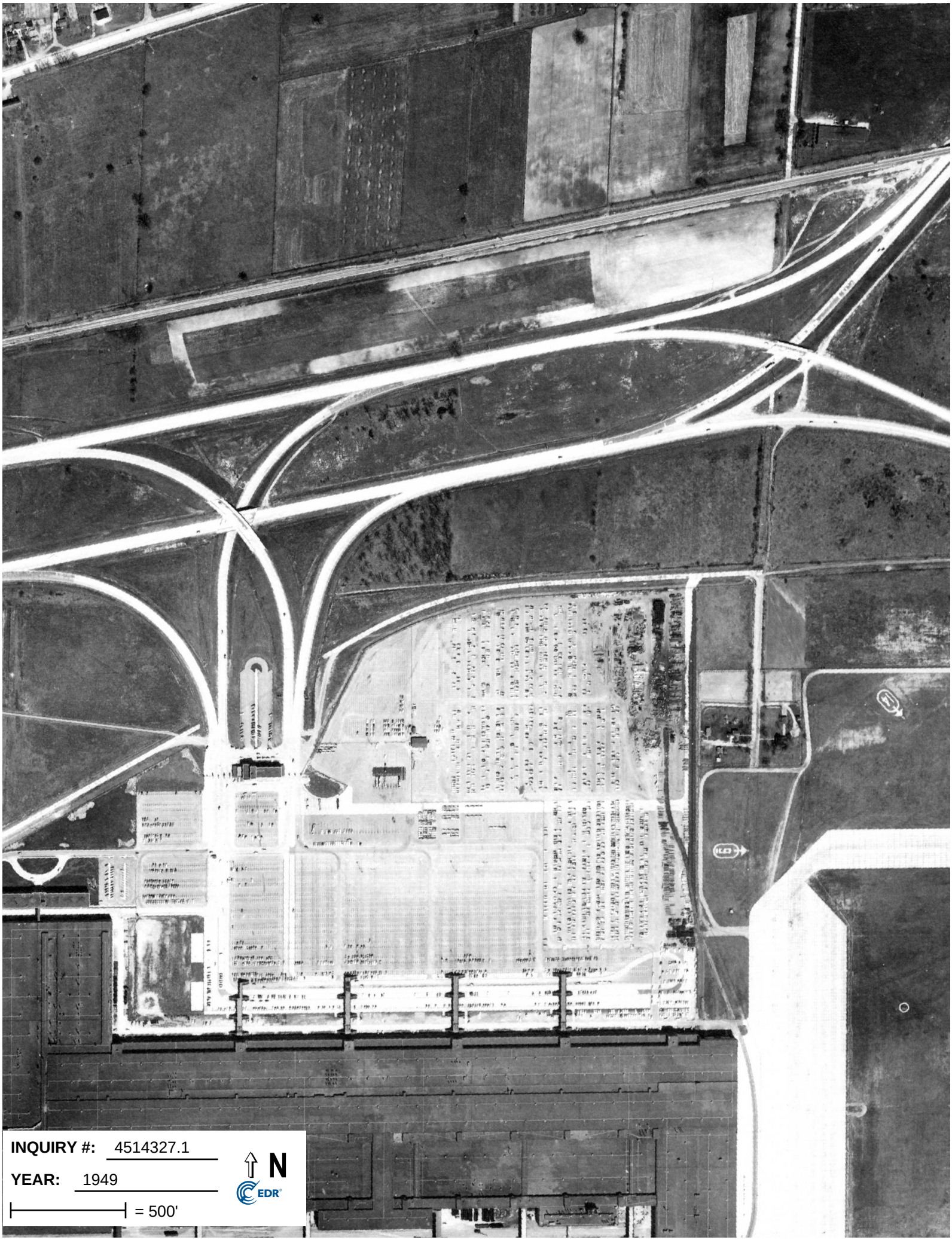
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EDR


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EDR



INQUIRY #: 4514327.1

YEAR: 1949

= 500'

N

EDR



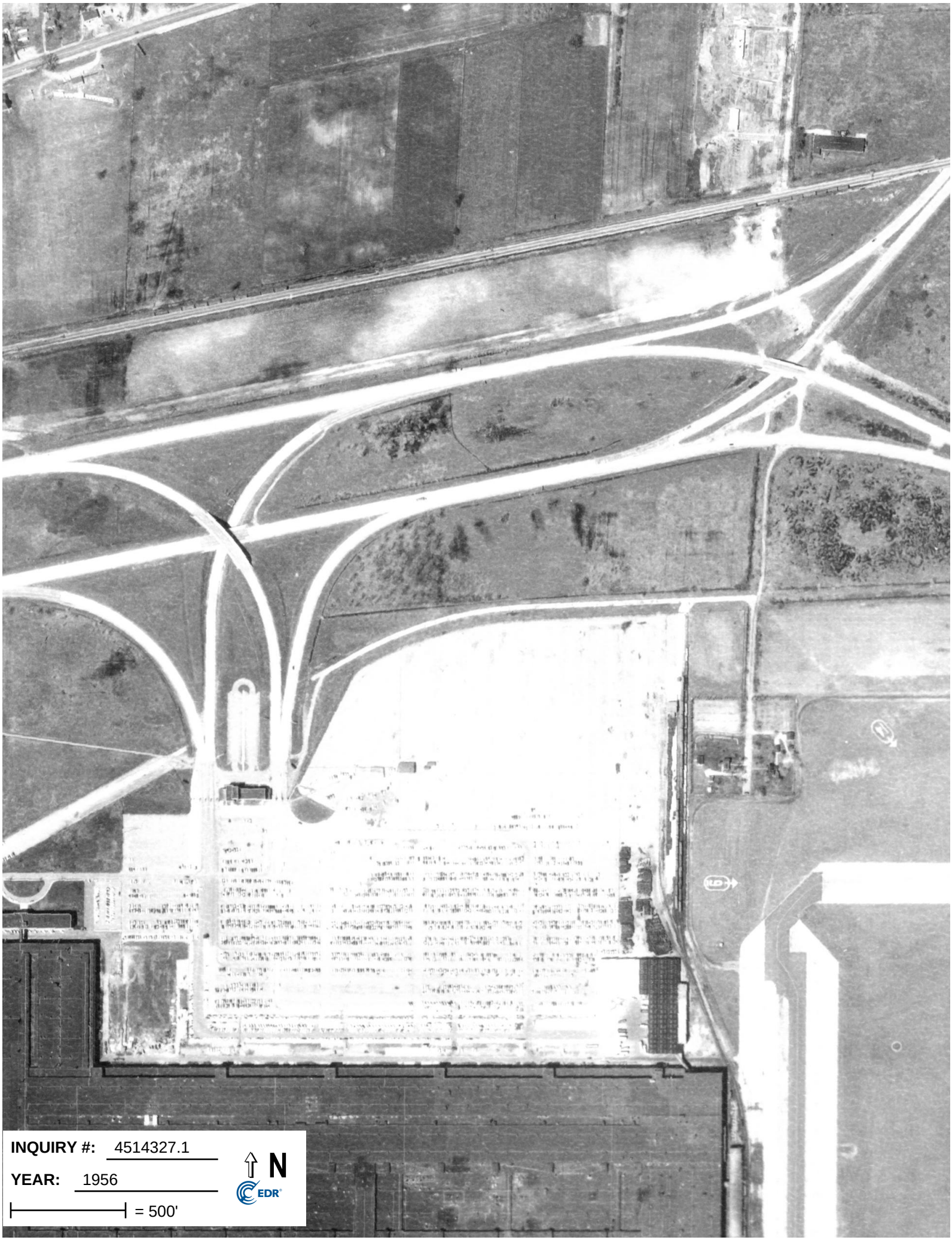
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YEAR: 1956

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EDR



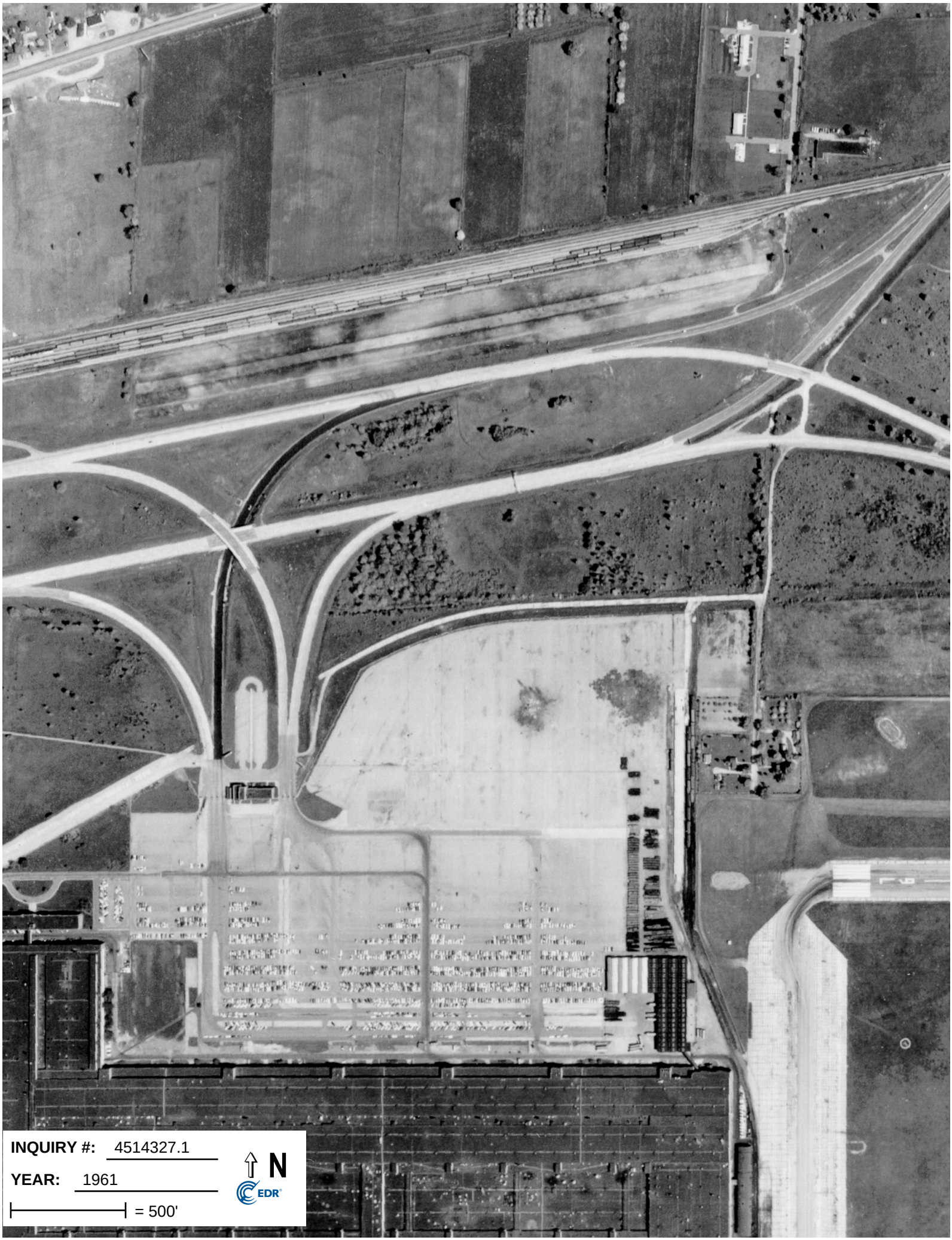
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EDR


INQUIRY #: 4514327.1
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N
EDR



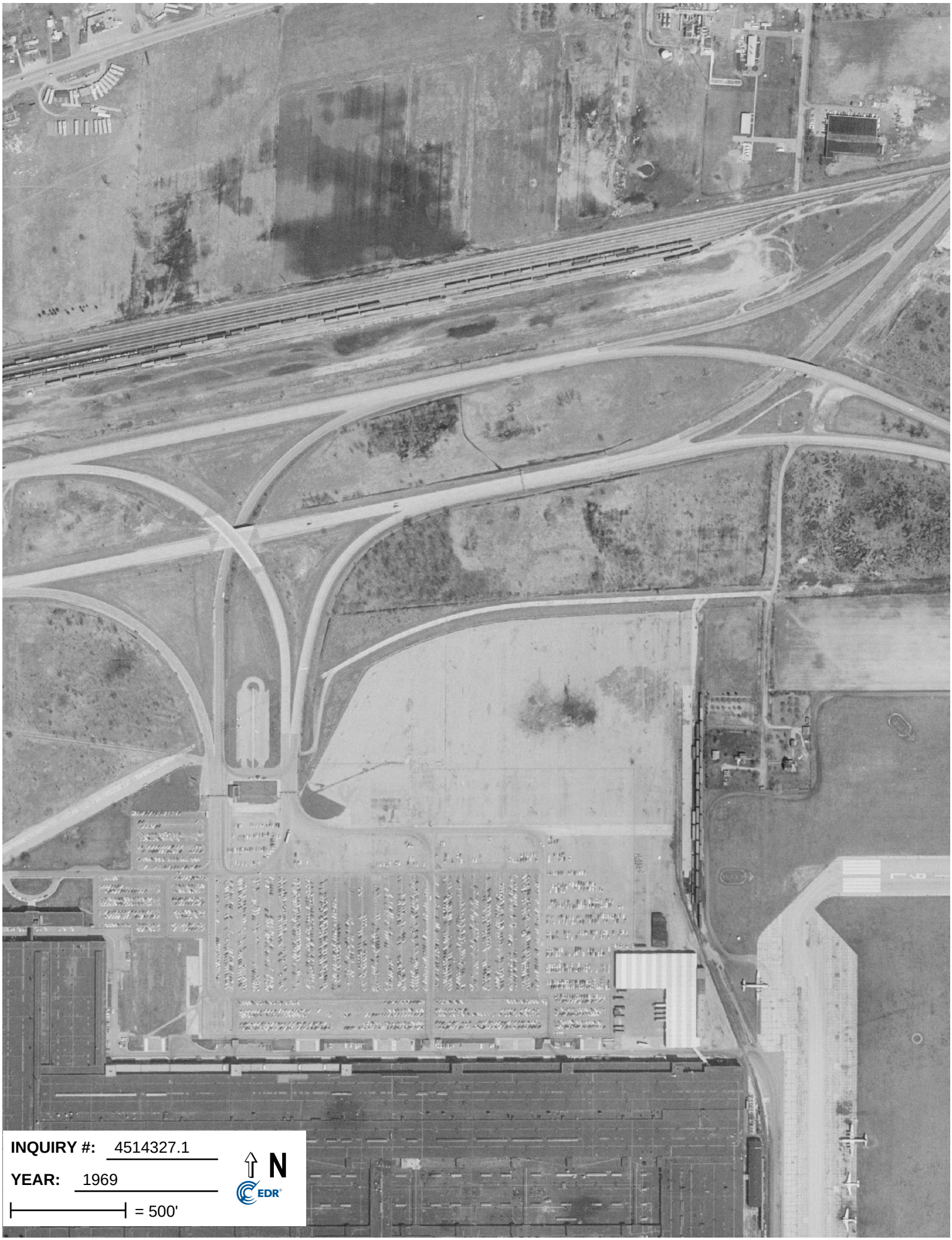
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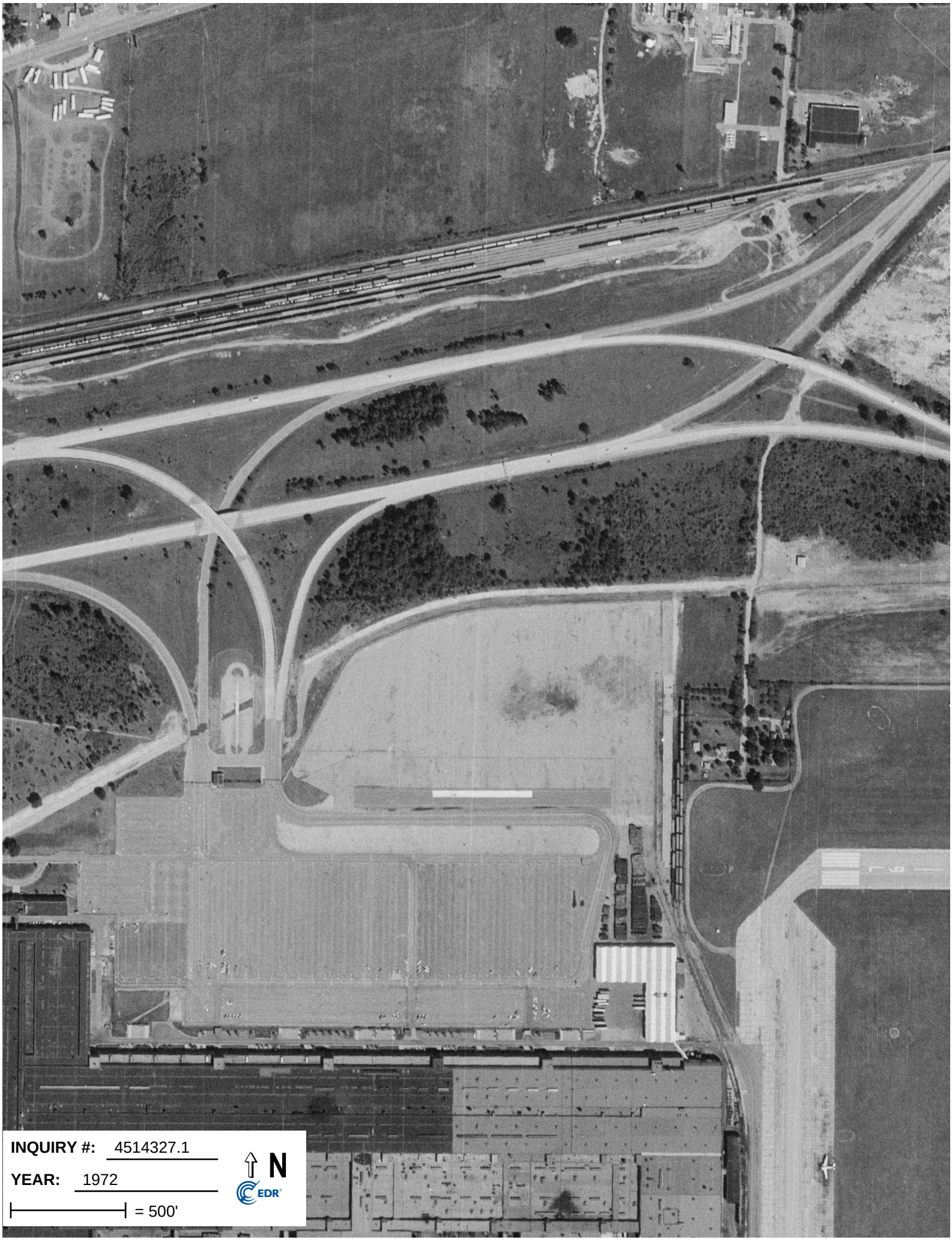
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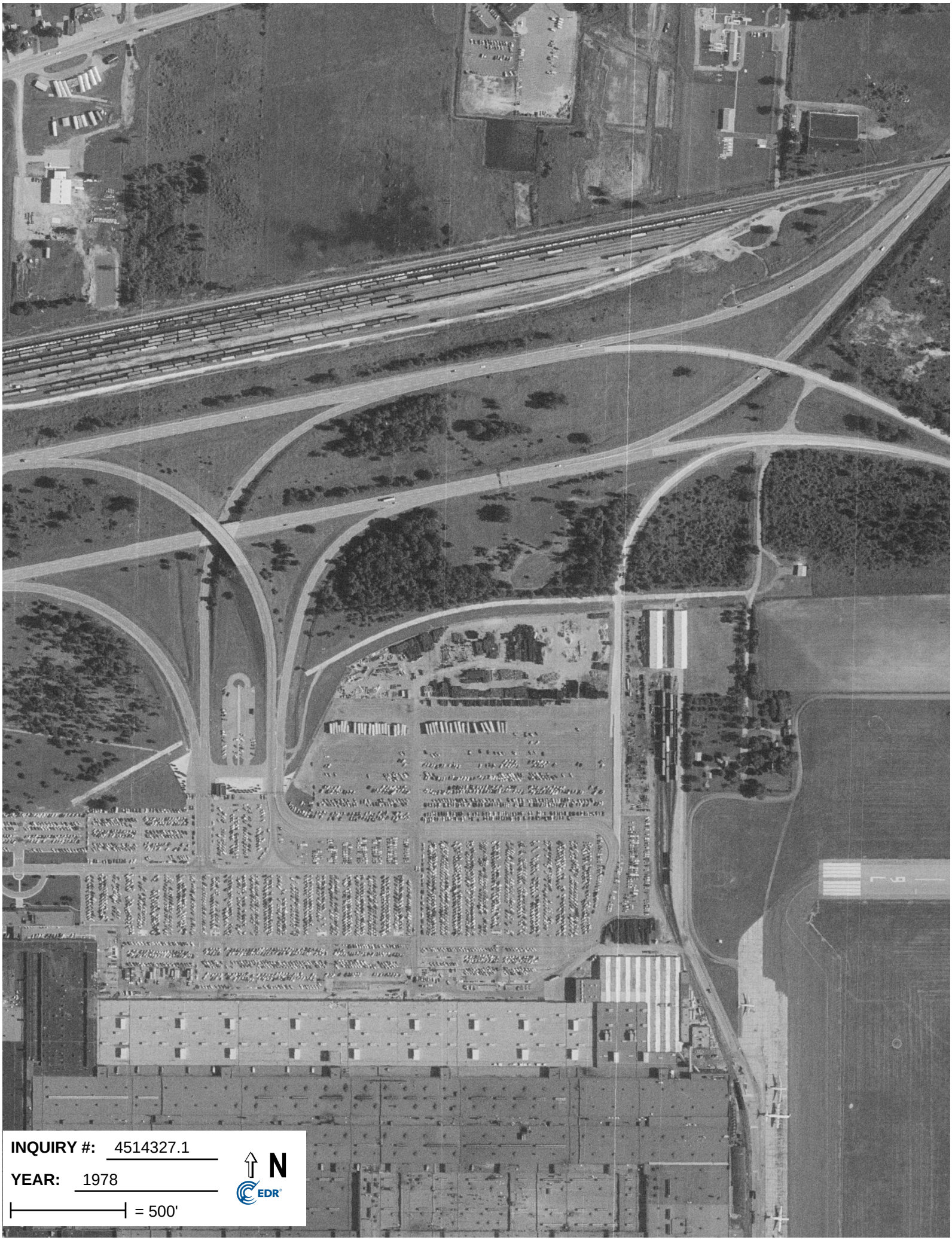
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EDR


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EDR


INQUIRY #: 4514327.1
YEAR: 1972
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EDR


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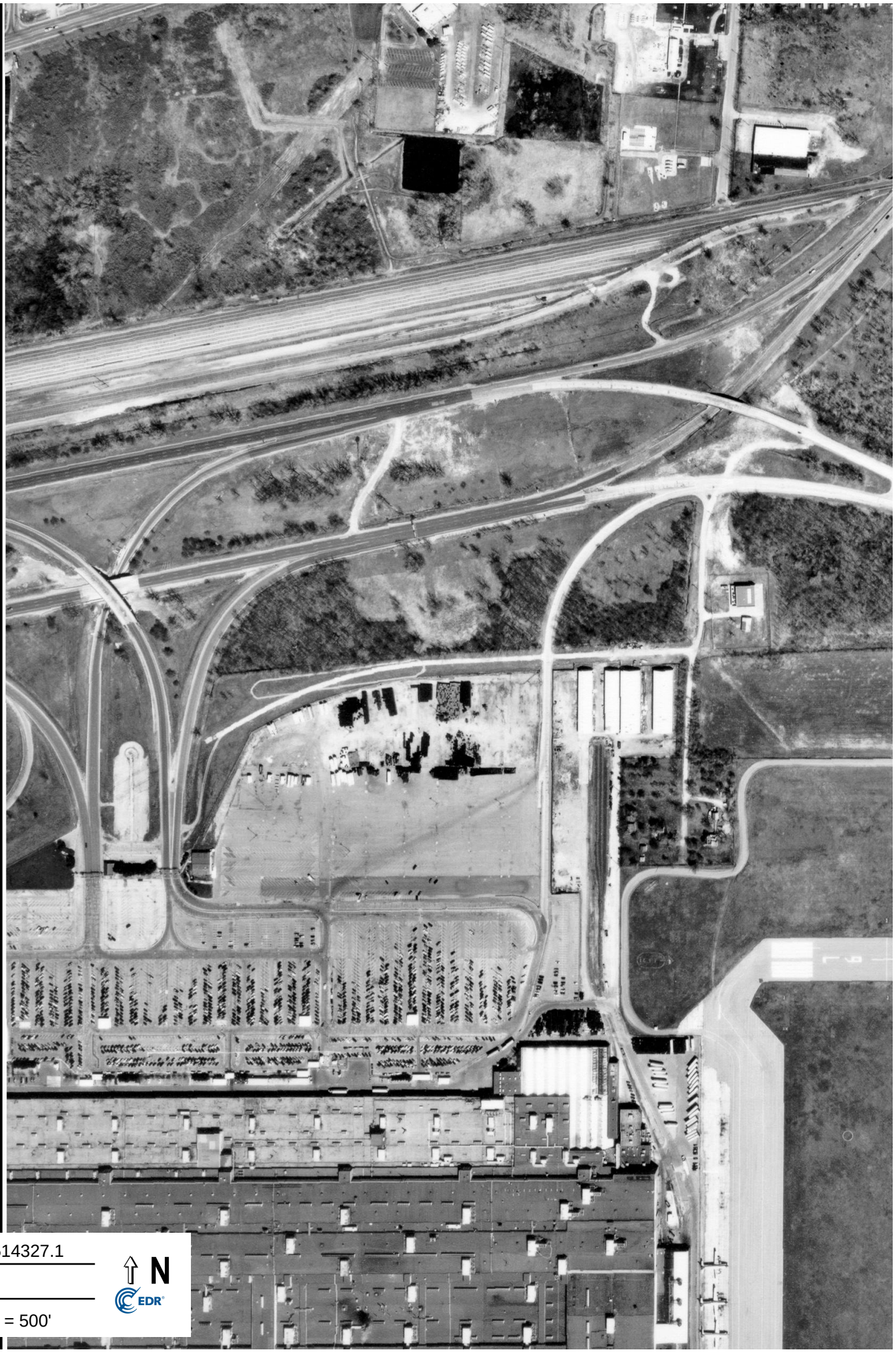

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EDR


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= 500'
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N
EDR


INQUIRY #: 4514327.1
YEAR: 1987
= 500'
N
EDR


INQUIRY #: 4514322.1
YEAR: 1997
= 500'
N
EDR



INQUIRY #: 4514327.1

YEAR: 1997

= 500'

N

EDR


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EDR

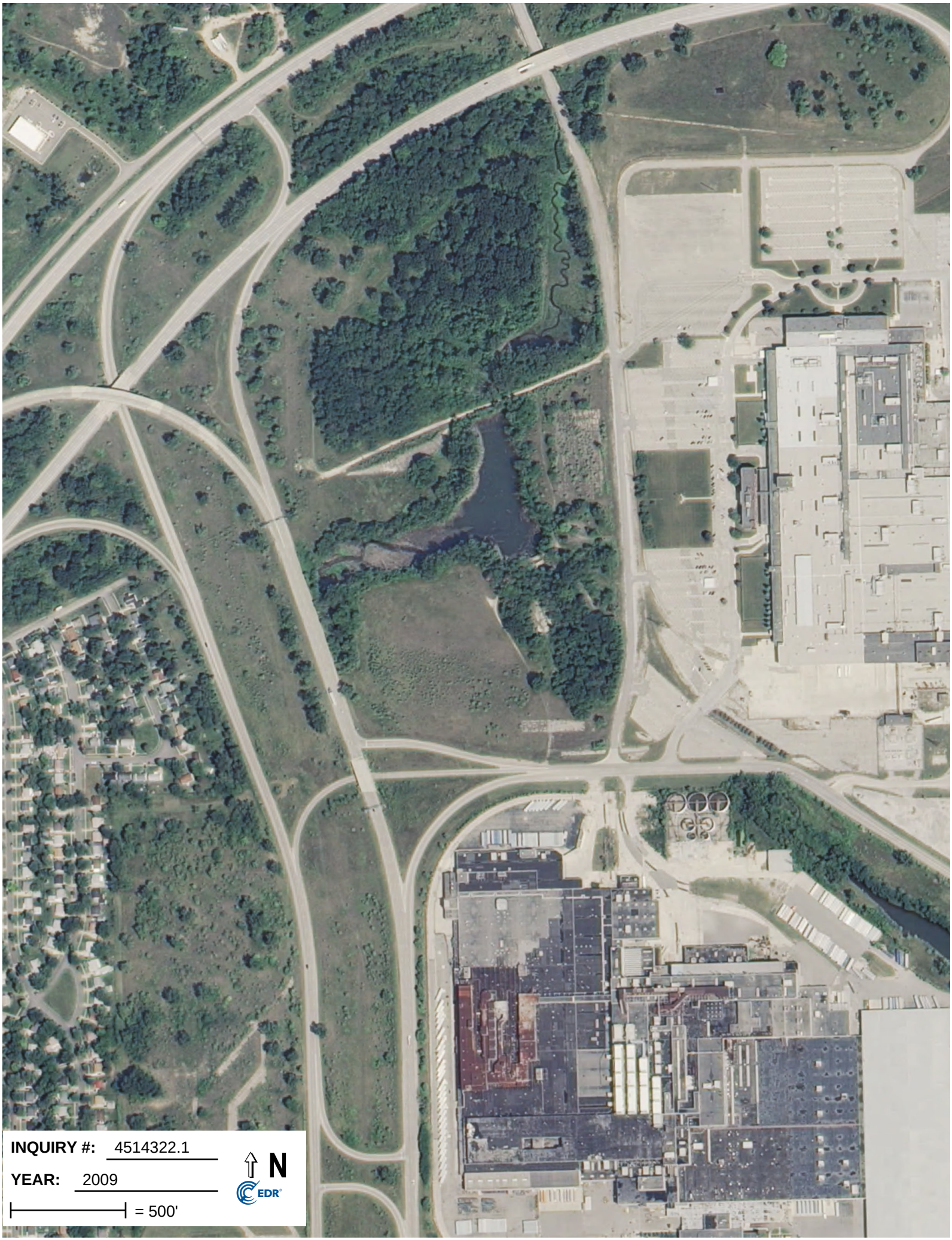

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EDR


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EDR

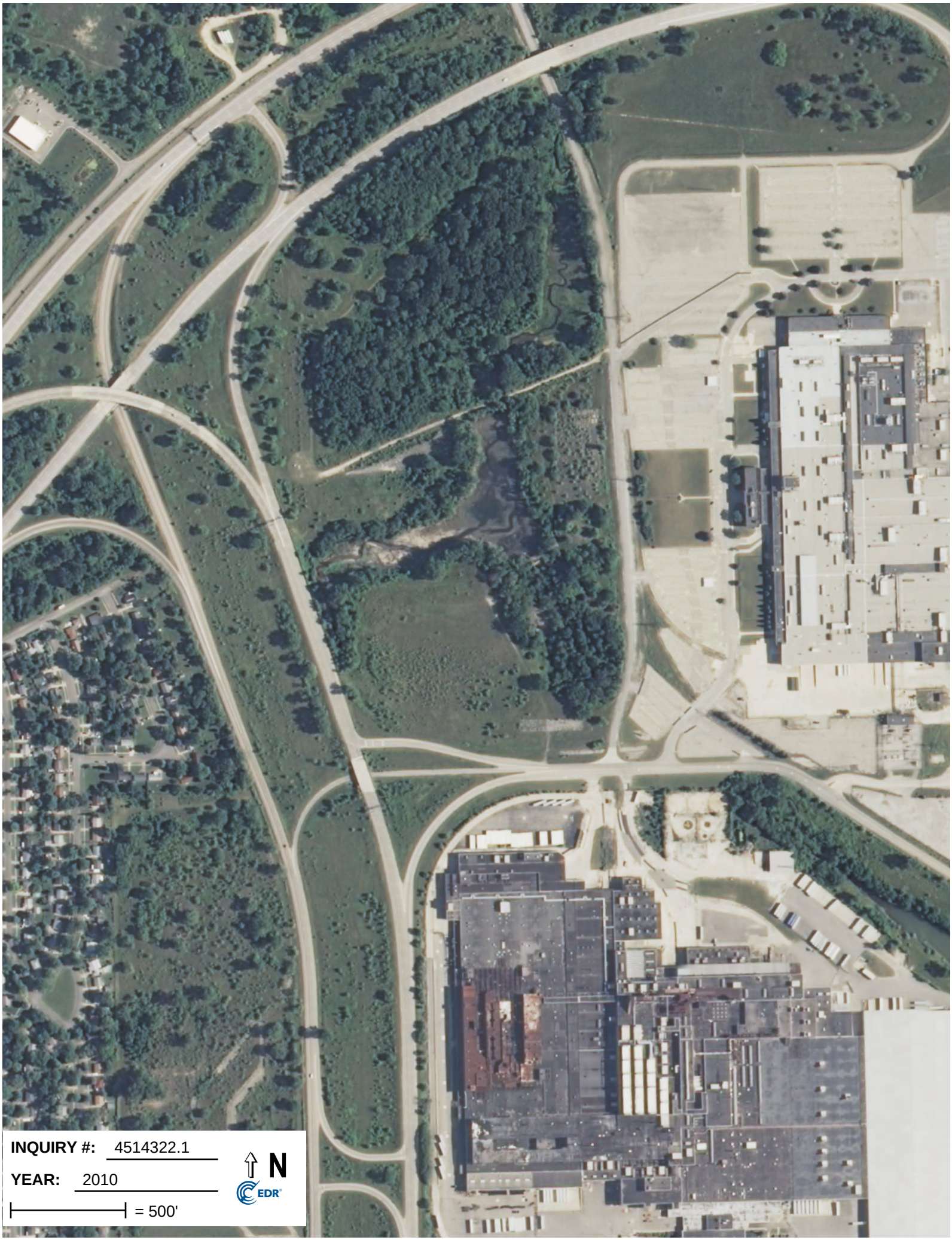

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EDR


INQUIRY #: 4514322.1
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YEAR: 2006
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EDR


INQUIRY #: 4514322.1
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 4514327.1
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 4514322.1
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4514327.1
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4514322.1
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 4514327.1
YEAR: 2012
= 500'
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EDR

Attachment B
Aerial Photo (taken between 1942 and 1945)

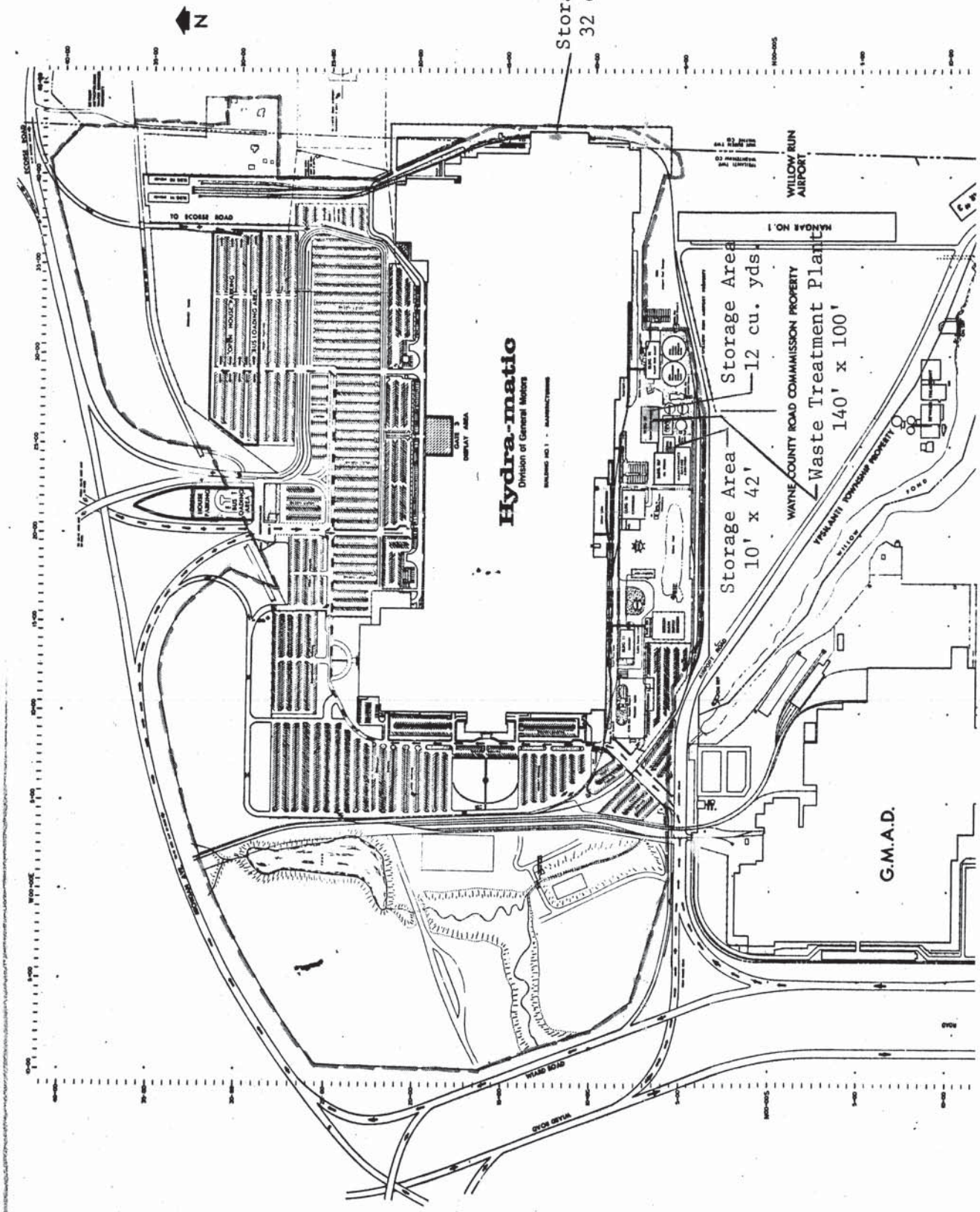



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Attachment C
Figure from Part A TSDF Permit

Form Approved OMB No. 158-S80004 424

V. FACILITY DRAWING *(see page 4)*



Attachment D
March 2016 Analytical Data Table and Sample Location Figure

BEYER DRAIN

DRAIN 382.44'

656.29'

GHD-1024SB

GHD-1025SB

APPROXIMATE EXTENT OF UNDERGROUND BUNKER

GHD-1026SB

PARCEL I

GHD-1027SB

GHD-1028SB

25 29 38

20 FT WATER MAIN EASEMENT #14

PROPERTY LINE

BEYER DRAIN

LEGEND

- PROPERTY BOUNDARY
- EXISTING STORM SEWER
- EXISTING WATER
- 2014 WATER MAIN
- 25 ADAMS AND SON EASEMENT DRAWING
- EXISTING UTILITIES
- PARCEL AREA
- GHD-1027SB EXISTING SOIL BORINGS

0 60 120ft

FORMER POWERTRAIN PLANT
YPSILANTI, MICHIGAN
REDEVELOPMENT SUPPORT

OUT-PARCEL I

017358-T01

Jun 15, 2016

FIGURE D-1

CAD File: I:\drawings\17000s\17358\17358-MEMO\017358-T01(MEMO159)\017358-T01(MEMO159)GN\017358-T01(MEMO159)GN-DE002.dwg

Sample Location:		***MDEQ Generic Cleanup Criteria: Residential and Nonresidential*** [1]											
Sample Identification:		Site											
Sample Date:		Background	Drinking Water	NR Drinking Water	Groundwater Surface Water	Soil Volatilization to Indoor Air	NR Soil Volatilization to Indoor Air	Infinite Source Volatile Soil	NR Infinite Source Volatile Soil	Finite VSIC for 5 Meter Source	NR Finite VSIC for 5 Meter Source	Finite VSIC for 2 Meter Source	NR Finite VSIC for 2 Meter Source	Particulate Soil Inhalation
Sample Type:		Levels [2]	Protection	Protection	Interface Protection	Inhalation	Inhalation	Inhalation	Inhalation	Thickness	Thickness	Thickness	Thickness	
Exceedance Superscript/Sample Depth:	***Units***	a	b	c	d	e	f	g	h	i	j	k	l	m
Volatile Organic Compounds (VOCs)														
1,1,1-Trichloroethane	mg/kg		4	4	1.8	250	460	3800	4500	12000	15000	28000	31000	67000000
1,1,2,2-Tetrachloroethane	mg/kg		0.17	0.7	1.6	4.3	23	10	34	10	34	14	34	54000
1,1,2-Trichloroethane	mg/kg		0.1	0.1	6.6	4.6	24	17	57	21	57	44	120	190000
1,1-Dichloroethane	mg/kg		18	50	15	230	430	2100	2500	5900	6000	14000	14000	33000000
1,1-Dichloroethene	mg/kg		0.14	0.14	2.6	0.062	0.33	1.1	3.7	5.3	15	13	37	62000
1,2,4-Trichlorobenzene	mg/kg		4.2	4.2	5.9	9600	18000	28000	34000	28000	34000	28000	34000	25000000
1,2-Dibromo-3-chloropropane (DI	mg/kg		0.01	0.01	ID	0.22	1.2	0.26	0.9	0.26	0.9	0.26	0.9	560
1,2-Dibromoethane (Ethylene dib	mg/kg		0.02	0.02	0.11	0.67	3.6	1.7	5.8	1.7	5.8	3.3	9.8	14000
1,2-Dichlorobenzene	mg/kg		14	14	0.28	11000	20000	39000	46000	39000	46000	52000	55000	100000000
1,2-Dichloroethane	mg/kg		0.1	0.1	7.2	2.1	11	6.2	21	11	33	26	74	120000
1,2-Dichloropropane	mg/kg		0.1	0.1	4.6	4	7.4	25	30	50	51	110	120	270000
1,3-Dichlorobenzene	mg/kg		0.17	0.48	0.68	26	48	79	94	79	94	110	110	200000
1,4-Dichlorobenzene	mg/kg		1.7	1.7	0.36	19	100	77	260	77	260	110	340	450000
2-Butanone (Methyl ethyl ketone)	mg/kg		260	760	44	54000	99000	29000	35000	29000	35000	35000	36000	67000000
2-Hexanone	mg/kg		20	58	ID	990	1800	1100	1300	1100	1300	1400	1500	2700000
4-Methyl-2-pentanone (Methyl isc	mg/kg		36	100	ID	37000	69000	45000	53000	45000	53000	67000	70000	140000000
Acetone	mg/kg		15	42	34	290000	540000	130000	160000	130000	160000	190000	200000	390000000
Benzene	mg/kg		0.1	0.1	4	1.6	8.4	13	45	34	99	79	230	380000
Bromodichloromethane	mg/kg		1.6	1.6	ID	1.2	6.4	9.1	31	9.7	31	19	57	84000
Bromoform	mg/kg		1.6	1.6	ID	150	770	900	3100	900	3100	900	3100	2800000
Bromomethane (Methyl bromide)	mg/kg		0.2	0.58	0.7	0.86	1.6	11	13	57	57	140	140	330000
Carbon disulfide	mg/kg		16	46	ID	76	140	1300	1600	7900	8000	19000	19000	47000000
Carbon tetrachloride	mg/kg		0.1	0.1	0.9	0.19	0.99	3.5	12	12	34	28	79	130000
Chlorobenzene	mg/kg		2	2	0.5	120	220	770	920	990	1100	2100	2100	4700000
Chloroethane	mg/kg		8.6	34	22	2900	5300	30000	36000	120000	120000	280000	280000	670000000
Chloroform (Trichloromethane)	mg/kg		1.6	1.6	7	7.2	38	45	150	120	340	270	790	1300000
Chloromethane (Methyl chloride)	mg/kg		5.2	22	ID	2.3	10	40	120	410	1000	1000	2500	4900000
cis-1,2-Dichloroethene	mg/kg		1.4	1.4	12	22	41	180	210	420	430	990	1000	2300000
cis-1,3-Dichloropropene	mg/kg													
Cyclohexane	mg/kg													
Dibromochloromethane	mg/kg		1.6	1.6	ID	3.9	21	24	80	24	80	33	98	130000
Dichlorodifluoromethane (CFC-12	mg/kg		95	270	ID	900	1700	53000	63000	550000	550000	1400000	1400000	3300000000
Ethylbenzene	mg/kg		1.5	1.5	0.36	87	460	720	2400	1000	3100	2200	6500	10000000
Isopropyl benzene	mg/kg		91	260	3.2	400	730	1700	2000	1700	2000	2800	3000	5800000
Methyl acetate	mg/kg													
Methyl cyclohexane	mg/kg													
Methyl tert butyl ether (MTBE)	mg/kg		0.8	0.8	140	9900	18000	25000	30000	39000	41000	87000	89000	200000000
Methylene chloride	mg/kg		0.1	0.1	30	45	240	210	700	590	1700	1400	4000	6600000
Styrene	mg/kg		2.7	2.7	2.1	250	1600	970	3300	970	3300	1400	4200	5500000
Tetrachloroethene	mg/kg		0.1	0.1	1.2	11	21	170	210	480	490	1100	1100	2700000
Toluene	mg/kg		16	16	5.4	330	610	2800	3300	5100	36000	12000	36000	27000000
trans-1,2-Dichloroethene	mg/kg		2	2	30	23	43	280	330	830	840	2000	2000	4700000
trans-1,3-Dichloropropene	mg/kg													
Trichloroethene	mg/kg		0.1	0.1	4	1.0	1.9	11	14	25	25	57	58	130000
Trichlorofluoromethane (CFC-11)	mg/kg		52	150		2800	5100	92000	110000	630000	140000000	1500000	140000000	3800000000
Trifluorotrichloroethane (CFC-113	mg/kg		9000	9000	1.7	5100	9300	180000	210000	880000	890000	2100000	2100000	5100000000
Vinyl chloride	mg/kg		0.04	0.04	0.26	0.27	2.8	4.2	29	30	170	73	420	350000

Sample Location:		***MDEQ Generic Cleanup Criteria: Residential and Nonresidential*** [1]											
Sample Identification:		Site											
Sample Date:		Background	Drinking Water	NR Drinking Water	Groundwater Surface Water	Soil Volatilization to Indoor Air	NR Soil Volatilization to Indoor Air	Infinite Source Volatile Soil	NR Infinite Source Volatile Soil	Finite VSIC for 5 Meter Source	NR Finite VSIC for 5 Meter Source	Finite VSIC for 2 Meter Source	NR Finite VSIC for 2 Meter Source	Particulate
Sample Type:		Levels [2]	Protection	Protection	Interface Protection	Inhalation	Inhalation	Inhalation	Inhalation	Thickness	Thickness	Thickness	Thickness	Soil Inhalation
Exceedance Superscript/Sample Depth:	***Units***	a	b	c	d	e	f	g	h	i	j	k	l	m
Xylenes (total)	mg/kg		5.6	5.6	0.82	6300	12000	46000	54000	61000	65000	130000	130000	290000000
Semi-Volatile Organic Compounds (SVOCs)														
2,2'-Oxybis(1-chloropropane) (bis	mg/kg													
2,4,5-Trichlorophenol	mg/kg		39	110		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	23000000
2,4,6-Trichlorophenol	mg/kg		2.4	9.4	0.33	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1000000
2,4-Dichlorophenol	mg/kg		1.5	4.2	0.33	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	5100000
2,4-Dimethylphenol	mg/kg		7.4	20	7.6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	4700000
2,4-Dinitrophenol	mg/kg													
2,4-Dinitrotoluene	mg/kg		0.43	0.64		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	16000
2,6-Dinitrotoluene	mg/kg													
2-Chloronaphthalene	mg/kg		620	1800		ID	ID	ID	ID	ID	ID	ID	ID	ID
2-Chlorophenol	mg/kg		0.9	2.6	0.36	430	800	960	1100	960	1100	960	1100	1200000
2-Methylnaphthalene	mg/kg		57	170	4.2	2700	4900	1500	1800	1500	1800	1500	1800	670000
2-Methylphenol	mg/kg		7.4	20	1	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000
2-Nitroaniline	mg/kg													
2-Nitrophenol	mg/kg		0.4	1.2	ID	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
3&4-Methylphenol	mg/kg		7.4	20	1	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000
3,3'-Dichlorobenzidine	mg/kg		2	2	2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6500
3-Nitroaniline	mg/kg													
4,6-Dinitro-2-methylphenol	mg/kg		0.83	0.83		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	130000
4-Bromophenyl phenyl ether	mg/kg													
4-Chloro-3-methylphenol	mg/kg		5.8	16	0.28	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
4-Chloroaniline	mg/kg													
4-Chlorophenyl phenyl ether	mg/kg													
4-Nitroaniline	mg/kg													
4-Nitrophenol	mg/kg													
Acenaphthene	mg/kg		300	880	8.7	190000	350000	81000	97000	81000	97000	81000	97000	14000000
Acenaphthylene	mg/kg		5.9	17	ID	1600	3000	2200	2700	2200	2700	2200	2700	2300000
Acetophenone	mg/kg		30	88	ID	120000	210000	44000	52000	44000	52000	44000	52000	33000000
Anthracene	mg/kg		41	41	ID	1000000	1000000	1400000	1600000	1400000	1600000	1400000	1600000	67000000
Atrazine	mg/kg		0.06	0.06	0.15	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Benzaldehyde	mg/kg													
Benzo(a)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Benzo(a)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1500
Benzo(b)fluoranthene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	ID	ID	ID	ID
Benzo(g,h,i)perylene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	800000
Benzo(k)fluoranthene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Biphenyl (1,1-Biphenyl)	mg/kg													
bis(2-Chloroethoxy)methane	mg/kg													
bis(2-Chloroethyl)ether	mg/kg		0.10	0.17	0.1	8.3	44	3.8	13	3.8	13	3.8	13	9400
bis(2-Ethylhexyl)phthalate (DEHF	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	700000
Butyl benzylphthalate (BBP)	mg/kg		2200	5600	120	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	47000000
Caprolactam	mg/kg		120	340		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	670000
Carbazole	mg/kg		9.4	39	1.1	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	62000
Chrysene	mg/kg		NLL	NLL	NLL	ID	ID	ID	ID	ID	ID	ID	ID	ID
Dibenz(a,h)anthracene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Dibenzofuran	mg/kg		ID	ID	1.7	2000	3600	130	160	130	160	130	160	6700

Sample Location:		***MDEQ Generic Cleanup Criteria: Residential and Nonresidential*** [1]												
Sample Identification:		Site												
Sample Date:		Background	Drinking Water	NR Drinking Water	Groundwater Surface Water	Soil Volatilization to Indoor Air	NR Soil Volatilization to Indoor Air	Infinite Source Volatile Soil	NR Infinite Source Volatile Soil	Finite VSIC for 5 Meter Source	NR Finite VSIC for 5 Meter Source	Finite VSIC for 2 Meter Source	NR Finite VSIC for 2 Meter Source	Particulate Soil Inhalation
Sample Type:		Levels [2]	Protection	Protection	Interface Protection	Inhalation	Inhalation	Inhalation	Inhalation	Thickness	Thickness	Thickness	Thickness	
Exceedance Superscript/Sample Depth:	***Units***	a	b	c	d	e	f	g	h	i	j	k	l	m
Diethyl phthalate	mg/kg		110	320	2.2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000
Dimethyl phthalate	mg/kg		1500	4200		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000
Di-n-butylphthalate (DBP)	mg/kg		960	2700	11	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000
Di-n-octyl phthalate (DnOP)	mg/kg		100000	290000	ID	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	31000000
Fluoranthene	mg/kg		730	730	5.5	1000000	1000000	740000	890000	740000	880000	740000	880000	9300000
Fluorene	mg/kg		390	890	5.3	580000	1000000	130000	150000	130000	150000	130000	150000	9300000
Hexachlorobenzene	mg/kg		1.8	1.8	0.35	41	220	17	56	17	56	17	56	6800
Hexachlorobutadiene	mg/kg		26	72	0.091	130	710	130	460	130	460	130	460	140000
Hexachlorocyclopentadiene	mg/kg		320	320	ID	30	56	50	60	50	60	50	60	13000
Hexachloroethane	mg/kg		0.43	1.2	1.8	40	79	550	660	930	1400	930	1400	230000
Indeno(1,2,3-cd)pyrene	mg/kg		NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Isophorone	mg/kg		15	62	26	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	12000000
Naphthalene	mg/kg		35	100	0.73	250	470	300	350	300	350	300	350	200000
Nitrobenzene	mg/kg		0.33	0.33	3.6	91	170	54	64	54	64	54	64	47000
N-Nitrosodi-n-propylamine	mg/kg		0.33	0.33		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1600
N-Nitrosodiphenylamine	mg/kg		5.4	22		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	2200000
Pentachlorophenol	mg/kg		0.022	0.022	27	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	100000
Phenanthrene	mg/kg		56	160	2.1	2800	5100	160	190	160	190	160	190	6700
Phenol	mg/kg		88	260	9	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	40000000
Pyrene	mg/kg		480	480	ID	1000000	1000000	650000	780000	650000	780000	650000	780000	6700000
PCBs														
Aroclor-1016 (PCB-1016)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1221 (PCB-1221)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1232 (PCB-1232)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1242 (PCB-1242)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1248 (PCB-1248)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1254 (PCB-1254)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1260 (PCB-1260)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1262 (PCB-1262)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Aroclor-1268 (PCB-1268)	mg/kg		NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200
Metals														
Aluminum	mg/kg	5788	1	1		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Antimony	mg/kg	0.024	4.3	4.3	94	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000
Arsenic	mg/kg	7.26	4.6	4.6	4.6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	720
Barium	mg/kg	25.6	1300	1300	1200	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	330000
Beryllium	mg/kg	0.196	51	51	950	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1300
Cadmium	mg/kg	0.098	6	6	7.30	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1700
Calcium	mg/kg													
Chromium	mg/kg	11.9	1000000	1000000	6600000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	330000
Cobalt	mg/kg	4.38	0.8	2	2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000
Copper	mg/kg	13.0	5800	5800	170	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	130000
Iron	mg/kg	13484	6	6		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Lead	mg/kg	7.14	700	700	11000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	100000
Magnesium	mg/kg		8000	22000		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000
Manganese	mg/kg	348	1	1	130	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300

Sample Location:		***MDEQ Generic Cleanup Criteria: Residential and Nonresidential*** [(1)]												
Sample Identification:		Site												
Sample Date:		Background	Drinking Water	NR Drinking Water	Groundwater Surface Water	Soil Volatilization to Indoor Air	NR Soil Volatilization to Indoor Air	Infinite Source Volatile Soil	NR Infinite Source Volatile Soil	Finite VSIC for 5 Meter Source	NR Finite VSIC for 5 Meter Source	Finite VSIC for 2 Meter Source	NR Finite VSIC for 2 Meter Source	Particulate Soil Inhalation
Sample Type:		Levels [(2)]	Protection	Protection	Interface Protection	Inhalation	Inhalation	Inhalation	Inhalation	Thickness	Thickness	Thickness	Thickness	
Exceedance Superscript/Sample Depth:		a	b	c	d	e	f	g	h	i	j	k	l	m
Units														
Mercury	mg/kg	0.05	1.7	1.7	0.05	48	89	52	62	52	62	52	62	20000
Nickel	mg/kg	11.90	100	100	170	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000
Potassium	mg/kg													
Selenium	mg/kg	0.83	4	4	0.4	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	130000
Silver	mg/kg	0.09	4.5	13	0.1	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700
Sodium	mg/kg		4600	7000		NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Thallium	mg/kg	0.12	2.3	2.3	4.2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000
Vanadium	mg/kg	16.7	72	990	430	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID
Zinc	mg/kg	32	2400	5000	380	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID

Notes:

NR - Nonresidential
BGS - below ground surface
U - Not detected at the associated reporting limit.
J - Estimated concentration.
NLV - not likely to volatilize under most conditions
NLL - not likely to leach under most soil conditions
ID - insufficient data to develop criterion

superscript - indicates concentration above site specific background and screening criteria
(1) MDEQ Generic cleanup criteria for residential and nonresidential category, administrative rule **R 299.46 and R 299.48,** respectively, effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended
(2) Site-Specific Background Level calculations and background information presented in the Site 2013 RCRA Facility Investigation Report

Sample Location:						***GHD-1024SB***	***GHD-1024SB***	***GHD-1025SB***	***GHD-1025SB***	***GHD-1026SB***	***GHD-1026SB***	***GHD-1027SB***	***GHD-1027SB***
Sample Identification:		NR Particulate	Direct	NR Direct	Soil Saturation	***S-17358-033016-BW-001***	***S-17358-033016-BW-002***	***S-17358-033016-BW-003***	***S-17358-033016-BW-004***	***S-17358-033016-BW-005***	***S-17358-033016-BW-006***	***S-17358-033016-BW-007***	***S-17358-033016-BW-008***
Sample Date:		Soil Inhalation	Contact	Contact	Concentration	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***
Sample Type:					Screening Levels								
Exceedance Superscript/Sample Depth:	***Units***	n	o	p	q	***(0-2.5) ft BGS***	***(7-9) ft BGS***	***(0-2.5) ft BGS***	***(14-15) ft BGS***	***(0-2.5) ft BGS***	***(9-11) ft BGS***	***(0-2.5) ft BGS***	***(8-10) ft BGS***
Volatile Organic Compounds (VOCs)													
1,1,1-Trichloroethane	mg/kg	29000000	500000	1000000	460	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
1,1,2,2-Tetrachloroethane	mg/kg	68000	53	240	870	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
1,1,2-Trichloroethane	mg/kg	250000	180	840	920	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
1,1-Dichloroethane	mg/kg	15000000	27000	87000	890	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
1,1-Dichloroethene	mg/kg	78000	200	660	570	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
1,2,4-Trichlorobenzene	mg/kg	11000000	990	5800	1100	0.064 J	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
1,2-Dibromo-3-chloropropane (DI	mg/kg	700	4400	20000	1.2	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
1,2-Dibromoethane (Ethylene dib	mg/kg	18000	0.092	0.43	890	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
1,2-Dichlorobenzene	mg/kg	44000000	19000	63000	210	0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
1,2-Dichloroethane	mg/kg	150000	91	420	1200	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
1,2-Dichloropropane	mg/kg	120000	140	660	550	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
1,3-Dichlorobenzene	mg/kg	8800	200	660	170	0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
1,4-Dichlorobenzene	mg/kg	570000	400	1900		0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
2-Butanone (Methyl ethyl ketone)	mg/kg	29000000	120000	700000	27000	1.1 U	0.7 U	0.83 U	0.9 U	0.85 U	0.78 U	0.73 U	0.81 U
2-Hexanone	mg/kg	1200000	32000	100000	2500	3.6 U	2.3 U	2.8 U	3 U	2.8 U	2.6 U	2.4 U	2.7 U
4-Methyl-2-pentanone (Methyl isc	mg/kg	60000000	56000	180000	2700	3.6 U	2.3 U	2.8 U	3 U	2.8 U	2.6 U	2.4 U	2.7 U
Acetone	mg/kg	170000000	23000	73000	110000	1.1 U	0.7 U	0.83 U	0.9 U	0.85 U	0.78 U	0.73 U	0.81 U
Benzene	mg/kg	470000	180	840	400	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Bromodichloromethane	mg/kg	110000	110	490	1500	0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
Bromoform	mg/kg	3600000	820	3800	870	0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
Bromomethane (Methyl bromide)	mg/kg	150000	320	1000	2200	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
Carbon disulfide	mg/kg	21000000	7200	43000	280	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
Carbon tetrachloride	mg/kg	170000	96	440	390	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Chlorobenzene	mg/kg	2100000	4300	14000	260	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Chloroethane	mg/kg	290000000	2600	12000	950	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
Chloroform (Trichloromethane)	mg/kg	1600000	1200	5500	1500	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Chloromethane (Methyl chloride)	mg/kg	2600000	1600	7400	1100	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
cis-1,2-Dichloroethene	mg/kg	1000000	2500	8000	640	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
cis-1,3-Dichloropropene	mg/kg					0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Cyclohexane	mg/kg					1.7 U	1.1 U	1.3 U	1.4 U	1.4 U	1.3 U	1.2 U	1.3 U
Dibromochloromethane	mg/kg	160000	110	500	610	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Dichlorodifluoromethane (CFC-12	mg/kg	1500000000	52000	17000	1000	0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
Ethylbenzene	mg/kg	13000000	22000	71000	140	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Isopropyl benzene	mg/kg	2600000	25000	80000	390	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
Methyl acetate	mg/kg					0.21 J	0.072 J	1.3 U	1.4 U	0.13 J	1.3 U	1.2 U	0.23 J
Methyl cyclohexane	mg/kg					1.7 U	1.1 U	1.3 U	1.4 U	1.4 U	1.3 U	1.2 U	1.3 U
Methyl tert butyl ether (MTBE)	mg/kg	88000000	1500	7100	5900	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
Methylene chloride	mg/kg	8300000	1300	5800	2300	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
Styrene	mg/kg	6900000	400	1900	520	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Tetrachloroethene	mg/kg	1200000	200	930	88	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Toluene	mg/kg	12000000	50000	160000	250	0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
trans-1,2-Dichloroethene	mg/kg	2100000	3800	12000	1400	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
trans-1,3-Dichloropropene	mg/kg					0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Trichloroethene	mg/kg	59000	110	660	500	0.073 U	0.047 U	0.056 U	0.06 U	0.057 U	0.052 U	0.048 U	0.054 U
Trichlorofluoromethane (CFC-11)	mg/kg	1700000000	79000	260000	560	0.15 U	0.094 U	0.11 U	0.12 U	0.11 U	0.1 U	0.097 U	0.11 U
Trifluorotrichloroethane (CFC-113	mg/kg	2300000000	1000000	1000000	550	0.36 U	0.23 U	0.28 U	0.3 U	0.28 U	0.26 U	0.24 U	0.27 U
Vinyl chloride	mg/kg	890000	3.8	34	490	0.058 U	0.038 U	0.045 U	0.048 U	0.045 U	0.042 U	0.039 U	0.043 U

Sample Location:						***GHD-1024SB***	***GHD-1024SB***	***GHD-1025SB***	***GHD-1025SB***	***GHD-1026SB***	***GHD-1026SB***	***GHD-1027SB***	***GHD-1027SB***
Sample Identification:		NR Particulate	Direct	NR Direct	Soil Saturation	***S-17358-033016-BW-001***	***S-17358-033016-BW-002***	***S-17358-033016-BW-003***	***S-17358-033016-BW-004***	***S-17358-033016-BW-005***	***S-17358-033016-BW-006***	***S-17358-033016-BW-007***	***S-17358-033016-BW-008***
Sample Date:		Soil Inhalation	Contact	Contact	Concentration	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***
Sample Type:					Screening Levels								
Exceedance Superscript/Sample Depth:	***Units***	n	o	p	q	***(0-2.5) ft BGS***	***(7-9) ft BGS***	***(0-2.5) ft BGS***	***(14-15) ft BGS***	***(0-2.5) ft BGS***	***(9-11) ft BGS***	***(0-2.5) ft BGS***	***(8-10) ft BGS***
Xylenes (total)	mg/kg	130000000	410000	1000000	150	0.22 U	0.14 U	0.17 U	0.18 U	0.17 U	0.16 U	0.15 U	0.16 U
Semi-Volatile Organic Compounds (SVOC													
2,2'-Oxybis(1-chloropropane) (bis	mg/kg					0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2,4,5-Trichlorophenol	mg/kg	10000000	23000	73000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2,4,6-Trichlorophenol	mg/kg	1300000	710	3300		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2,4-Dichlorophenol	mg/kg	2300000	660	3900	1800	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2,4-Dimethylphenol	mg/kg	2100000	11000	36000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2,4-Dinitrophenol	mg/kg					0.18 U	0.16 U	0.18 U	0.17 U	0.17 U	0.16 U	0.16 U	0.16 U
2,4-Dinitrotoluene	mg/kg	20000	48	220		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2,6-Dinitrotoluene	mg/kg					0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2-Chloronaphthalene	mg/kg	ID	56000	180000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2-Chlorophenol	mg/kg	530000	1400	4500	19000	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2-Methylnaphthalene	mg/kg	290000	8100	26000		0.0063 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2-Methylphenol	mg/kg	2900000	11000	36000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
2-Nitroaniline	mg/kg					0.24 U	0.22 U	0.24 U	0.23 U	0.22 U	0.21 U	0.22 U	0.21 U
2-Nitrophenol	mg/kg	ID	630	2000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
3&4-Methylphenol	mg/kg	2900000	11000	36000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
3,3'-Dichlorobenzidine	mg/kg	8200	6.6	30		1.9 U	1.7 U	1.9 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U
3-Nitroaniline	mg/kg					0.24 U	0.22 U	0.24 U	0.23 U	0.22 U	0.21 U	0.22 U	0.21 U
4,6-Dinitro-2-methylphenol	mg/kg	59000	79	260		0.18 U	0.16 U	0.18 U	0.17 U	0.17 U	0.16 U	0.16 U	0.16 U
4-Bromophenyl phenyl ether	mg/kg					0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
4-Chloro-3-methylphenol	mg/kg	ID	4500	15000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
4-Chloroaniline	mg/kg					0.24 U	0.22 U	0.24 U	0.23 U	0.22 U	0.21 U	0.22 U	0.21 U
4-Chlorophenyl phenyl ether	mg/kg					0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
4-Nitroaniline	mg/kg					0.24 U	0.22 U	0.24 U	0.23 U	0.22 U	0.21 U	0.22 U	0.21 U
4-Nitrophenol	mg/kg					0.39 U	0.36 U	0.4 U	0.38 U	0.36 U	0.35 U	0.36 U	0.35 U
Acenaphthene	mg/kg	6200000	41000	130000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Acenaphthylene	mg/kg	1000000	1600	5200		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.0045 J	0.28 U
Acetophenone	mg/kg	14000000	47000	150000	1100	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Anthracene	mg/kg	29000000	230000	730000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Atrazine	mg/kg	ID	71	330		0.047 U	0.043 U	0.048 U	0.046 U	0.044 U	0.043 U	0.043 U	0.042 U
Benzaldehyde	mg/kg					0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Benzo(a)anthracene	mg/kg	ID	20	80		0.012 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.0089 J	0.28 U
Benzo(a)pyrene	mg/kg	1900	2	8		0.011 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.012 J	0.28 U
Benzo(b)fluoranthene	mg/kg	ID	20	80		0.019 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.016 J	0.28 U
Benzo(g,h,i)perylene	mg/kg	350000	2500	7000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.012 J	0.28 U
Benzo(k)fluoranthene	mg/kg	ID	200	800		0.0058 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.0087 J	0.28 U
Biphenyl (1,1-Biphenyl)	mg/kg					0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
bis(2-Chloroethoxy)methane	mg/kg					0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
bis(2-Chloroethyl)ether	mg/kg	12000	13	58	2200	0.095 U	0.087 U	0.096 U	0.092 U	0.088 U	0.086 U	0.087 U	0.084 U
bis(2-Ethylhexyl)phthalate (DEHF	mg/kg	890000	2800	12000	10000	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Butyl benzylphthalate (BBP)	mg/kg	21000000	36000	120000	310	0.035 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Caprolactam	mg/kg	290000	53000	310000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Carbazole	mg/kg	78000	530	2400		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Chrysene	mg/kg	ID	2000	8000		0.012 J	0.29 U	0.32 U	0.3 U	0.0055 J	0.28 U	0.015 J	0.28 U
Dibenz(a,h)anthracene	mg/kg	ID	2	8		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Dibenzofuran	mg/kg	2900	ID	ID		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U

Sample Location:						***GHD-1024SB***	***GHD-1024SB***	***GHD-1025SB***	***GHD-1025SB***	***GHD-1026SB***	***GHD-1026SB***	***GHD-1027SB***	***GHD-1027SB***
Sample Identification:		NR Particulate	Direct	NR Direct	Soil Saturation	***S-17358-033016-BW-001***	***S-17358-033016-BW-002***	***S-17358-033016-BW-003***	***S-17358-033016-BW-004***	***S-17358-033016-BW-005***	***S-17358-033016-BW-006***	***S-17358-033016-BW-007***	***S-17358-033016-BW-008***
Sample Date:		Soil Inhalation	Contact	Contact	Concentration	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***
Sample Type:					Screening Levels								
Exceedance Superscript/Sample Depth:	***Units***	n	o	p	q	***(0-2.5) ft BGS***	***(7-9) ft BGS***	***(0-2.5) ft BGS***	***(14-15) ft BGS***	***(0-2.5) ft BGS***	***(9-11) ft BGS***	***(0-2.5) ft BGS***	***(8-10) ft BGS***
Diethyl phthalate	mg/kg	1500000	170000	550000	740	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Dimethyl phthalate	mg/kg	1500000	1000000	1000000	790	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Di-n-butylphthalate (DBP)	mg/kg	1500000	27000	87000	760	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Di-n-octyl phthalate (DnOP)	mg/kg	14000000	6900	20000	140000	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Fluoranthene	mg/kg	4100000	46000	130000		0.02 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.021 J	0.0048 J
Fluorene	mg/kg	4100000	27000	87000		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Hexachlorobenzene	mg/kg	8500	8.9	37		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Hexachlorobutadiene	mg/kg	180000	100	470	350	0.047 U	0.043 U	0.048 U	0.046 U	0.044 U	0.043 U	0.043 U	0.042 U
Hexachlorocyclopentadiene	mg/kg	5900	2300	6700	720	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Hexachloroethane	mg/kg	100000	230	730		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Indeno(1,2,3-cd)pyrene	mg/kg	ID	20	80		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.011 J	0.28 U
Isophorone	mg/kg	8200000	4800	22000	2400	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Naphthalene	mg/kg	88000	16000	52000		0.0052 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Nitrobenzene	mg/kg	21000	100	340	490	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
N-Nitrosodi-n-propylamine	mg/kg	2000	1.2	5.4	1500	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
N-Nitrosodiphenylamine	mg/kg	2800000	1700	7800		0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Pentachlorophenol	mg/kg	130000	90	320		0.18 U	0.16 U	0.18 U	0.17 U	0.17 U	0.16 U	0.16 U	0.16 U
Phenanthrene	mg/kg	2900	1600	5200		0.011 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.0089 J	0.0057 J
Phenol	mg/kg	18000000	40000	230000	12000	0.31 U	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.29 U	0.28 U
Pyrene	mg/kg	2900000	29000	84000		0.022 J	0.29 U	0.32 U	0.3 U	0.29 U	0.28 U	0.021 J	0.0053 J
PCBs													
Aroclor-1016 (PCB-1016)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1221 (PCB-1221)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1232 (PCB-1232)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1242 (PCB-1242)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1248 (PCB-1248)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1254 (PCB-1254)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1260 (PCB-1260)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1262 (PCB-1262)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Aroclor-1268 (PCB-1268)	mg/kg	6500	4	16		0.04 U	0.035 U	0.039 U	0.039 U	0.035 U	0.036 U	0.036 U	0.035 U
Metals													
Aluminum	mg/kg	ID	50000	370000		5700	1700	1400	2200	2900	2500	4200	2200
Antimony	mg/kg	5900	180	670		0.23 J	0.13 U	0.14 U	0.17 U	0.13 U	0.15 U	0.15 J	0.13 U
Arsenic	mg/kg	910	7.6	37		4.4	2.7	2	2.9	3.2	3.6	3.9	**7.5[bcd]**
Barium	mg/kg	150000	37000	130000		40	4.7	5.5	8.1	9.6	6.2	12	13
Beryllium	mg/kg	590	410	1600		0.21	0.1 J	0.064 J	0.11 J	0.13	0.14 J	0.2	0.13
Cadmium	mg/kg	2200	550	2100		0.16	0.091	0.074	0.14	0.12	0.13	0.091	0.49
Calcium	mg/kg					6100 J	46000 J	21000 J	40000 J	56000 J	61000 J	780 J	75000 J
Chromium	mg/kg	150000	790000	1000000		9.3	4.6	3.2	4.7	5	6.1	7.3	6.2
Cobalt	mg/kg	5900	2600	9000		3.5	1.9	1.5	3.1	2.2	2.7	3.3	**5.7[bcd]**
Copper	mg/kg	59000	20000	73000		6.9	7.6	3.5	6.7	6	7.9	7.4	14
Iron	mg/kg	ID	160000	580000		9100	4800	3500	5900	5600	8500	8700	8200
Lead	mg/kg	44000	400	900		6.6	2.7	1.7	2.9	2.9	3.5	6.3	4.4
Magnesium	mg/kg	2900000	1000000	1000000		2700 J	7300 J	3000 J	6400 J	7100 J	**14000 J[b]**	1500 J	**18000 J[b]**
Manganese	mg/kg	1500	25000	90000		300	120	94	160	190	220	170	260

Sample Location:						***GHD-1024SB***	***GHD-1024SB***	***GHD-1025SB***	***GHD-1025SB***	***GHD-1026SB***	***GHD-1026SB***	***GHD-1027SB***	***GHD-1027SB***
Sample Identification:		NR Particulate	Direct	NR Direct	Soil Saturation	***S-17358-033016-BW-001***	***S-17358-033016-BW-002***	***S-17358-033016-BW-003***	***S-17358-033016-BW-004***	***S-17358-033016-BW-005***	***S-17358-033016-BW-006***	***S-17358-033016-BW-007***	***S-17358-033016-BW-008***
Sample Date:		Soil Inhalation	Contact	Contact	Concentration	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***	***3/30/2016***
Sample Type:					Screening Levels								
Exceedance Superscript/Sample Depth:		n	o	p	q	***(0-2.5) ft BGS***	***(7-9) ft BGS***	***(0-2.5) ft BGS***	***(14-15) ft BGS***	***(0-2.5) ft BGS***	***(9-11) ft BGS***	***(0-2.5) ft BGS***	***(8-10) ft BGS***
	Units												
Mercury	mg/kg	8800	160	580		0.053 U	0.045 U	0.043 U	0.055 U	0.041 U	0.042 U	0.02 J	0.047 U
Nickel	mg/kg	16000	40000	150000		8.6	6.5	4.5	7.8	7.9	8.2	8.9	11
Potassium	mg/kg					250 J	290 J	190 J	340 J	260 J	390	250 J	350
Selenium	mg/kg	59000	2600	9600		**0.89[d]**	**1.1[d]**	0.68	**1.1[d]**	**1.3[d]**	**1.2[d]**	**1.5[d]**	**1.3[d]**
Silver	mg/kg	2900	2500	9000		0.016 J	0.0078 J	0.0034 J	0.012 J	0.0064 J	0.0064 J	0.0067 J	0.0077 J
Sodium	mg/kg	ID	1000000	1000000		54 J	48 J	29 J	45 J	47 J	61 J	76 U	78
Thallium	mg/kg	5900	35	130		0.097	0.071	0.041 J	0.069 J	0.053 J	0.06 J	0.071 J	0.13
Vanadium	mg/kg	ID	750	5500		12	6.2	4.7	8.2	7.4	9.8	12	9.2
Zinc	mg/kg	ID	170000	630000		29	19	10	18	16	27	21	29

Notes:

NR - Nonresidential
BGS - below ground surface
U - Not detected at the associated reporting
J - Estimated concentration.
NLV - not likely to volatilize under most conc
NLL - not likely to leach under most soil con
ID - insufficient data to develop criterion

[superscript] - indicates
(1) MDEQ Generic cleanup criteria for reside
(2) Site-Specific Background Level calculatio

Sample Location:		***GHD-1028SB***	***GHD-1028SB***
Sample Identification:		***S-17358-033116-BW-009***	***S-17358-033116-BW-010***
Sample Date:		***3/31/2016***	***3/31/2016***
Sample Type:			
Exceedance Superscript/Sample Depth:		***(0-2.5) ft BGS***	***(7-9) ft BGS***
	Units		
Volatile Organic Compounds (VOCs)			
1,1,1-Trichloroethane	mg/kg	0.057 U	0.052 U
1,1,2,2-Tetrachloroethane	mg/kg	0.057 U	0.052 U
1,1,2-Trichloroethane	mg/kg	0.057 U	0.052 U
1,1-Dichloroethane	mg/kg	0.057 U	0.052 U
1,1-Dichloroethene	mg/kg	0.057 U	0.052 U
1,2,4-Trichlorobenzene	mg/kg	0.28 U	0.26 U
1,2-Dibromo-3-chloropropane (DI	mg/kg	0.28 U	0.26 U
1,2-Dibromoethane (Ethylene dib	mg/kg	0.28 U	0.26 U
1,2-Dichlorobenzene	mg/kg	0.11 U	0.1 U
1,2-Dichloroethane	mg/kg	0.057 U	0.052 U
1,2-Dichloropropane	mg/kg	0.057 U	0.052 U
1,3-Dichlorobenzene	mg/kg	0.11 U	0.1 U
1,4-Dichlorobenzene	mg/kg	0.11 U	0.1 U
2-Butanone (Methyl ethyl ketone)	mg/kg	0.85 U	0.79 U
2-Hexanone	mg/kg	2.8 U	2.6 U
4-Methyl-2-pentanone (Methyl isc	mg/kg	2.8 U	2.6 U
Acetone	mg/kg	0.85 U	0.79 U
Benzene	mg/kg	0.057 U	0.052 U
Bromodichloromethane	mg/kg	0.11 U	0.1 U
Bromoform	mg/kg	0.11 U	0.1 U
Bromomethane (Methyl bromide)	mg/kg	0.28 U	0.26 U
Carbon disulfide	mg/kg	0.28 U	0.26 U
Carbon tetrachloride	mg/kg	0.057 U	0.052 U
Chlorobenzene	mg/kg	0.057 U	0.052 U
Chloroethane	mg/kg	0.28 U	0.26 U
Chloroform (Trichloromethane)	mg/kg	0.057 U	0.052 U
Chloromethane (Methyl chloride)	mg/kg	0.28 U	0.26 U
cis-1,2-Dichloroethene	mg/kg	0.057 U	0.052 U
cis-1,3-Dichloropropene	mg/kg	0.057 U	0.052 U
Cyclohexane	mg/kg	1.4 U	1.3 U
Dibromochloromethane	mg/kg	0.057 U	0.052 U
Dichlorodifluoromethane (CFC-12	mg/kg	0.11 U	0.1 U
Ethylbenzene	mg/kg	0.057 U	0.052 U
Isopropyl benzene	mg/kg	0.28 U	0.26 U
Methyl acetate	mg/kg	0.2 J	1.3 U
Methyl cyclohexane	mg/kg	1.4 U	1.3 U
Methyl tert butyl ether (MTBE)	mg/kg	0.28 U	0.26 U
Methylene chloride	mg/kg	0.28 U	0.26 U
Styrene	mg/kg	0.057 U	0.052 U
Tetrachloroethene	mg/kg	0.057 U	0.052 U
Toluene	mg/kg	0.11 U	0.1 U
trans-1,2-Dichloroethene	mg/kg	0.057 U	0.052 U
trans-1,3-Dichloropropene	mg/kg	0.057 U	0.052 U
Trichloroethene	mg/kg	0.057 U	0.052 U
Trichlorofluoromethane (CFC-11)	mg/kg	0.11 U	0.1 U
Trifluorotrichloroethane (CFC-113	mg/kg	0.28 U	0.26 U
Vinyl chloride	mg/kg	0.045 U	0.042 U

Sample Location:		***GHD-1028SB***	***GHD-1028SB***
Sample Identification:		***S-17358-033116-BW-009***	***S-17358-033116-BW-010***
Sample Date:		***3/31/2016***	***3/31/2016***
Sample Type:			
Exceedance Superscript/Sample Depth:		***(0-2.5) ft BGS***	***(7-9) ft BGS***
	Units		
Xylenes (total)	mg/kg	0.17 U	0.16 U
Semi-Volatile Organic Compounds (SVOC			
2,2'-Oxybis(1-chloropropane) (bis	mg/kg	0.3 U	0.31 U
2,4,5-Trichlorophenol	mg/kg	0.3 U	0.31 U
2,4,6-Trichlorophenol	mg/kg	0.3 U	0.31 U
2,4-Dichlorophenol	mg/kg	0.3 U	0.31 U
2,4-Dimethylphenol	mg/kg	0.3 U	0.31 U
2,4-Dinitrophenol	mg/kg	0.17 U	0.17 U
2,4-Dinitrotoluene	mg/kg	0.3 U	0.31 U
2,6-Dinitrotoluene	mg/kg	0.3 U	0.31 U
2-Chloronaphthalene	mg/kg	0.3 U	0.31 U
2-Chlorophenol	mg/kg	0.3 U	0.31 U
2-Methylnaphthalene	mg/kg	0.3 U	0.31 U
2-Methylphenol	mg/kg	0.3 U	0.31 U
2-Nitroaniline	mg/kg	0.23 U	0.23 U
2-Nitrophenol	mg/kg	0.3 U	0.31 U
3&4-Methylphenol	mg/kg	0.3 U	0.31 U
3,3'-Dichlorobenzidine	mg/kg	1.8 U	1.9 U
3-Nitroaniline	mg/kg	0.23 U	0.23 U
4,6-Dinitro-2-methylphenol	mg/kg	0.17 U	0.17 U
4-Bromophenyl phenyl ether	mg/kg	0.3 U	0.31 U
4-Chloro-3-methylphenol	mg/kg	0.3 U	0.31 U
4-Chloroaniline	mg/kg	0.23 U	0.23 U
4-Chlorophenyl phenyl ether	mg/kg	0.3 U	0.31 U
4-Nitroaniline	mg/kg	0.23 U	0.23 U
4-Nitrophenol	mg/kg	0.38 U	0.38 U
Acenaphthene	mg/kg	0.3 U	0.31 U
Acenaphthylene	mg/kg	0.0059 J	0.31 U
Acetophenone	mg/kg	0.3 U	0.31 U
Anthracene	mg/kg	0.3 U	0.31 U
Atrazine	mg/kg	0.046 U	0.046 U
Benzaldehyde	mg/kg	0.3 U	0.31 U
Benzo(a)anthracene	mg/kg	0.017 J	0.0055 J
Benzo(a)pyrene	mg/kg	0.02 J	0.0065 J
Benzo(b)fluoranthene	mg/kg	0.031 J	0.0067 J
Benzo(g,h,i)perylene	mg/kg	0.018 J	0.0068 J
Benzo(k)fluoranthene	mg/kg	0.019 J	0.31 U
Biphenyl (1,1-Biphenyl)	mg/kg	0.3 U	0.31 U
bis(2-Chloroethoxy)methane	mg/kg	0.3 U	0.31 U
bis(2-Chloroethyl)ether	mg/kg	0.092 U	0.093 U
bis(2-Ethylhexyl)phthalate (DEHF	mg/kg	0.3 U	0.31 U
Butyl benzylphthalate (BBP)	mg/kg	0.036 J	0.31 U
Caprolactam	mg/kg	0.3 U	0.31 U
Carbazole	mg/kg	0.3 U	0.31 U
Chrysene	mg/kg	0.026 J	0.0064 J
Dibenz(a,h)anthracene	mg/kg	0.3 U	0.31 U
Dibenzofuran	mg/kg	0.3 U	0.31 U

Sample Location:		***GHD-1028SB***	***GHD-1028SB***
Sample Identification:		***S-17358-033116-BW-009***	***S-17358-033116-BW-010***
Sample Date:		***3/31/2016***	***3/31/2016***
Sample Type:			
Exceedance Superscript/Sample Depth:		***(0-2.5) ft BGS***	***(7-9) ft BGS***
	Units		
Diethyl phthalate	mg/kg	0.3 U	0.31 U
Dimethyl phthalate	mg/kg	0.3 U	0.31 U
Di-n-butylphthalate (DBP)	mg/kg	0.3 U	0.31 U
Di-n-octyl phthalate (DnOP)	mg/kg	0.3 U	0.31 U
Fluoranthene	mg/kg	0.038 J	0.009 J
Fluorene	mg/kg	0.3 U	0.31 U
Hexachlorobenzene	mg/kg	0.3 U	0.31 U
Hexachlorobutadiene	mg/kg	0.046 U	0.046 U
Hexachlorocyclopentadiene	mg/kg	0.3 U	0.31 U
Hexachloroethane	mg/kg	0.3 U	0.31 U
Indeno(1,2,3-cd)pyrene	mg/kg	0.014 J	0.31 U
Isophorone	mg/kg	0.3 U	0.31 U
Naphthalene	mg/kg	0.3 U	0.31 U
Nitrobenzene	mg/kg	0.3 U	0.31 U
N-Nitrosodi-n-propylamine	mg/kg	0.3 U	0.31 U
N-Nitrosodiphenylamine	mg/kg	0.3 U	0.31 U
Pentachlorophenol	mg/kg	0.17 U	0.17 U
Phenanthrene	mg/kg	0.015 J	0.0042 J
Phenol	mg/kg	0.3 U	0.31 U
Pyrene	mg/kg	0.034 J	0.0084 J
PCBs			
Aroclor-1016 (PCB-1016)	mg/kg	0.039 U	0.038 U
Aroclor-1221 (PCB-1221)	mg/kg	0.039 U	0.038 U
Aroclor-1232 (PCB-1232)	mg/kg	0.039 U	0.038 U
Aroclor-1242 (PCB-1242)	mg/kg	0.039 U	0.038 U
Aroclor-1248 (PCB-1248)	mg/kg	0.039 U	0.038 U
Aroclor-1254 (PCB-1254)	mg/kg	0.039 U	0.038 U
Aroclor-1260 (PCB-1260)	mg/kg	0.039 U	0.038 U
Aroclor-1262 (PCB-1262)	mg/kg	0.039 U	0.038 U
Aroclor-1268 (PCB-1268)	mg/kg	0.039 U	0.038 U
Metals			
Aluminum	mg/kg	5300	3700
Antimony	mg/kg	0.23 J	0.16 U
Arsenic	mg/kg	4.8	**19**[bcdo]
Barium	mg/kg	31	16
Beryllium	mg/kg	0.23	0.19
Cadmium	mg/kg	0.17	0.11
Calcium	mg/kg	8600 J	15000 J
Chromium	mg/kg	8.1	6.8
Cobalt	mg/kg	**4.4**[bcd]	2.9
Copper	mg/kg	7.6	9.2
Iron	mg/kg	11000	8000
Lead	mg/kg	12	6.7
Magnesium	mg/kg	4100 J	4300 J
Manganese	mg/kg	330	130

Sample Location:		***GHD-1028SB***	***GHD-1028SB***
Sample Identification:		***S-17358-033116-BW-009***	***S-17358-033116-BW-010***
Sample Date:		***3/31/2016***	***3/31/2016***
Sample Type:			
Exceedance Superscript/Sample Depth:		***(0-2.5) ft BGS***	***(7-9) ft BGS***
	Units		
Mercury	mg/kg	0.047 U	0.041 U
Nickel	mg/kg	9.5	8.6
Potassium	mg/kg	280 J	370 J
Selenium	mg/kg	**1.1[d]**	**1.1[d]**
Silver	mg/kg	0.017 J	0.015 J
Sodium	mg/kg	23 J	33 J
Thallium	mg/kg	0.088	0.078
Vanadium	mg/kg	13	11
Zinc	mg/kg	35	22

Notes:

NR - Nonresidential
BGS - below ground surface
U - Not detected at the associated reporting
J - Estimated concentration.
NLV - not likely to volatilize under most conc
NLL - not likely to leach under most soil con
ID - insufficient data to develop criterion

[superscript] - indicates
(1) MDEQ Generic cleanup criteria for reside
(2) Site-Specific Background Level calculatio

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: GHD-1024SB
DATE COMPLETED: March 30, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	TOPSOIL	0.40	BACKFILLED WITH BENTONITE CHIPS; 2-1/2" BOREHOLE	0-2.5' -001				0.1
2	SP-SAND, trace silt, trace fine gravel, compact, fine grained, brown, moist			1GP		60		0.2
4								
6								0.3
8	- few fine gravel at 7.0ft BGS - light brown at 7.5ft BGS			2GP 7-9' -002		70		0.4
10	- wet at 9.5ft BGS - trace coarse subrounded gravel at 10.0ft BGS	10.20						0.4
12	CL-SILTY CLAY, trace fine sand, firm, mottled, brown/gray, moist	12.60		3GP		80		0.7
14	SP-SAND, few silt, compact, fine grained, light brown, moist - yellow, oxidation banding at 13.3ft BGS - reddish brown, oxidation banding at 14.6ft BGS	15.00						0.3
16	SP-SAND, few silt, dense, fine grained, brown, moist - wet at 15.5ft BGS			4GP		80		0.2
18								
20	SP-SAND, with silt, dense, fine grained, brown/gray, wet	19.20						
22	END OF BOREHOLE @ 21.0ft BGS	21.00						
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017358-WI-RACER.GPJ CRA_CORP.GDT 4/25/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: GHD-1025SB
DATE COMPLETED: March 30, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	TOPSOIL	0.40	BACKFILLED WITH BENTONITE CHIPS; 2-1/2" BOREHOLE	0-2.5' -003				0.0
2	SP-SAND, trace fine gravel, trace silt, compact, fine to medium grained, trace coarse grained, brown			1GP		60		0.1
4								
6	- oxidation banding at 6.0ft BGS							0.4
8	- silty sand seam from 7.3 to 7.6ft BGS			2GP		60		0.5
10								
12	- reddish brown, oxidation banding at 12.1ft BGS			3GP		70		0.5
14	- yellowish brown, oxidation banding at 12.6ft BGS	13.60		14-15' -004				0.5
	- few coarse grained, wet at 13.4ft BGS	14.30						
16	CL-SILTY CLAY, firm, brown, moist	15.00						0.4
	CL-SILTY CLAY, firm, gray, moist							
18	SP-SAND, with silt, compact, fine grained, gray, wet	17.50		4GP		80		0.3
20	SM-SILTY SAND, dense, very fine grained, gray, wet							
22				5GP		75		0.2
24	CL-SILTY CLAY, firm, gray, moist	23.10						0.1
	END OF BOREHOLE @ 24.0ft BGS	24.00						
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 017358-WI-RACER.GPJ CRA_CORP.GDT 4/25/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: GHD-1026SB
DATE COMPLETED: March 30, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	TOPSOIL	0.40	BACKFILLED WITH BENTONITE CHIPS	0-2.5' -005				0.0
2	SW-SAND, few fine gravel, trace coarse gravel, compact, fine to coarse grained, multicolored brown, moist	2.60	2-1/2" BOREHOLE	1GP		60		0.1
4	SP-SAND, trace silt, compact, fine grained, brown, moist	3.30						0.1
6	SW-SAND, with fine to coarse subangular to subrounded gravel, trace silt, compact, fine to coarse grained, multicolored brown, moist			2GP		90		0.2
8								
10				9-11' -006				0.1
12	- wet at 11.5ft BGS	11.60		3GP		70		0.4
14	CL-SILTY CLAY, firm, laminated, gray, moist	12.50						
16	SM-SILTY SAND, compact, very fine grained, gray, wet	13.60						
18	ML-SILT, trace fine sand, compact, laminated, gray, moist to wet	14.10		4GP		90		0.4
20	SP-SAND, with silt, compact, fine grained, brown, wet	15.50						0.3
22	SM-SILTY SAND, dense, very fine grained, gray, wet - < 0.1' black lamination at 17.3ft BGS - < 0.1' black lamination at 18.4ft BGS			5GP		90		0.0
24	CL-SILTY CLAY, firm, gray, moist	22.70						0.0
26	END OF BOREHOLE @ 24.5ft BGS	24.50						
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017358-WI-RACER.GPJ CRA_CORP.GDT 4/25/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: GHD-1027SB
DATE COMPLETED: March 30, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	TOPSOIL	0.40	BACKFILLED WITH BENTONITE CHIPS; 2-1/2" BOREHOLE	0-2.5' -007				0.0
2	SP-SAND, few fine gravel, compact, fine grained, dark brown, moist			1GP		60		0.0
4								0.1
6								
8	SW-SAND, with fine to coarse subangular to subrounded gravel, trace silt, compact, fine to coarse grained, brown, moist	7.50		2GP		60		0.1
10	- wet at 11.0ft BGS			8-10' -008				0.3
12	CL-SILTY CLAY, firm, gray, moist	12.00		3GP		80		0.2
14	SM-SILTY SAND, compact, very fine grained, brown/gray, wet	13.10						0.2
16								
18	SM-SILTY SAND, dense, very fine grained, gray, wet	17.50		4GP		90		0.4
20	CL-SILTY CLAY, firm, gray, moist	20.00						0.4
22	SM-SILTY SAND, compact, fine grained, gray, wet	20.80						
24	CL-SILTY CLAY, firm, gray, moist	22.30		5GP		90		0.4
26	SM-SILTY SAND, dense, gray, wet	24.30						
28	CL-SILTY CLAY, firm, gray, moist	24.60						
30	END OF BOREHOLE @ 25.0ft BGS	25.00						
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017358-WI-RACER.GPJ CRA_CORP.GDT 4/25/16

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: GHD-1028SB
DATE COMPLETED: March 30, 2016
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	TOPSOIL	0.30	BACKFILLED WITH BENTONITE CHIPS; 2-1/2" BOREHOLE	0-2.5' -009				0.0
2	SP-SAND, trace fine gravel, trace silt, compact, fine grained, brown, moist			1GP		60		0.0
4								0.0
6								0.0
8				2GP 7-9' -010		60		0.1
10	- trace fiberglass debris, hard, gray at 8.7ft BGS	8.90						0.2
12	SW-SAND, with fine to coarse subangular to subrounded gravel, trace silt, compact, fine to coarse grained, brown, moist - wet at 9.5ft BGS	10.30		3GP		80		0.3
14	CL-SILTY CLAY, firm, laminated, gray, moist SM-SILTY SAND, dense, gray, wet	12.60						0.4
16								0.4
18	- silty clay seam from 17.2 to 17.5ft BGS			4GP		90		0.3
20	ML-SILT, few sand, compact, fine grained, gray, moist	20.00 20.60						0.2
22	SM-SILTY SAND, dense, very fine grained, gray, wet			5GP		90		
24	CL-SILTY CLAY, firm, gray, moist	24.30						
25	END OF BOREHOLE @ 25.0ft BGS	25.00						
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017358-WI-RACER.GPJ CRA_CORP.GDT 4/25/16

Memorandum

To:	Beth Landale	Ref. No.:	17358-T01-08Y16
From:	Ruth Mickle/ma/163/Det	Date:	May 2, 2016

Re: **Analytical Results and Reduced Validation**
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

1. Introduction

The following document details a reduced validation of analytical results for groundwater and soil samples collected in support of the North Lot & West Out sampling at the Willow Run Powertrain Site between March 30-April 1, 2016. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio and Buffalo, New York. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2A and 2B. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, recovery data from surrogate spikes, laboratory control samples (LCS), matrix spikes and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable documents entitled:

i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Items i) and ii) will subsequently be referred to as the "Guidelines" in this Memorandum

2. Sample Holding Time and Preservation

The sample holding time requirements for the analyses are summarized in Table 3. The sample chain of custody documents and analytical reports were used to determine sample holding times. The samples were prepared and analyzed within the required holding times.

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The samples were properly preserved and delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

Several low concentrations of target parameters were detected in the method blanks which indicate a potential for laboratory contamination. The associated samples that contained similar concentrations of these compounds were assumed to be a reflection of laboratory contamination and the results were qualified non-detect, as detailed in Table 4.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for polychlorinated biphenyl (PCB), volatile organic compound (VOC) and semi-volatile organic compound (SVOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. The surrogate recoveries met the above criteria or an outlying percent recovery did not result in qualification.

5. Laboratory Control Sample (LCS) Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

5.1 Organic Analyses

The LCS contained all compounds of interest. Table 5 presents outlying LCS data. The associated VOC results were qualified estimated, as noted in the table.

5.2 Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". The LCS recoveries were within the control limits.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the extraction or digestion process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS or MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1. The laboratory performed additional site-specific MS/MSD analyses internally.

6.1 Organic Analyses

The matrix samples were spiked with all compounds of interest, except PCBs which were spiked with the compounds specified in the method.

The percent recoveries were within the control limits, demonstrating acceptable analytical accuracy and precision.

6.2 Inorganic Analyses

The matrix spike samples were spiked with the analytes of interest and the results were evaluated using the "Guidelines".

Table 6 presents the outlying matrix spike data. The associated metals results were qualified estimated, as noted in the table. The remaining percent recoveries and RPD values were within the control limits.

7. Field QA/QC Samples

The field QA/QC consisted of three trip blank samples and three field duplicate samples.

7.1 Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, three trip blanks were submitted to the laboratory for VOC analysis. With the exception of acetone detections, the trip blanks were nondetect for VOC parameters. Table 7 presents the associated acetone detections that were qualified nondetect based on trip blank results.

7.2 Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, three field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 and 100 percent for water and soil samples, respectively. If the reported

concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one or two times the RL value for water and soil samples, respectively.

The majority of field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision. Table 8 presents the noncomparable results. The associated sample data were qualified estimated, as noted in the table.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the reporting limit (RL) but greater than the MDL were qualified as estimated (J) in Table 2A and 2B unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2A and 2B.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2A and 2B are acceptable with the specific qualifications noted herein.

Table 1

Sample Collection and Analysis Summary
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Sample Identification	Location	Initial Sample Depth (ft. bgs.)	Final Sample Depth (ft. bgs.)	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: TCL VOCs	TCL SVOCs	PCBs	TAL Metals	orthophosphate	Phosphorus	Comments
TestAmerica Lab SDG: 240-62912-1													
S-17358-033016-BW-001	GHD-1024SB	0	2.5	soil	03/30/2016	14:00	X	X	X	X	--	--	MS/MSD (partial parameter)
S-17358-033016-BW-002	GHD-1024SB	7	9	soil	03/30/2016	14:10	X	X	X	X	--	--	
S-17358-033016-BW-003	GHD-1025SB	0	2.5	soil	03/30/2016	15:00	X	X	X	X	--	--	
S-17358-033016-BW-004	GHD-1025SB	14	15	soil	03/30/2016	15:15	X	X	X	X	--	--	
S-17358-033016-BW-005	GHD-1026SB	0	2.5	soil	03/30/2016	16:10	X	X	X	X	--	--	MS/MSD (partial parameter)
S-17358-033016-BW-006	GHD-1026SB	9	11	soil	03/30/2016	16:18	X	X	X	X	--	--	
S-17358-033016-BW-007	GHD-1027SB	0	2.5	soil	03/30/2016	16:40	X	X	X	X	--	--	
S-17358-033016-BW-008	GHD-1027SB	8	10	soil	03/30/2016	16:45	X	X	X	X	--	--	
S-17358-033116-BW-009	GHD-1028SB	0	2.5	soil	03/31/2016	7:30	X	X	X	X	--	--	
S-17358-033116-BW-010	GHD-1028SB	7	9	soil	03/31/2016	7:40	X	X	X	X	--	--	
S-17358-033116-BW-011	GHD-1023SB	0	2.5	soil	03/31/2016	8:45	X	X	X	X	--	--	
S-17358-033116-BW-012	GHD-1023SB	4	5	soil	03/31/2016	8:50	X	X	X	X	--	--	
S-17358-033116-BW-013	GHD-1022SB	0	2.5	soil	03/31/2016	9:47	X	X	X	X	--	--	
S-17358-033116-BW-014	GHD-1022SB	6	8	soil	03/31/2016	9:53	X	X	X	X	--	--	
S-17358-033116-BW-015	GHD-1019SB	0	2.5	soil	03/31/2016	10:30	X	X	X	X	--	--	
S-17358-033116-BW-016	GHD-1019SB	6	8	soil	03/31/2016	10:40	X	X	X	X	--	--	
S-17358-033116-BW-017	GHD-1020SB	0	2.5	soil	03/31/2016	12:10	X	X	X	X	--	--	
S-17358-033116-BW-018	GHD-1020SB	0	2.5	soil	03/31/2016	12:20	X	X	X	X	--	--	Field Duplicate of BW-017, MS/MSD (partial parameter)
S-17358-033116-BW-019	GHD-1020SB	4	6	soil	03/31/2016	12:30	X	X	X	X	--	--	
S-17358-033116-BW-020	GHD-1021SB	0	2.5	soil	03/31/2016	13:00	X	X	X	X	--	--	
S-17358-033116-BW-021	GHD-1021SB	0	2.5	soil	03/31/2016	13:07	X	X	X	X	--	--	Field Duplicate of BW-020
S-17358-033116-BW-022	GHD-1021SB	5.5	7.5	soil	03/31/2016	13:18	X	X	X	X	--	--	MS/MSD (partial parameter)
TRIP BLANK	Trip Blank				03/31/2016	--	X	--	--	--	--	--	Trip Blank
TestAmerica Lab SDG: 240-62920-1													
GW-17358-033116-JY-022	GHD-1013M	--	--	water	03/31/2016	8:45	--	--	--	--	X	X	
GW-17358-033116-JY-023	GHD-1014M	--	--	water	03/31/2016	10:15	--	--	--	--	X	X	
TestAmerica Lab SDG: 240-62956-1													
TB-17358-033116	Trip Blank	--	--	water	03/31/2016	--	X	--	--	--	--	--	Trip Blank
GW-17358-033116-JY-022	GHD-1013M	--	--	water	03/31/2016	8:45	X	X	X	X	--	--	
GW-17358-033116-JY-023	GHD-1014M	--	--	water	03/31/2016	10:15	X	X	X	X	--	--	MS/MSD (partial parameter)
TestAmerica Lab SDG: 240-62978-1													
GW-17358-040116-JY-024	GHD-1015M	--	--	water	04/01/2016	9:05	--	--	--	--	X	X	
GW-17358-040116-JY-025	GHD-1016M	--	--	water	04/01/2016	10:45	--	--	--	--	X	X	
GW-17358-040116-JY-026	GHD-1016M	--	--	water	04/01/2016	10:55	--	--	--	--	X	X	Field Duplicate of JY-025
GW-17358-040116-JY-027	GHD-1017M	--	--	water	04/01/2016	10:05	--	--	--	--	X	X	MS/MSD (partial parameter)
GW-17358-040116-JY-028	GHD-1018M	--	--	water	04/01/2016	12:25	--	--	--	--	X	X	

Table 1

Sample Collection and Analysis Summary
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Sample Identification	Location	Initial Sample Depth (ft. bgs.)	Final Sample Depth (ft. bgs.)	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: TCL VOCs	TCL SVOCs	PCBs	TAL Metals	orthophosphate	Phosphorus	Comments
TestAmerica Lab SDG: 240-62981-1													
TB-17358-040116	Trip Blank	--	--	water	04/01/2016	--	X	--	--	--	--	--	Trip Blank
GW-17358-040116-JY-024	GHD-1015M	--	--	water	04/01/2016	9:05	X	X	X	X	--	--	
GW-17358-040116-JY-025	GHD-1016M	--	--	water	04/01/2016	10:45	X	X	X	X	--	--	
GW-17358-040116-JY-026	GHD-1016M	--	--	water	04/01/2016	10:55	X	X	X	X	--	--	Field Duplicate of JY-025
GW-17358-040116-JY-027	GHD-1017M	--	--	water	04/01/2016	10:05	X	X	X	X	--	--	
GW-17358-040116-JY-028	GHD-1018M	--	--	water	04/01/2016	12:25	X	X	X	X	--	--	

Notes:

MS/MSD	- Matrix Spike/Matrix Spike Duplicate
PCBs	- Polychlorinated Biphenyl Compounds
SDG	- Sample Delivery Group
SVOCs	- Semi-Volatile Organic Compounds
TCL	- Target Compound List
VOCs	- Volatile Organic Compounds

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1013M	GHD-1014M	GHD-1015M	GHD-1016M	GHD-1016M
Sample Name:		GW-17358-033116-JY-022	GW-17358-033116-JY-023	GW-17358-040116-JY-024	GW-17358-040116-JY-025	GW-17358-040116-JY-026
Sample Date:		03/31/2016	03/31/2016	04/01/2016	04/01/2016	04/01/2016
Depth:		--	--	--	--	--
						Duplicate
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1013M	GHD-1014M	GHD-1015M	GHD-1016M	GHD-1016M
Sample Name:		GW-17358-033116-JY-022	GW-17358-033116-JY-023	GW-17358-040116-JY-024	GW-17358-040116-JY-025	GW-17358-040116-JY-026
Sample Date:		03/31/2016	03/31/2016	04/01/2016	04/01/2016	04/01/2016
Depth:		--	--	--	--	--
						Duplicate
Parameters	Unit					
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2,4,5-Trichlorophenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2,4,6-Trichlorophenol	µg/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2,4-Dichlorophenol	µg/L	9.5 U	9.6 U	9.5 U	9.5 U	9.5 U
2,4-Dimethylphenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2,4-Dinitrophenol	µg/L	19 U	19 U	19 U	19 U	19 U
2,4-Dinitrotoluene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2,6-Dinitrotoluene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Chloronaphthalene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Chlorophenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Methylnaphthalene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Methylphenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
2-Nitroaniline	µg/L	19 U	19 U	19 U	19 U	19 U
2-Nitrophenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
3&4-Methylphenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
3,3'-Dichlorobenzidine	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
3-Nitroaniline	µg/L	19 U	19 U	19 U	19 U	19 U
4,6-Dinitro-2-methylphenol	µg/L	19 U	19 U	19 U	19 U	19 U
4-Bromophenyl phenyl ether	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
4-Chloro-3-methylphenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
4-Chloroaniline	µg/L	9.5 U	9.6 U	9.5 U	9.5 U	9.5 U
4-Chlorophenyl phenyl ether	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
4-Nitroaniline	µg/L	19 U	19 U	19 U	19 U	19 U
4-Nitrophenol	µg/L	19 U	19 U	19 U	19 U	19 U
Acenaphthene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Acenaphthylene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Acetophenone	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Anthracene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Atrazine	µg/L	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Benzaldehyde	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Benzo(a)anthracene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1013M	GHD-1014M	GHD-1015M	GHD-1016M	GHD-1016M
Sample Name:		GW-17358-033116-JY-022	GW-17358-033116-JY-023	GW-17358-040116-JY-024	GW-17358-040116-JY-025	GW-17358-040116-JY-026
Sample Date:		03/31/2016	03/31/2016	04/01/2016	04/01/2016	04/01/2016
Depth:		--	--	--	--	--
						Duplicate
Parameters	**Unit**					
Benzo(a)pyrene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
Benzo(b)fluoranthene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
Benzo(g,h,i)perylene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
Benzo(k)fluoranthene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
Biphenyl (1,1-Biphenyl)	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
bis(2-Chloroethoxy)methane	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
bis(2-Chloroethyl)ether	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	4.8 U	2.8 J	4.8 U	4.8 U	4.8 U
Butyl benzylphthalate (BBP)	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Caprolactam	µg/L	9.5 U	9.6 U	9.5 U	9.5 U	9.5 U
Carbazole	µg/L	9.5 U	9.6 U	9.5 U	9.5 U	9.5 U
Chrysene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
Di-n-butylphthalate (DBP)	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Di-n-octyl phthalate (DnOP)	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzofuran	µg/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Diethyl phthalate	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Dimethyl phthalate	µg/L	4.8 U	0.29 J	4.8 U	4.8 U	4.8 U
Fluoranthene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
Fluorene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Hexachlorobenzene	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Hexachlorobutadiene	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U
Hexachlorocyclopentadiene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Hexachloroethane	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Isophorone	µg/L	4.8 U	4.8 U	0.27 J	0.26 J	4.8 U
N-Nitrosodi-n-propylamine	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
N-Nitrosodiphenylamine	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Naphthalene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Nitrobenzene	µg/L	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Pentachlorophenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Phenanthrene	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Pyrene	µg/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Metals						
Aluminum	µg/L	65	120	400	86	74
Antimony	µg/L	2.0 U	2.0 U	0.58 J	0.27 J	0.22 J
Arsenic	µg/L	2.6 J	2.4 J	9.0	1.1 J	1.0 J
Barium	µg/L	99 J	92 J	110	98 J	96 J
Beryllium	µg/L	0.21 J	0.066 J	1.0 U	1.0 U	1.0 U

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1013M	GHD-1014M	GHD-1015M	GHD-1016M	GHD-1016M
Sample Name:		GW-17358-033116-JY-022	GW-17358-033116-JY-023	GW-17358-040116-JY-024	GW-17358-040116-JY-025	GW-17358-040116-JY-026
Sample Date:		03/31/2016	03/31/2016	04/01/2016	04/01/2016	04/01/2016
Depth:		--	--	--	--	--
						Duplicate
Parameters	**Unit**					
Cadmium	µg/L	0.26 J	0.11 J	1.0 U	1.0 U	1.0 U
Calcium	µg/L	71000	71000	75000	99000	96000
Chromium	µg/L	10 U	10 U	0.83 J	10 U	10 U
Cobalt	µg/L	1.3 J	0.75 J	0.75 J	1.9 J	1.9 J
Copper	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Iron	µg/L	110 J	140 J	720	120 J	110 J
Lead	µg/L	0.50 J	0.34 J	0.29 J	0.17 J	0.15 J
Magnesium	µg/L	12000	12000	15000	14000	13000
Manganese	µg/L	140	160	190	450	440
Mercury	µg/L	0.20 U	0.20 U	0.19 J	0.20 U	0.20 U
Nickel	µg/L	2.5 J	2.2 J	2.2 J	5.4 J	5.2 J
Potassium	µg/L	1400	1800	2000	2500	2400
Selenium	µg/L	5.0 U	5.0 U	0.37 J	0.27 J	5.0 U
Silver	µg/L	0.025 J	0.20 U	0.20 U	0.20 U	0.20 U
Sodium	µg/L	130000	280000	99000	230000	230000
Thallium	µg/L	0.18 J	0.078 J	2.0 U	2.0 U	2.0 U
Vanadium	µg/L	0.46 J	0.76 J	1.0 J	0.35 J	0.33 J
Zinc	µg/L	50 U	50 U	50 U	50 U	50 U
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1221 (PCB-1221)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1232 (PCB-1232)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1242 (PCB-1242)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1248 (PCB-1248)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1254 (PCB-1254)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1260 (PCB-1260)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1262 (PCB-1262)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Aroclor-1268 (PCB-1268)	µg/L	0.095 U	0.095 U	0.095 U	0.10 U	0.095 U
Wet Chemistry						
Orthophosphate	mg/L	0.015 J	0.014 J	0.038	0.048 J	0.021 J
Phosphorus	mg/L	0.010 U	0.010 U	0.017	0.010 U	0.010 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1017M	GHD-1018M	Trip Blank	Trip Blank
Sample Name:		GW-17358-040116-JY-027	GW-17358-040116-JY-028	TB-17358-033116	TB-17358-040116
Sample Date:		04/01/2016	04/01/2016	03/31/2016	04/01/2016
Depth:		--	--	--	--
Parameters	**Unit**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	4.2 J	5.8 J
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1017M	GHD-1018M	Trip Blank	Trip Blank
Sample Name:		GW-17358-040116-JY-027	GW-17358-040116-JY-028	TB-17358-033116	TB-17358-040116
Sample Date:		04/01/2016	04/01/2016	03/31/2016	04/01/2016
Depth:		--	--	--	--
Parameters	**Unit**				
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 UJ	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Semivolatile Organic Compounds					
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	4.8 U	4.8 U	--	--
2,4,5-Trichlorophenol	µg/L	4.8 U	4.8 U	--	--
2,4,6-Trichlorophenol	µg/L	3.8 U	3.8 U	--	--
2,4-Dichlorophenol	µg/L	9.5 U	9.6 U	--	--
2,4-Dimethylphenol	µg/L	4.8 U	4.8 U	--	--
2,4-Dinitrophenol	µg/L	19 U	19 U	--	--
2,4-Dinitrotoluene	µg/L	4.8 U	4.8 U	--	--
2,6-Dinitrotoluene	µg/L	4.8 U	4.8 U	--	--
2-Chloronaphthalene	µg/L	4.8 U	4.8 U	--	--
2-Chlorophenol	µg/L	4.8 U	4.8 U	--	--
2-Methylnaphthalene	µg/L	4.8 U	4.8 U	--	--
2-Methylphenol	µg/L	4.8 U	4.8 U	--	--
2-Nitroaniline	µg/L	19 U	19 U	--	--
2-Nitrophenol	µg/L	4.8 U	4.8 U	--	--
3&4-Methylphenol	µg/L	4.8 U	4.8 U	--	--
3,3'-Dichlorobenzidine	µg/L	0.95 U	0.96 U	--	--
3-Nitroaniline	µg/L	19 U	19 U	--	--
4,6-Dinitro-2-methylphenol	µg/L	19 U	19 U	--	--
4-Bromophenyl phenyl ether	µg/L	4.8 U	4.8 U	--	--
4-Chloro-3-methylphenol	µg/L	4.8 U	4.8 U	--	--
4-Chloroaniline	µg/L	9.5 U	9.6 U	--	--
4-Chlorophenyl phenyl ether	µg/L	4.8 U	4.8 U	--	--
4-Nitroaniline	µg/L	19 U	19 U	--	--
4-Nitrophenol	µg/L	19 U	19 U	--	--
Acenaphthene	µg/L	4.8 U	4.8 U	--	--
Acenaphthylene	µg/L	4.8 U	4.8 U	--	--
Acetophenone	µg/L	4.8 U	4.8 U	--	--
Anthracene	µg/L	4.8 U	4.8 U	--	--
Atrazine	µg/L	2.9 U	2.9 U	--	--
Benzaldehyde	µg/L	4.8 U	4.8 U	--	--
Benzo(a)anthracene	µg/L	0.95 U	0.96 U	--	--

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1017M	GHD-1018M	Trip Blank	Trip Blank
Sample Name:		GW-17358-040116-JY-027	GW-17358-040116-JY-028	TB-17358-033116	TB-17358-040116
Sample Date:		04/01/2016	04/01/2016	03/31/2016	04/01/2016
Depth:		--	--	--	--
Parameters	**Unit**				
Benzo(a)pyrene	µg/L	0.95 U	0.96 U	--	--
Benzo(b)fluoranthene	µg/L	0.95 U	0.96 U	--	--
Benzo(g,h,i)perylene	µg/L	0.95 U	0.96 U	--	--
Benzo(k)fluoranthene	µg/L	0.95 U	0.96 U	--	--
Biphenyl (1,1-Biphenyl)	µg/L	4.8 U	4.8 U	--	--
bis(2-Chloroethoxy)methane	µg/L	4.8 U	4.8 U	--	--
bis(2-Chloroethyl)ether	µg/L	0.95 U	0.96 U	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	4.8 U	4.8 U	--	--
Butyl benzylphthalate (BBP)	µg/L	4.8 U	4.8 U	--	--
Caprolactam	µg/L	9.5 U	9.6 U	--	--
Carbazole	µg/L	9.5 U	9.6 U	--	--
Chrysene	µg/L	0.95 U	0.96 U	--	--
Di-n-butylphthalate (DBP)	µg/L	4.8 U	4.8 U	--	--
Di-n-octyl phthalate (DnOP)	µg/L	4.8 U	4.8 U	--	--
Dibenz(a,h)anthracene	µg/L	1.9 U	1.9 U	--	--
Dibenzofuran	µg/L	3.8 U	3.8 U	--	--
Diethyl phthalate	µg/L	4.8 U	4.8 U	--	--
Dimethyl phthalate	µg/L	4.8 U	4.8 U	--	--
Fluoranthene	µg/L	0.95 U	0.96 U	--	--
Fluorene	µg/L	4.8 U	4.8 U	--	--
Hexachlorobenzene	µg/L	0.19 U	0.19 U	--	--
Hexachlorobutadiene	µg/L	0.95 U	0.96 U	--	--
Hexachlorocyclopentadiene	µg/L	4.8 U	4.8 U	--	--
Hexachloroethane	µg/L	4.8 U	4.8 U	--	--
Indeno(1,2,3-cd)pyrene	µg/L	1.9 U	1.9 U	--	--
Isophorone	µg/L	4.8 U	4.8 U	--	--
N-Nitrosodi-n-propylamine	µg/L	4.8 U	4.8 U	--	--
N-Nitrosodiphenylamine	µg/L	4.8 U	4.8 U	--	--
Naphthalene	µg/L	4.8 U	4.8 U	--	--
Nitrobenzene	µg/L	2.9 U	2.9 U	--	--
Pentachlorophenol	µg/L	4.8 U	4.8 U	--	--
Phenanthrene	µg/L	1.9 U	1.9 U	--	--
Phenol	µg/L	4.8 U	4.8 U	--	--
Pyrene	µg/L	4.8 U	4.8 U	--	--
Metals					
Aluminum	µg/L	750	740	--	--
Antimony	µg/L	0.59 J	0.20 J	--	--
Arsenic	µg/L	2.4 J	2.4 J	--	--
Barium	µg/L	150	100	--	--
Beryllium	µg/L	0.28 J	1.0 U	--	--

Table 2A

Validated Analytical Data Summary - Groundwater
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1017M	GHD-1018M	Trip Blank	Trip Blank
Sample Name:		GW-17358-040116-JY-027	GW-17358-040116-JY-028	TB-17358-033116	TB-17358-040116
Sample Date:		04/01/2016	04/01/2016	03/31/2016	04/01/2016
Depth:		--	--	--	--
Parameters	**Unit**				
Cadmium	µg/L	0.20 J	1.0 U	--	--
Calcium	µg/L	120000	140000	--	--
Chromium	µg/L	2.1 J	2.0 J	--	--
Cobalt	µg/L	2.0 J	1.4 J	--	--
Copper	µg/L	5.1 U	4.0 U	--	--
Iron	µg/L	1200	2800	--	--
Lead	µg/L	0.68 J	0.62 J	--	--
Magnesium	µg/L	18000	23000	--	--
Manganese	µg/L	330	280	--	--
Mercury	µg/L	0.20 U	0.20 U	--	--
Nickel	µg/L	4.3 J	3.0 J	--	--
Potassium	µg/L	6300	2600	--	--
Selenium	µg/L	1.9 J	2.4 J	--	--
Silver	µg/L	0.029 J	0.20 U	--	--
Sodium	µg/L	680000	650000	--	--
Thallium	µg/L	0.16 J	2.0 U	--	--
Vanadium	µg/L	2.9 J	2.1 J	--	--
Zinc	µg/L	50 U	50 U	--	--
Pesticides/PCBs					
Aroclor-1016 (PCB-1016)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1221 (PCB-1221)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1232 (PCB-1232)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1242 (PCB-1242)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1248 (PCB-1248)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1254 (PCB-1254)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1260 (PCB-1260)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1262 (PCB-1262)	µg/L	0.095 U	0.096 U	--	--
Aroclor-1268 (PCB-1268)	µg/L	0.095 U	0.096 U	--	--
Wet Chemistry					
Orthophosphate	mg/L	0.056	0.042	--	--
Phosphorus	mg/L	0.0082 J	0.017	--	--

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1019SB	GHD-1019SB	GHD-1020SB	GHD-1020SB	GHD-1020SB
Sample Name:		S-17358-033116-BW-016	S-17358-033116-BW-015	S-17358-033116-BW-019	S-17358-033116-BW-017	S-17358-033116-BW-018
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		6-8 ft BGS	0-2.5 ft BGS	4-6 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/kg	49 U	69 U	50 U	50 U	55 U
1,1,2,2-Tetrachloroethane	µg/kg	49 U	69 U	50 U	50 U	55 U
1,1,2-Trichloroethane	µg/kg	49 U	69 U	50 U	50 U	55 U
1,1-Dichloroethane	µg/kg	49 U	69 U	50 U	50 U	55 U
1,1-Dichloroethene	µg/kg	49 U	69 U	50 U	50 U	55 U
1,2,4-Trichlorobenzene	µg/kg	250 U	350 U	250 U	250 U	280 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	250 U	350 U	250 U	250 U	280 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	250 U	350 U	250 U	250 U	280 U
1,2-Dichlorobenzene	µg/kg	98 U	140 U	100 U	99 U	110 U
1,2-Dichloroethane	µg/kg	49 U	69 U	50 U	50 U	55 U
1,2-Dichloropropane	µg/kg	49 U	69 U	50 U	50 U	55 U
1,3-Dichlorobenzene	µg/kg	98 U	140 U	100 U	99 U	110 U
1,4-Dichlorobenzene	µg/kg	98 U	140 U	100 U	99 U	110 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	740 U	1000 U	750 U	750 U	830 U
2-Hexanone	µg/kg	2500 U	3500 U	2500 U	2500 U	2800 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2500 U	3500 U	2500 U	2500 U	2800 U
Acetone	µg/kg	740 U	1000 U	750 U	750 U	830 U
Benzene	µg/kg	49 U	69 U	50 U	50 U	55 U
Bromodichloromethane	µg/kg	98 U	140 U	100 U	99 U	110 U
Bromoform	µg/kg	98 U	140 U	100 U	99 U	110 U
Bromomethane (Methyl bromide)	µg/kg	250 U	350 U	250 U	250 U	280 U
Carbon disulfide	µg/kg	250 U	350 U	250 U	250 U	280 U
Carbon tetrachloride	µg/kg	49 U	69 U	50 U	50 U	55 U
Chlorobenzene	µg/kg	49 U	69 U	50 U	50 U	55 U
Chloroethane	µg/kg	250 U	350 U	250 U	250 U	280 U
Chloroform (Trichloromethane)	µg/kg	49 U	69 U	50 U	50 U	55 U
Chloromethane (Methyl chloride)	µg/kg	250 U	350 U	250 U	250 U	280 U
cis-1,2-Dichloroethene	µg/kg	49 U	69 U	50 U	50 U	55 U
cis-1,3-Dichloropropene	µg/kg	49 U	69 U	50 U	50 U	55 U
Cyclohexane	µg/kg	1200 U	1700 U	1200 U	1200 U	1300 U
Dibromochloromethane	µg/kg	49 U	69 U	50 U	50 U	55 U
Dichlorodifluoromethane (CFC-12)	µg/kg	98 U	140 U	100 U	99 U	110 U
Ethylbenzene	µg/kg	49 U	69 U	50 U	50 U	55 U
Isopropyl benzene	µg/kg	250 U	350 U	250 U	250 U	280 U
Methyl acetate	µg/kg	1200 U	1700 U	1200 U	1200 U	1300 U
Methyl cyclohexane	µg/kg	1200 U	1700 U	1200 U	1200 U	1300 U
Methyl tert butyl ether (MTBE)	µg/kg	250 U	350 U	250 U	250 U	280 U
Methylene chloride	µg/kg	250 U	350 U	250 U	250 U	280 U
Styrene	µg/kg	49 U	69 U	50 U	50 U	55 U
Tetrachloroethene	µg/kg	49 U	69 U	50 U	50 U	55 U

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1019SB	GHD-1019SB	GHD-1020SB	GHD-1020SB	GHD-1020SB
Sample Name:		S-17358-033116-BW-016	S-17358-033116-BW-015	S-17358-033116-BW-019	S-17358-033116-BW-017	S-17358-033116-BW-018
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		6-8 ft BGS	0-2.5 ft BGS	4-6 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate
Parameters	**Unit**					
Toluene	µg/kg	98 U	140 U	100 U	99 U	110 U
trans-1,2-Dichloroethene	µg/kg	49 U	69 U	50 U	50 U	55 U
trans-1,3-Dichloropropene	µg/kg	49 U	69 U	50 U	50 U	55 U
Trichloroethene	µg/kg	49 U	69 U	50 U	50 U	55 U
Trichlorofluoromethane (CFC-11)	µg/kg	98 U	140 U	100 U	99 U	110 U
Trifluorotrichloroethane (CFC-113)	µg/kg	250 U	350 U	250 U	250 U	280 U
Vinyl chloride	µg/kg	39 U	55 U	40 U	40 U	44 U
Xylenes (total)	µg/kg	150 U	210 U	150 U	150 U	170 U
Semivolatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	290 U	290 U	300 U	280 U	300 U
2,4,5-Trichlorophenol	µg/kg	290 U	290 U	300 U	280 U	300 U
2,4,6-Trichlorophenol	µg/kg	290 U	290 U	300 U	280 U	300 U
2,4-Dichlorophenol	µg/kg	290 U	290 U	300 U	280 U	300 U
2,4-Dimethylphenol	µg/kg	290 U	290 U	300 U	280 U	300 U
2,4-Dinitrophenol	µg/kg	170 U	170 U	170 U	160 U	170 U
2,4-Dinitrotoluene	µg/kg	290 U	290 U	300 U	280 U	300 U
2,6-Dinitrotoluene	µg/kg	290 U	290 U	300 U	280 U	300 U
2-Chloronaphthalene	µg/kg	290 U	290 U	300 U	280 U	300 U
2-Chlorophenol	µg/kg	290 U	290 U	300 U	280 U	300 U
2-Methylnaphthalene	µg/kg	290 U	31 J	6.5 J	280 U	300 U
2-Methylphenol	µg/kg	290 U	290 U	300 U	280 U	300 U
2-Nitroaniline	µg/kg	220 U	220 U	230 U	210 U	230 U
2-Nitrophenol	µg/kg	290 U	290 U	300 U	280 U	300 U
3&4-Methylphenol	µg/kg	290 U	290 U	300 U	280 U	300 U
3,3'-Dichlorobenzidine	µg/kg	1800 U	1800 U	1800 U	1700 U	1800 U
3-Nitroaniline	µg/kg	220 U	220 U	230 U	210 U	230 U
4,6-Dinitro-2-methylphenol	µg/kg	170 U	170 U	170 U	160 U	170 U
4-Bromophenyl phenyl ether	µg/kg	290 U	290 U	300 U	280 U	300 U
4-Chloro-3-methylphenol	µg/kg	290 U	290 U	300 U	280 U	300 U
4-Chloroaniline	µg/kg	220 U	220 U	230 U	210 U	230 U
4-Chlorophenyl phenyl ether	µg/kg	290 U	290 U	300 U	280 U	300 U
4-Nitroaniline	µg/kg	220 U	220 U	230 U	210 U	230 U
4-Nitrophenol	µg/kg	370 U	370 U	380 U	350 U	370 U
Acenaphthene	µg/kg	290 U	290 U	300 U	280 U	300 U
Acenaphthylene	µg/kg	290 U	290 U	300 U	280 U	13 J
Acetophenone	µg/kg	290 U	290 U	300 U	280 U	300 U
Anthracene	µg/kg	290 U	290 U	300 U	280 U	6.9 J
Atrazine	µg/kg	44 U	45 U	46 U	43 U	45 U
Benzaldehyde	µg/kg	290 U	290 U	300 U	280 U	300 U
Benzo(a)anthracene	µg/kg	290 U	8.8 J	300 U	280 U	35 J

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1019SB	GHD-1019SB	GHD-1020SB	GHD-1020SB	GHD-1020SB
Sample Name:		S-17358-033116-BW-016	S-17358-033116-BW-015	S-17358-033116-BW-019	S-17358-033116-BW-017	S-17358-033116-BW-018
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		6-8 ft BGS	0-2.5 ft BGS	4-6 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate
Parameters	**Unit**					
Benzo(a)pyrene	µg/kg	290 U	8.4 J	300 U	280 U	64 J
Benzo(b)fluoranthene	µg/kg	290 U	16 J	300 U	280 U	110 J
Benzo(g,h,i)perylene	µg/kg	12 J	7.1 J	19 J	280 U	70 J
Benzo(k)fluoranthene	µg/kg	290 U	290 U	300 U	280 U	53 J
Biphenyl (1,1-Biphenyl)	µg/kg	290 U	3.9 J	300 U	280 U	300 U
bis(2-Chloroethoxy)methane	µg/kg	290 U	290 U	300 U	280 U	300 U
bis(2-Chloroethyl)ether	µg/kg	89 U	89 U	91 U	86 U	90 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	290 U	290 U	300 U	280 U	21 J
Butyl benzylphthalate (BBP)	µg/kg	290 U	290 U	300 U	280 U	37 J
Caprolactam	µg/kg	290 U	290 U	300 U	280 U	300 U
Carbazole	µg/kg	290 U	290 U	300 U	280 U	300 U
Chrysene	µg/kg	6.0 J	12 J	16 J	280 U	60 J
Di-n-butylphthalate (DBP)	µg/kg	290 U	290 U	300 U	280 U	300 U
Di-n-octyl phthalate (DnOP)	µg/kg	290 U	290 U	300 U	280 U	300 U
Dibenz(a,h)anthracene	µg/kg	290 U	290 U	300 U	280 U	18 J
Dibenzofuran	µg/kg	290 U	7.3 J	300 U	280 U	300 U
Diethyl phthalate	µg/kg	290 U	290 U	300 U	280 U	300 U
Dimethyl phthalate	µg/kg	290 U	290 U	300 U	280 U	300 U
Fluoranthene	µg/kg	290 U	18 J	6.3 J	280 U	67 J
Fluorene	µg/kg	290 U	290 U	300 U	280 U	300 U
Hexachlorobenzene	µg/kg	290 U	290 U	300 U	280 U	300 U
Hexachlorobutadiene	µg/kg	44 U	45 U	46 U	43 U	45 U
Hexachlorocyclopentadiene	µg/kg	290 U	290 U	300 U	280 U	300 U
Hexachloroethane	µg/kg	290 U	290 U	300 U	280 U	300 U
Indeno(1,2,3-cd)pyrene	µg/kg	290 U	5.8 J	300 U	280 U	55 J
Isophorone	µg/kg	290 U	290 U	300 U	280 U	300 U
N-Nitrosodi-n-propylamine	µg/kg	290 U	290 U	300 U	280 U	300 U
N-Nitrosodiphenylamine	µg/kg	290 U	290 U	300 U	280 U	300 U
Naphthalene	µg/kg	290 U	24 J	4.0 J	280 U	3.8 J
Nitrobenzene	µg/kg	290 U	290 U	300 U	280 U	300 U
Pentachlorophenol	µg/kg	170 U	170 U	170 U	160 U	170 U
Phenanthrene	µg/kg	290 U	19 J	11 J	280 U	25 J
Phenol	µg/kg	290 U	290 U	300 U	280 U	300 U
Pyrene	µg/kg	7.3 J	14 J	14 J	280 U	63 J
Metals						
Aluminum	mg/kg	5300	3200	3100	3900	4800
Antimony	mg/kg	0.14 U	0.17 U	0.11 J	0.12 U	0.19 J
Arsenic	mg/kg	2.2	4.5	5.1	3.7	5.3
Barium	mg/kg	24	18	13	15	21
Beryllium	mg/kg	0.27	0.17	0.14 J	0.23	0.21

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1019SB	GHD-1019SB	GHD-1020SB	GHD-1020SB	GHD-1020SB
Sample Name:		S-17358-033116-BW-016	S-17358-033116-BW-015	S-17358-033116-BW-019	S-17358-033116-BW-017	S-17358-033116-BW-018
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		6-8 ft BGS	0-2.5 ft BGS	4-6 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate
Parameters	**Unit**					
Cadmium	mg/kg	0.25	0.21	0.16	0.10	0.14
Calcium	mg/kg	52000 J	42000 J	91000 J	23000 J	20000 J
Chromium	mg/kg	8.8	5.4	7.0	7.6	8.8
Cobalt	mg/kg	7.8	2.4	3.9	3.6	3.1
Copper	mg/kg	13	9.0	10	7.4	9.2
Iron	mg/kg	7200	6200	7500	7400	9600
Lead	mg/kg	5.2	14	5.3 J	3.6 J	12 J
Magnesium	mg/kg	15000 J	12000 J	17000	4700 J	4000
Manganese	mg/kg	150	170	220 J	150	150 J
Mercury	mg/kg	0.049 U	0.041 U	0.048 U	0.038 U	0.047 U
Nickel	mg/kg	20	6.7	11	11	9.8
Potassium	mg/kg	900	330 J	620	290 J	360 J
Selenium	mg/kg	1.9	0.97	1.5	2.2	1.8
Silver	mg/kg	0.026 J	0.062 J	0.021 J	0.0081 J	0.017 J
Sodium	mg/kg	75	43 J	140 U	33 J	83 U
Thallium	mg/kg	0.30	0.10	0.19	0.084	0.11
Vanadium	mg/kg	14	8.7	11	11	15
Zinc	mg/kg	45	32	31	24	30
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1221 (PCB-1221)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1232 (PCB-1232)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1242 (PCB-1242)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1248 (PCB-1248)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1254 (PCB-1254)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1260 (PCB-1260)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1262 (PCB-1262)	µg/kg	37 U	37 U	37 U	36 U	37 U
Aroclor-1268 (PCB-1268)	µg/kg	37 U	37 U	37 U	36 U	37 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1021SB	GHD-1021SB	GHD-1021SB	GHD-1022SB	GHD-1022SB
Sample Name:		S-17358-033116-BW-022	S-17358-033116-BW-020	S-17358-033116-BW-021	S-17358-033116-BW-014	S-17358-033116-BW-013
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		5.5-7.5 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate	6-8 ft BGS	0-2.5 ft BGS
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/kg	51 U	53 U	50 U	87 U	54 U
1,1,2,2-Tetrachloroethane	µg/kg	51 U	53 U	50 U	87 U	54 U
1,1,2-Trichloroethane	µg/kg	51 U	53 U	50 U	87 U	54 U
1,1-Dichloroethane	µg/kg	51 U	53 U	50 U	87 U	54 U
1,1-Dichloroethene	µg/kg	51 U	53 U	50 U	87 U	54 U
1,2,4-Trichlorobenzene	µg/kg	250 U	270 U	100 J	440 U	270 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	250 U	270 U	250 U	440 U	270 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	250 U	270 U	250 U	440 U	270 U
1,2-Dichlorobenzene	µg/kg	100 U	110 U	99 U	170 U	110 U
1,2-Dichloroethane	µg/kg	51 U	53 U	50 U	87 U	54 U
1,2-Dichloropropane	µg/kg	51 U	53 U	50 U	87 U	54 U
1,3-Dichlorobenzene	µg/kg	100 U	110 U	99 U	170 U	110 U
1,4-Dichlorobenzene	µg/kg	100 U	110 U	99 U	170 U	110 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	760 U	800 U	740 U	1300 U	800 U
2-Hexanone	µg/kg	2500 U	2700 U	2500 U	4400 U	2700 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2500 U	2700 U	2500 U	4400 U	2700 U
Acetone	µg/kg	760 U	800 U	740 U	1300 U	800 U
Benzene	µg/kg	51 U	53 U	50 U	87 U	54 U
Bromodichloromethane	µg/kg	100 U	110 U	99 U	170 U	110 U
Bromoform	µg/kg	100 U	110 U	99 U	170 U	110 U
Bromomethane (Methyl bromide)	µg/kg	250 U	270 U	250 U	440 U	270 U
Carbon disulfide	µg/kg	250 U	270 U	250 U	440 U	270 U
Carbon tetrachloride	µg/kg	51 U	53 U	50 U	87 U	54 U
Chlorobenzene	µg/kg	51 U	53 U	50 U	87 U	54 U
Chloroethane	µg/kg	250 U	270 U	250 U	440 U	270 U
Chloroform (Trichloromethane)	µg/kg	51 U	53 U	50 U	87 U	54 U
Chloromethane (Methyl chloride)	µg/kg	250 U	270 U	250 U	440 U	270 U
cis-1,2-Dichloroethene	µg/kg	51 U	53 U	50 U	87 U	54 U
cis-1,3-Dichloropropene	µg/kg	51 U	53 U	50 U	87 U	54 U
Cyclohexane	µg/kg	1200 U	1300 U	1200 U	2100 U	1300 U
Dibromochloromethane	µg/kg	51 U	53 U	50 U	87 U	54 U
Dichlorodifluoromethane (CFC-12)	µg/kg	100 U	110 U	99 U	170 U	110 U
Ethylbenzene	µg/kg	51 U	53 U	50 U	87 U	54 U
Isopropyl benzene	µg/kg	250 U	270 U	250 U	440 U	270 U
Methyl acetate	µg/kg	1200 U	1300 U	1200 U	2100 U	1300 U
Methyl cyclohexane	µg/kg	1200 U	1300 U	1200 U	2100 U	1300 U
Methyl tert butyl ether (MTBE)	µg/kg	250 U	270 U	250 U	440 U	270 U
Methylene chloride	µg/kg	250 U	270 U	250 U	440 U	270 U
Styrene	µg/kg	51 U	53 U	50 U	87 U	54 U
Tetrachloroethene	µg/kg	51 U	53 U	50 U	87 U	54 U

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1021SB	GHD-1021SB	GHD-1021SB	GHD-1022SB	GHD-1022SB
Sample Name:		S-17358-033116-BW-022	S-17358-033116-BW-020	S-17358-033116-BW-021	S-17358-033116-BW-014	S-17358-033116-BW-013
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		5.5-7.5 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate	6-8 ft BGS	0-2.5 ft BGS
Parameters	Unit					
Toluene	µg/kg	100 U	110 U	99 U	170 U	110 U
trans-1,2-Dichloroethene	µg/kg	51 U	53 U	50 U	87 U	54 U
trans-1,3-Dichloropropene	µg/kg	51 U	53 U	50 U	87 U	54 U
Trichloroethene	µg/kg	51 U	53 U	50 U	87 U	54 U
Trichlorofluoromethane (CFC-11)	µg/kg	100 U	110 U	99 U	170 U	110 U
Trifluorotrichloroethane (CFC-113)	µg/kg	250 U	270 U	250 U	440 U	270 U
Vinyl chloride	µg/kg	41 U	43 U	40 U	70 U	43 U
Xylenes (total)	µg/kg	150 U	160 U	150 U	260 U	160 U
Semivolatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	300 U	290 U	290 U	330 U	310 U
2,4,5-Trichlorophenol	µg/kg	300 U	290 U	290 U	330 U	310 U
2,4,6-Trichlorophenol	µg/kg	300 U	290 U	290 U	330 U	310 U
2,4-Dichlorophenol	µg/kg	300 U	290 U	290 U	330 U	310 U
2,4-Dimethylphenol	µg/kg	300 U	290 U	290 U	330 U	310 U
2,4-Dinitrophenol	µg/kg	170 U	170 U	170 U	190 U	180 U
2,4-Dinitrotoluene	µg/kg	300 U	290 U	290 U	330 U	310 U
2,6-Dinitrotoluene	µg/kg	300 U	290 U	290 U	330 U	310 U
2-Chloronaphthalene	µg/kg	300 U	290 U	290 U	330 U	310 U
2-Chlorophenol	µg/kg	300 U	290 U	290 U	330 U	310 U
2-Methylnaphthalene	µg/kg	300 U	290 U	28 J	330 U	310 U
2-Methylphenol	µg/kg	300 U	290 U	290 U	330 U	310 U
2-Nitroaniline	µg/kg	230 U	220 U	220 U	250 U	240 U
2-Nitrophenol	µg/kg	300 U	290 U	290 U	330 U	310 U
3&4-Methylphenol	µg/kg	300 U	290 U	290 U	330 U	310 U
3,3'-Dichlorobenzidine	µg/kg	1800 U	1800 U	1800 U	2000 U	1900 U
3-Nitroaniline	µg/kg	230 U	220 U	220 U	250 U	240 U
4,6-Dinitro-2-methylphenol	µg/kg	170 U	170 U	170 U	190 U	180 U
4-Bromophenyl phenyl ether	µg/kg	300 U	290 U	290 U	330 U	310 U
4-Chloro-3-methylphenol	µg/kg	300 U	290 U	290 U	330 U	310 U
4-Chloroaniline	µg/kg	230 U	220 U	220 U	250 U	240 U
4-Chlorophenyl phenyl ether	µg/kg	300 U	290 U	290 U	330 U	310 U
4-Nitroaniline	µg/kg	230 U	220 U	220 U	250 U	240 U
4-Nitrophenol	µg/kg	380 U	370 U	370 U	410 U	390 U
Acenaphthene	µg/kg	300 U	290 U	290 U	330 U	310 U
Acenaphthylene	µg/kg	300 U	290 U	4.4 J	330 U	310 U
Acetophenone	µg/kg	300 U	290 U	290 U	330 U	310 U
Anthracene	µg/kg	300 U	4.2 J	8.4 J	330 U	310 U
Atrazine	µg/kg	45 U	45 U	44 U	50 U	47 U
Benzaldehyde	µg/kg	300 U	14 J	290 U	330 U	310 U
Benzo(a)anthracene	µg/kg	300 U	24 J	24 J	330 U	310 U

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1021SB	GHD-1021SB	GHD-1021SB	GHD-1022SB	GHD-1022SB
Sample Name:		S-17358-033116-BW-022	S-17358-033116-BW-020	S-17358-033116-BW-021	S-17358-033116-BW-014	S-17358-033116-BW-013
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		5.5-7.5 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate	6-8 ft BGS	0-2.5 ft BGS
Parameters	Unit					
Benzo(a)pyrene	µg/kg	300 U	34 J	25 J	330 U	310 U
Benzo(b)fluoranthene	µg/kg	300 U	52 J	40 J	330 U	310 U
Benzo(g,h,i)perylene	µg/kg	300 U	31 J	20 J	330 U	310 U
Benzo(k)fluoranthene	µg/kg	300 U	23 J	12 J	330 U	310 U
Biphenyl (1,1-Biphenyl)	µg/kg	300 U	290 U	290 U	330 U	310 U
bis(2-Chloroethoxy)methane	µg/kg	300 U	290 U	290 U	330 U	310 U
bis(2-Chloroethyl)ether	µg/kg	91 U	89 U	89 U	100 U	95 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	300 U	290 U	290 U	330 U	310 U
Butyl benzylphthalate (BBP)	µg/kg	300 U	33 J	290 U	330 U	310 U
Caprolactam	µg/kg	300 U	290 U	290 U	330 U	310 U
Carbazole	µg/kg	300 U	290 U	290 U	330 U	310 U
Chrysene	µg/kg	300 U	41 J	31 J	330 U	310 U
Di-n-butylphthalate (DBP)	µg/kg	300 U	290 U	290 U	330 U	310 U
Di-n-octyl phthalate (DnOP)	µg/kg	300 U	290 U	290 U	330 U	310 U
Dibenz(a,h)anthracene	µg/kg	300 U	290 U	290 U	330 U	310 U
Dibenzofuran	µg/kg	300 U	290 U	14 J	330 U	310 U
Diethyl phthalate	µg/kg	300 U	290 U	290 U	330 U	310 U
Dimethyl phthalate	µg/kg	300 U	290 U	290 U	330 U	310 U
Fluoranthene	µg/kg	10 J	59 J	48 J	330 U	310 U
Fluorene	µg/kg	300 U	290 U	290 U	330 U	310 U
Hexachlorobenzene	µg/kg	300 U	290 U	290 U	330 U	310 U
Hexachlorobutadiene	µg/kg	45 U	45 U	44 U	50 U	47 U
Hexachlorocyclopentadiene	µg/kg	300 U	290 U	290 U	330 U	310 U
Hexachloroethane	µg/kg	300 U	290 U	290 U	330 U	310 U
Indeno(1,2,3-cd)pyrene	µg/kg	300 U	24 J	15 J	330 U	310 U
Isophorone	µg/kg	300 U	290 U	290 U	330 U	310 U
N-Nitrosodi-n-propylamine	µg/kg	300 U	290 U	290 U	330 U	310 U
N-Nitrosodiphenylamine	µg/kg	300 U	290 U	290 U	330 U	310 U
Naphthalene	µg/kg	300 U	290 U	11 J	330 U	310 U
Nitrobenzene	µg/kg	300 U	290 U	290 U	330 U	310 U
Pentachlorophenol	µg/kg	170 U	170 U	170 U	190 U	180 U
Phenanthrene	µg/kg	9.1 J	25 J	62 J	330 U	310 U
Phenol	µg/kg	300 U	290 U	290 U	330 U	310 U
Pyrene	µg/kg	6.6 J	55 J	46 J	330 U	310 U
Metals						
Aluminum	mg/kg	1400	3300	4800	2500	7400
Antimony	mg/kg	0.023 J	0.13 J	0.091 J	0.17 U	0.14 U
Arsenic	mg/kg	4.0	9.2	18	2.9	6.2
Barium	mg/kg	11	17	37	7.6	45
Beryllium	mg/kg	0.088 J	0.18	0.25	0.12 J	0.39

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1021SB	GHD-1021SB	GHD-1021SB	GHD-1022SB	GHD-1022SB
Sample Name:		S-17358-033116-BW-022	S-17358-033116-BW-020	S-17358-033116-BW-021	S-17358-033116-BW-014	S-17358-033116-BW-013
Sample Date:		03/31/2016	03/31/2016	03/31/2016	03/31/2016	03/31/2016
Depth:		5.5-7.5 ft BGS	0-2.5 ft BGS	0-2.5 ft BGS Duplicate	6-8 ft BGS	0-2.5 ft BGS
Parameters	**Unit**					
Cadmium	mg/kg	0.082 J	0.15	0.18	0.030 J	0.088
Calcium	mg/kg	31000 J	16000 J	1700 J	1100 J	2200 J
Chromium	mg/kg	4.0	6.9	9.1	6.2	13
Cobalt	mg/kg	1.3	3.0	4.1	1.8	6.3
Copper	mg/kg	4.5	6.8	5.6	6.5	12
Iron	mg/kg	6200	12000	20000	6700	13000
Lead	mg/kg	2.1 J	12 J	10 J	3.0	6.1
Magnesium	mg/kg	3600	4500 J	1300 J	1100 J	1900 J
Manganese	mg/kg	190 J	340 J	600 J	40	200
Mercury	mg/kg	0.045 U	0.016 J	0.019 J	0.045 U	0.018 J
Nickel	mg/kg	6.0	8.9	9.3	6.7	17
Potassium	mg/kg	260 J	340	320 J	320 J	470
Selenium	mg/kg	0.61	1.3	1.7	1.1	3.1
Silver	mg/kg	0.0088 J	0.017 J	0.018 J	0.011 J	0.023 J
Sodium	mg/kg	86 U	65 U	81 U	31 J	17 J
Thallium	mg/kg	0.061 J	0.099	0.15	0.048 J	0.17
Vanadium	mg/kg	5.9	11	15	8.5	20
Zinc	mg/kg	17	34	33	19	41
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1221 (PCB-1221)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1232 (PCB-1232)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1242 (PCB-1242)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1248 (PCB-1248)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1254 (PCB-1254)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1260 (PCB-1260)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1262 (PCB-1262)	µg/kg	37 U	36 U	36 U	42 U	39 U
Aroclor-1268 (PCB-1268)	µg/kg	37 U	36 U	36 U	42 U	39 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1023SB	GHD-1023SB	GHD-1024SB	GHD-1024SB	GHD-1025SB
Sample Name:		S-17358-033116-BW-012	S-17358-033116-BW-011	S-17358-033016-BW-002	S-17358-033016-BW-001	S-17358-033016-BW-004
Sample Date:		03/31/2016	03/31/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		4-5 ft BGS	0-2.5 ft BGS	7-9 ft BGS	0-2.5 ft BGS	14-15 ft BGS
Parameters	**Unit**					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/kg	53 U	56 U	47 U	73 U	60 U
1,1,2,2-Tetrachloroethane	µg/kg	53 U	56 U	47 U	73 U	60 U
1,1,2-Trichloroethane	µg/kg	53 U	56 U	47 U	73 U	60 U
1,1-Dichloroethane	µg/kg	53 U	56 U	47 U	73 U	60 U
1,1-Dichloroethene	µg/kg	53 U	56 U	47 U	73 U	60 U
1,2,4-Trichlorobenzene	µg/kg	270 U	280 U	230 U	64 J	300 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	270 U	280 U	230 U	360 U	300 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	270 U	280 U	230 U	360 U	300 U
1,2-Dichlorobenzene	µg/kg	110 U	110 U	94 U	150 U	120 U
1,2-Dichloroethane	µg/kg	53 U	56 U	47 U	73 U	60 U
1,2-Dichloropropane	µg/kg	53 U	56 U	47 U	73 U	60 U
1,3-Dichlorobenzene	µg/kg	110 U	110 U	94 U	150 U	120 U
1,4-Dichlorobenzene	µg/kg	110 U	110 U	94 U	150 U	120 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	800 U	840 U	700 U	1100 U	900 U
2-Hexanone	µg/kg	2700 U	2800 U	2300 U	3600 U	3000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2700 U	2800 U	2300 U	3600 U	3000 U
Acetone	µg/kg	800 U	840 U	700 U	1100 U	900 U
Benzene	µg/kg	53 U	56 U	47 U	73 U	60 U
Bromodichloromethane	µg/kg	110 U	110 U	94 U	150 U	120 U
Bromoform	µg/kg	110 U	110 U	94 U	150 U	120 U
Bromomethane (Methyl bromide)	µg/kg	270 U	280 U	230 U	360 U	300 U
Carbon disulfide	µg/kg	270 U	280 U	230 U	360 U	300 U
Carbon tetrachloride	µg/kg	53 U	56 U	47 U	73 U	60 U
Chlorobenzene	µg/kg	53 U	56 U	47 U	73 U	60 U
Chloroethane	µg/kg	270 U	280 U	230 U	360 U	300 U
Chloroform (Trichloromethane)	µg/kg	53 U	56 U	47 U	73 U	60 U
Chloromethane (Methyl chloride)	µg/kg	270 U	280 U	230 U	360 U	300 U
cis-1,2-Dichloroethene	µg/kg	53 U	56 U	47 U	73 U	60 U
cis-1,3-Dichloropropene	µg/kg	53 U	56 U	47 U	73 U	60 U
Cyclohexane	µg/kg	1300 U	1300 U	1100 U	1700 U	1400 U
Dibromochloromethane	µg/kg	53 U	56 U	47 U	73 U	60 U
Dichlorodifluoromethane (CFC-12)	µg/kg	110 U	110 U	94 U	150 U	120 U
Ethylbenzene	µg/kg	53 U	56 U	47 U	73 U	60 U
Isopropyl benzene	µg/kg	270 U	280 U	230 U	360 U	300 U
Methyl acetate	µg/kg	1300 U	120 J	72 J	210 J	1400 U
Methyl cyclohexane	µg/kg	1300 U	1300 U	1100 U	1700 U	1400 U
Methyl tert butyl ether (MTBE)	µg/kg	270 U	280 U	230 U	360 U	300 U
Methylene chloride	µg/kg	270 U	280 U	230 U	360 U	300 U
Styrene	µg/kg	53 U	56 U	47 U	73 U	60 U
Tetrachloroethene	µg/kg	53 U	56 U	47 U	73 U	60 U

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1023SB	GHD-1023SB	GHD-1024SB	GHD-1024SB	GHD-1025SB
Sample Name:		S-17358-033116-BW-012	S-17358-033116-BW-011	S-17358-033016-BW-002	S-17358-033016-BW-001	S-17358-033016-BW-004
Sample Date:		03/31/2016	03/31/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		4-5 ft BGS	0-2.5 ft BGS	7-9 ft BGS	0-2.5 ft BGS	14-15 ft BGS
Parameters	**Unit**					
Toluene	µg/kg	110 U	110 U	94 U	150 U	120 U
trans-1,2-Dichloroethene	µg/kg	53 U	56 U	47 U	73 U	60 U
trans-1,3-Dichloropropene	µg/kg	53 U	56 U	47 U	73 U	60 U
Trichloroethene	µg/kg	53 U	56 U	47 U	73 U	60 U
Trichlorofluoromethane (CFC-11)	µg/kg	110 U	110 U	94 U	150 U	120 U
Trifluorotrichloroethane (CFC-113)	µg/kg	270 U	280 U	230 U	360 U	300 U
Vinyl chloride	µg/kg	43 U	45 U	38 U	58 U	48 U
Xylenes (total)	µg/kg	160 U	170 U	140 U	220 U	180 U
Semivolatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	290 U	300 U	290 U	310 U	300 U
2,4,5-Trichlorophenol	µg/kg	290 U	300 U	290 U	310 U	300 U
2,4,6-Trichlorophenol	µg/kg	290 U	300 U	290 U	310 U	300 U
2,4-Dichlorophenol	µg/kg	290 U	300 U	290 U	310 U	300 U
2,4-Dimethylphenol	µg/kg	290 U	300 U	290 U	310 U	300 U
2,4-Dinitrophenol	µg/kg	170 U	170 U	160 U	180 U	170 U
2,4-Dinitrotoluene	µg/kg	290 U	300 U	290 U	310 U	300 U
2,6-Dinitrotoluene	µg/kg	290 U	300 U	290 U	310 U	300 U
2-Chloronaphthalene	µg/kg	290 U	300 U	290 U	310 U	300 U
2-Chlorophenol	µg/kg	290 U	300 U	290 U	310 U	300 U
2-Methylnaphthalene	µg/kg	6.5 J	300 U	290 U	6.3 J	300 U
2-Methylphenol	µg/kg	290 U	300 U	290 U	310 U	300 U
2-Nitroaniline	µg/kg	220 U	220 U	220 U	240 U	230 U
2-Nitrophenol	µg/kg	290 U	300 U	290 U	310 U	300 U
3&4-Methylphenol	µg/kg	290 U	300 U	290 U	310 U	300 U
3,3'-Dichlorobenzidine	µg/kg	1800 U	1800 U	1700 U	1900 U	1800 U
3-Nitroaniline	µg/kg	220 U	220 U	220 U	240 U	230 U
4,6-Dinitro-2-methylphenol	µg/kg	170 U	170 U	160 U	180 U	170 U
4-Bromophenyl phenyl ether	µg/kg	290 U	300 U	290 U	310 U	300 U
4-Chloro-3-methylphenol	µg/kg	290 U	300 U	290 U	310 U	300 U
4-Chloroaniline	µg/kg	220 U	220 U	220 U	240 U	230 U
4-Chlorophenyl phenyl ether	µg/kg	290 U	300 U	290 U	310 U	300 U
4-Nitroaniline	µg/kg	220 U	220 U	220 U	240 U	230 U
4-Nitrophenol	µg/kg	370 U	370 U	360 U	390 U	380 U
Acenaphthene	µg/kg	290 U	300 U	290 U	310 U	300 U
Acenaphthylene	µg/kg	290 U	300 U	290 U	310 U	300 U
Acetophenone	µg/kg	290 U	300 U	290 U	310 U	300 U
Anthracene	µg/kg	290 U	5.2 J	290 U	310 U	300 U
Atrazine	µg/kg	44 U	45 U	43 U	47 U	46 U
Benzaldehyde	µg/kg	290 U	300 U	290 U	310 U	300 U
Benzo(a)anthracene	µg/kg	290 U	28 J	290 U	12 J	300 U

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1023SB	GHD-1023SB	GHD-1024SB	GHD-1024SB	GHD-1025SB
Sample Name:		S-17358-033116-BW-012	S-17358-033116-BW-011	S-17358-033016-BW-002	S-17358-033016-BW-001	S-17358-033016-BW-004
Sample Date:		03/31/2016	03/31/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		4-5 ft BGS	0-2.5 ft BGS	7-9 ft BGS	0-2.5 ft BGS	14-15 ft BGS
Parameters	**Unit**					
Benzo(a)pyrene	µg/kg	290 U	28 J	290 U	11 J	300 U
Benzo(b)fluoranthene	µg/kg	290 U	37 J	290 U	19 J	300 U
Benzo(g,h,i)perylene	µg/kg	17 J	21 J	290 U	310 U	300 U
Benzo(k)fluoranthene	µg/kg	290 U	17 J	290 U	5.8 J	300 U
Biphenyl (1,1-Biphenyl)	µg/kg	290 U	300 U	290 U	310 U	300 U
bis(2-Chloroethoxy)methane	µg/kg	290 U	300 U	290 U	310 U	300 U
bis(2-Chloroethyl)ether	µg/kg	89 U	89 U	87 U	95 U	92 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	290 U	300 U	290 U	310 U	300 U
Butyl benzylphthalate (BBP)	µg/kg	290 U	300 U	290 U	35 J	300 U
Caprolactam	µg/kg	290 U	300 U	290 U	310 U	300 U
Carbazole	µg/kg	290 U	300 U	290 U	310 U	300 U
Chrysene	µg/kg	11 J	35 J	290 U	12 J	300 U
Di-n-butylphthalate (DBP)	µg/kg	290 U	300 U	290 U	310 U	300 U
Di-n-octyl phthalate (DnOP)	µg/kg	290 U	300 U	290 U	310 U	300 U
Dibenz(a,h)anthracene	µg/kg	290 U	300 U	290 U	310 U	300 U
Dibenzofuran	µg/kg	290 U	300 U	290 U	310 U	300 U
Diethyl phthalate	µg/kg	290 U	300 U	290 U	310 U	300 U
Dimethyl phthalate	µg/kg	290 U	300 U	290 U	310 U	300 U
Fluoranthene	µg/kg	4.4 J	51 J	290 U	20 J	300 U
Fluorene	µg/kg	290 U	300 U	290 U	310 U	300 U
Hexachlorobenzene	µg/kg	290 U	300 U	290 U	310 U	300 U
Hexachlorobutadiene	µg/kg	44 U	45 U	43 U	47 U	46 U
Hexachlorocyclopentadiene	µg/kg	290 U	300 U	290 U	310 U	300 U
Hexachloroethane	µg/kg	290 U	300 U	290 U	310 U	300 U
Indeno(1,2,3-cd)pyrene	µg/kg	290 U	18 J	290 U	310 U	300 U
Isophorone	µg/kg	290 U	300 U	290 U	310 U	300 U
N-Nitrosodi-n-propylamine	µg/kg	290 U	300 U	290 U	310 U	300 U
N-Nitrosodiphenylamine	µg/kg	290 U	300 U	290 U	310 U	300 U
Naphthalene	µg/kg	290 U	300 U	290 U	5.2 J	300 U
Nitrobenzene	µg/kg	290 U	300 U	290 U	310 U	300 U
Pentachlorophenol	µg/kg	170 U	170 U	160 U	180 U	170 U
Phenanthrene	µg/kg	9.4 J	21 J	290 U	11 J	300 U
Phenol	µg/kg	290 U	300 U	290 U	310 U	300 U
Pyrene	µg/kg	12 J	45 J	290 U	22 J	300 U
Metals						
Aluminum	mg/kg	7300	3100	1700	5700	2200
Antimony	mg/kg	0.18 U	0.17 U	0.13 U	0.23 J	0.17 U
Arsenic	mg/kg	3.4	14	2.7	4.4	2.9
Barium	mg/kg	36	16	4.7	40	8.1
Beryllium	mg/kg	0.38	0.18	0.10 J	0.21	0.11 J

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1023SB	GHD-1023SB	GHD-1024SB	GHD-1024SB	GHD-1025SB
Sample Name:		S-17358-033116-BW-012	S-17358-033116-BW-011	S-17358-033016-BW-002	S-17358-033016-BW-001	S-17358-033016-BW-004
Sample Date:		03/31/2016	03/31/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		4-5 ft BGS	0-2.5 ft BGS	7-9 ft BGS	0-2.5 ft BGS	14-15 ft BGS
Parameters	**Unit**					
Cadmium	mg/kg	0.28	0.18	0.091	0.16	0.14
Calcium	mg/kg	58000 J	28000 J	46000 J	6100 J	40000 J
Chromium	mg/kg	12	7.6	4.6	9.3	4.7
Cobalt	mg/kg	8.1	3.3	1.9	3.5	3.1
Copper	mg/kg	16	7.4	7.6	6.9	6.7
Iron	mg/kg	14000	13000	4800	9100	5900
Lead	mg/kg	7.3	5.0	2.7	6.6	2.9
Magnesium	mg/kg	18000 J	15000 J	7300 J	2700 J	6400 J
Manganese	mg/kg	340	210	120	300	160
Mercury	mg/kg	0.043 U	0.044 U	0.045 U	0.053 U	0.055 U
Nickel	mg/kg	23	9.3	6.5	8.6	7.8
Potassium	mg/kg	1200	240 J	290 J	250 J	340 J
Selenium	mg/kg	2.6	1.3	1.1	0.89	1.1
Silver	mg/kg	0.043 J	0.014 J	0.0078 J	0.016 J	0.012 J
Sodium	mg/kg	170	55 J	48 J	54 J	45 J
Thallium	mg/kg	0.28	0.057 J	0.071	0.097	0.069 J
Vanadium	mg/kg	19	12	6.2	12	8.2
Zinc	mg/kg	52	23	19	29	18
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1221 (PCB-1221)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1232 (PCB-1232)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1242 (PCB-1242)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1248 (PCB-1248)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1254 (PCB-1254)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1260 (PCB-1260)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1262 (PCB-1262)	µg/kg	38 U	37 U	35 U	40 U	39 U
Aroclor-1268 (PCB-1268)	µg/kg	38 U	37 U	35 U	40 U	39 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1025SB	GHD-1026SB	GHD-1026SB	GHD-1027SB	GHD-1027SB
Sample Name:		S-17358-033016-BW-003	S-17358-033016-BW-006	S-17358-033016-BW-005	S-17358-033016-BW-008	S-17358-033016-BW-007
Sample Date:		03/30/2016	03/30/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		0-2.5 ft BGS	9-11 ft BGS	0-2.5 ft BGS	8-10 ft BGS	0-2.5 ft BGS
Parameters	Unit					
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/kg	56 U	52 U	57 U	54 U	48 U
1,1,2,2-Tetrachloroethane	µg/kg	56 U	52 U	57 U	54 U	48 U
1,1,2-Trichloroethane	µg/kg	56 U	52 U	57 U	54 U	48 U
1,1-Dichloroethane	µg/kg	56 U	52 U	57 U	54 U	48 U
1,1-Dichloroethene	µg/kg	56 U	52 U	57 U	54 U	48 U
1,2,4-Trichlorobenzene	µg/kg	280 U	260 U	280 U	270 U	240 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	280 U	260 U	280 U	270 U	240 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	280 U	260 U	280 U	270 U	240 U
1,2-Dichlorobenzene	µg/kg	110 U	100 U	110 U	110 U	97 U
1,2-Dichloroethane	µg/kg	56 U	52 U	57 U	54 U	48 U
1,2-Dichloropropane	µg/kg	56 U	52 U	57 U	54 U	48 U
1,3-Dichlorobenzene	µg/kg	110 U	100 U	110 U	110 U	97 U
1,4-Dichlorobenzene	µg/kg	110 U	100 U	110 U	110 U	97 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	830 U	780 U	850 U	810 U	730 U
2-Hexanone	µg/kg	2800 U	2600 U	2800 U	2700 U	2400 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2800 U	2600 U	2800 U	2700 U	2400 U
Acetone	µg/kg	830 U	780 U	850 U	810 U	730 U
Benzene	µg/kg	56 U	52 U	57 U	54 U	48 U
Bromodichloromethane	µg/kg	110 U	100 U	110 U	110 U	97 U
Bromoform	µg/kg	110 U	100 U	110 U	110 U	97 U
Bromomethane (Methyl bromide)	µg/kg	280 U	260 U	280 U	270 U	240 U
Carbon disulfide	µg/kg	280 U	260 U	280 U	270 U	240 U
Carbon tetrachloride	µg/kg	56 U	52 U	57 U	54 U	48 U
Chlorobenzene	µg/kg	56 U	52 U	57 U	54 U	48 U
Chloroethane	µg/kg	280 U	260 U	280 U	270 U	240 U
Chloroform (Trichloromethane)	µg/kg	56 U	52 U	57 U	54 U	48 U
Chloromethane (Methyl chloride)	µg/kg	280 U	260 U	280 U	270 U	240 U
cis-1,2-Dichloroethene	µg/kg	56 U	52 U	57 U	54 U	48 U
cis-1,3-Dichloropropene	µg/kg	56 U	52 U	57 U	54 U	48 U
Cyclohexane	µg/kg	1300 U	1300 U	1400 U	1300 U	1200 U
Dibromochloromethane	µg/kg	56 U	52 U	57 U	54 U	48 U
Dichlorodifluoromethane (CFC-12)	µg/kg	110 U	100 U	110 U	110 U	97 U
Ethylbenzene	µg/kg	56 U	52 U	57 U	54 U	48 U
Isopropyl benzene	µg/kg	280 U	260 U	280 U	270 U	240 U
Methyl acetate	µg/kg	1300 U	1300 U	130 J	230 J	1200 U
Methyl cyclohexane	µg/kg	1300 U	1300 U	1400 U	1300 U	1200 U
Methyl tert butyl ether (MTBE)	µg/kg	280 U	260 U	280 U	270 U	240 U
Methylene chloride	µg/kg	280 U	260 U	280 U	270 U	240 U
Styrene	µg/kg	56 U	52 U	57 U	54 U	48 U
Tetrachloroethene	µg/kg	56 U	52 U	57 U	54 U	48 U

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1025SB	GHD-1026SB	GHD-1026SB	GHD-1027SB	GHD-1027SB
Sample Name:		S-17358-033016-BW-003	S-17358-033016-BW-006	S-17358-033016-BW-005	S-17358-033016-BW-008	S-17358-033016-BW-007
Sample Date:		03/30/2016	03/30/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		0-2.5 ft BGS	9-11 ft BGS	0-2.5 ft BGS	8-10 ft BGS	0-2.5 ft BGS
Parameters	**Unit**					
Toluene	µg/kg	110 U	100 U	110 U	110 U	97 U
trans-1,2-Dichloroethene	µg/kg	56 U	52 U	57 U	54 U	48 U
trans-1,3-Dichloropropene	µg/kg	56 U	52 U	57 U	54 U	48 U
Trichloroethene	µg/kg	56 U	52 U	57 U	54 U	48 U
Trichlorofluoromethane (CFC-11)	µg/kg	110 U	100 U	110 U	110 U	97 U
Trifluorotrichloroethane (CFC-113)	µg/kg	280 U	260 U	280 U	270 U	240 U
Vinyl chloride	µg/kg	45 U	42 U	45 U	43 U	39 U
Xylenes (total)	µg/kg	170 U	160 U	170 U	160 U	150 U
Semivolatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	320 U	280 U	290 U	280 U	290 U
2,4,5-Trichlorophenol	µg/kg	320 U	280 U	290 U	280 U	290 U
2,4,6-Trichlorophenol	µg/kg	320 U	280 U	290 U	280 U	290 U
2,4-Dichlorophenol	µg/kg	320 U	280 U	290 U	280 U	290 U
2,4-Dimethylphenol	µg/kg	320 U	280 U	290 U	280 U	290 U
2,4-Dinitrophenol	µg/kg	180 U	160 U	170 U	160 U	160 U
2,4-Dinitrotoluene	µg/kg	320 U	280 U	290 U	280 U	290 U
2,6-Dinitrotoluene	µg/kg	320 U	280 U	290 U	280 U	290 U
2-Chloronaphthalene	µg/kg	320 U	280 U	290 U	280 U	290 U
2-Chlorophenol	µg/kg	320 U	280 U	290 U	280 U	290 U
2-Methylnaphthalene	µg/kg	320 U	280 U	290 U	280 U	290 U
2-Methylphenol	µg/kg	320 U	280 U	290 U	280 U	290 U
2-Nitroaniline	µg/kg	240 U	210 U	220 U	210 U	220 U
2-Nitrophenol	µg/kg	320 U	280 U	290 U	280 U	290 U
3&4-Methylphenol	µg/kg	320 U	280 U	290 U	280 U	290 U
3,3'-Dichlorobenzidine	µg/kg	1900 U	1700 U	1800 U	1700 U	1700 U
3-Nitroaniline	µg/kg	240 U	210 U	220 U	210 U	220 U
4,6-Dinitro-2-methylphenol	µg/kg	180 U	160 U	170 U	160 U	160 U
4-Bromophenyl phenyl ether	µg/kg	320 U	280 U	290 U	280 U	290 U
4-Chloro-3-methylphenol	µg/kg	320 U	280 U	290 U	280 U	290 U
4-Chloroaniline	µg/kg	240 U	210 U	220 U	210 U	220 U
4-Chlorophenyl phenyl ether	µg/kg	320 U	280 U	290 U	280 U	290 U
4-Nitroaniline	µg/kg	240 U	210 U	220 U	210 U	220 U
4-Nitrophenol	µg/kg	400 U	350 U	360 U	350 U	360 U
Acenaphthene	µg/kg	320 U	280 U	290 U	280 U	290 U
Acenaphthylene	µg/kg	320 U	280 U	290 U	280 U	4.5 J
Acetophenone	µg/kg	320 U	280 U	290 U	280 U	290 U
Anthracene	µg/kg	320 U	280 U	290 U	280 U	290 U
Atrazine	µg/kg	48 U	43 U	44 U	42 U	43 U
Benzaldehyde	µg/kg	320 U	280 U	290 U	280 U	290 U
Benzo(a)anthracene	µg/kg	320 U	280 U	290 U	280 U	8.9 J

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1025SB	GHD-1026SB	GHD-1026SB	GHD-1027SB	GHD-1027SB
Sample Name:		S-17358-033016-BW-003	S-17358-033016-BW-006	S-17358-033016-BW-005	S-17358-033016-BW-008	S-17358-033016-BW-007
Sample Date:		03/30/2016	03/30/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		0-2.5 ft BGS	9-11 ft BGS	0-2.5 ft BGS	8-10 ft BGS	0-2.5 ft BGS
Parameters	**Unit**					
Benzo(a)pyrene	µg/kg	320 U	280 U	290 U	280 U	12 J
Benzo(b)fluoranthene	µg/kg	320 U	280 U	290 U	280 U	16 J
Benzo(g,h,i)perylene	µg/kg	320 U	280 U	290 U	280 U	12 J
Benzo(k)fluoranthene	µg/kg	320 U	280 U	290 U	280 U	8.7 J
Biphenyl (1,1-Biphenyl)	µg/kg	320 U	280 U	290 U	280 U	290 U
bis(2-Chloroethoxy)methane	µg/kg	320 U	280 U	290 U	280 U	290 U
bis(2-Chloroethyl)ether	µg/kg	96 U	86 U	88 U	84 U	87 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	320 U	280 U	290 U	280 U	290 U
Butyl benzylphthalate (BBP)	µg/kg	320 U	280 U	290 U	280 U	290 U
Caprolactam	µg/kg	320 U	280 U	290 U	280 U	290 U
Carbazole	µg/kg	320 U	280 U	290 U	280 U	290 U
Chrysene	µg/kg	320 U	280 U	5.5 J	280 U	15 J
Di-n-butylphthalate (DBP)	µg/kg	320 U	280 U	290 U	280 U	290 U
Di-n-octyl phthalate (DnOP)	µg/kg	320 U	280 U	290 U	280 U	290 U
Dibenz(a,h)anthracene	µg/kg	320 U	280 U	290 U	280 U	290 U
Dibenzofuran	µg/kg	320 U	280 U	290 U	280 U	290 U
Diethyl phthalate	µg/kg	320 U	280 U	290 U	280 U	290 U
Dimethyl phthalate	µg/kg	320 U	280 U	290 U	280 U	290 U
Fluoranthene	µg/kg	320 U	280 U	290 U	4.8 J	21 J
Fluorene	µg/kg	320 U	280 U	290 U	280 U	290 U
Hexachlorobenzene	µg/kg	320 U	280 U	290 U	280 U	290 U
Hexachlorobutadiene	µg/kg	48 U	43 U	44 U	42 U	43 U
Hexachlorocyclopentadiene	µg/kg	320 U	280 U	290 U	280 U	290 U
Hexachloroethane	µg/kg	320 U	280 U	290 U	280 U	290 U
Indeno(1,2,3-cd)pyrene	µg/kg	320 U	280 U	290 U	280 U	11 J
Isophorone	µg/kg	320 U	280 U	290 U	280 U	290 U
N-Nitrosodi-n-propylamine	µg/kg	320 U	280 U	290 U	280 U	290 U
N-Nitrosodiphenylamine	µg/kg	320 U	280 U	290 U	280 U	290 U
Naphthalene	µg/kg	320 U	280 U	290 U	280 U	290 U
Nitrobenzene	µg/kg	320 U	280 U	290 U	280 U	290 U
Pentachlorophenol	µg/kg	180 U	160 U	170 U	160 U	160 U
Phenanthrene	µg/kg	320 U	280 U	290 U	5.7 J	8.9 J
Phenol	µg/kg	320 U	280 U	290 U	280 U	290 U
Pyrene	µg/kg	320 U	280 U	290 U	5.3 J	21 J
Metals						
Aluminum	mg/kg	1400	2500	2900	2200	4200
Antimony	mg/kg	0.14 U	0.15 U	0.13 U	0.13 U	0.15 J
Arsenic	mg/kg	2.0	3.6	3.2	7.5	3.9
Barium	mg/kg	5.5	6.2	9.6	13	12
Beryllium	mg/kg	0.064 J	0.14 J	0.13	0.13	0.20

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1025SB	GHD-1026SB	GHD-1026SB	GHD-1027SB	GHD-1027SB
Sample Name:		S-17358-033016-BW-003	S-17358-033016-BW-006	S-17358-033016-BW-005	S-17358-033016-BW-008	S-17358-033016-BW-007
Sample Date:		03/30/2016	03/30/2016	03/30/2016	03/30/2016	03/30/2016
Depth:		0-2.5 ft BGS	9-11 ft BGS	0-2.5 ft BGS	8-10 ft BGS	0-2.5 ft BGS
Parameters	**Unit**					
Cadmium	mg/kg	0.074	0.13	0.12	0.49	0.091
Calcium	mg/kg	21000 J	61000 J	56000 J	75000 J	780 J
Chromium	mg/kg	3.2	6.1	5.0	6.2	7.3
Cobalt	mg/kg	1.5	2.7	2.2	5.7	3.3
Copper	mg/kg	3.5	7.9	6.0	14	7.4
Iron	mg/kg	3500	8500	5600	8200	8700
Lead	mg/kg	1.7	3.5	2.9	4.4	6.3
Magnesium	mg/kg	3000 J	14000 J	7100 J	18000 J	1500 J
Manganese	mg/kg	94	220	190	260	170
Mercury	mg/kg	0.043 U	0.042 U	0.041 U	0.047 U	0.020 J
Nickel	mg/kg	4.5	8.2	7.9	11	8.9
Potassium	mg/kg	190 J	390	260 J	350	250 J
Selenium	mg/kg	0.68	1.2	1.3	1.3	1.5
Silver	mg/kg	0.0034 J	0.0064 J	0.0064 J	0.0077 J	0.0067 J
Sodium	mg/kg	29 J	61 J	47 J	78	76 U
Thallium	mg/kg	0.041 J	0.060 J	0.053 J	0.13	0.071 J
Vanadium	mg/kg	4.7	9.8	7.4	9.2	12
Zinc	mg/kg	10	27	16	29	21
Pesticides/PCBs						
Aroclor-1016 (PCB-1016)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1221 (PCB-1221)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1232 (PCB-1232)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1242 (PCB-1242)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1248 (PCB-1248)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1254 (PCB-1254)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1260 (PCB-1260)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1262 (PCB-1262)	µg/kg	39 U	36 U	35 U	35 U	36 U
Aroclor-1268 (PCB-1268)	µg/kg	39 U	36 U	35 U	35 U	36 U

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1028SB	GHD-1028SB	Trip Blank
Sample Name:		S-17358-033116-BW-010	S-17358-033116-BW-009	TRIP BLANK
Sample Date:		03/31/2016	03/31/2016	03/31/2016
Depth:		7-9 ft BGS	0-2.5 ft BGS	--
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/kg	52 U	57 U	40 U
1,1,2,2-Tetrachloroethane	µg/kg	52 U	57 U	40 U
1,1,2-Trichloroethane	µg/kg	52 U	57 U	40 U
1,1-Dichloroethane	µg/kg	52 U	57 U	40 U
1,1-Dichloroethene	µg/kg	52 U	57 U	40 U
1,2,4-Trichlorobenzene	µg/kg	260 U	280 U	200 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	260 U	280 U	200 U
1,2-Dibromoethane (Ethylene dibromide)	µg/kg	260 U	280 U	200 U
1,2-Dichlorobenzene	µg/kg	100 U	110 U	80 U
1,2-Dichloroethane	µg/kg	52 U	57 U	40 U
1,2-Dichloropropane	µg/kg	52 U	57 U	40 U
1,3-Dichlorobenzene	µg/kg	100 U	110 U	80 U
1,4-Dichlorobenzene	µg/kg	100 U	110 U	80 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/kg	790 U	850 U	600 U
2-Hexanone	µg/kg	2600 U	2800 U	2000 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/kg	2600 U	2800 U	2000 U
Acetone	µg/kg	790 U	850 U	600 U
Benzene	µg/kg	52 U	57 U	40 U
Bromodichloromethane	µg/kg	100 U	110 U	80 U
Bromoform	µg/kg	100 U	110 U	80 U
Bromomethane (Methyl bromide)	µg/kg	260 U	280 U	200 U
Carbon disulfide	µg/kg	260 U	280 U	200 U
Carbon tetrachloride	µg/kg	52 U	57 U	40 U
Chlorobenzene	µg/kg	52 U	57 U	40 U
Chloroethane	µg/kg	260 U	280 U	200 U
Chloroform (Trichloromethane)	µg/kg	52 U	57 U	40 U
Chloromethane (Methyl chloride)	µg/kg	260 U	280 U	200 U
cis-1,2-Dichloroethene	µg/kg	52 U	57 U	40 U
cis-1,3-Dichloropropene	µg/kg	52 U	57 U	40 U
Cyclohexane	µg/kg	1300 U	1400 U	960 U
Dibromochloromethane	µg/kg	52 U	57 U	40 U
Dichlorodifluoromethane (CFC-12)	µg/kg	100 U	110 U	80 U
Ethylbenzene	µg/kg	52 U	57 U	40 U
Isopropyl benzene	µg/kg	260 U	280 U	200 U
Methyl acetate	µg/kg	1300 U	200 J	960 U
Methyl cyclohexane	µg/kg	1300 U	1400 U	960 U
Methyl tert butyl ether (MTBE)	µg/kg	260 U	280 U	200 U
Methylene chloride	µg/kg	260 U	280 U	200 U
Styrene	µg/kg	52 U	57 U	40 U
Tetrachloroethene	µg/kg	52 U	57 U	40 U

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1028SB	GHD-1028SB	Trip Blank
Sample Name:		S-17358-033116-BW-010	S-17358-033116-BW-009	TRIP BLANK
Sample Date:		03/31/2016	03/31/2016	03/31/2016
Depth:		7-9 ft BGS	0-2.5 ft BGS	--
Parameters	**Unit**			
Toluene	µg/kg	100 U	110 U	80 U
trans-1,2-Dichloroethene	µg/kg	52 U	57 U	40 U
trans-1,3-Dichloropropene	µg/kg	52 U	57 U	40 U
Trichloroethene	µg/kg	52 U	57 U	40 U
Trichlorofluoromethane (CFC-11)	µg/kg	100 U	110 U	80 U
Trifluorotrichloroethane (CFC-113)	µg/kg	260 U	280 U	200 U
Vinyl chloride	µg/kg	42 U	45 U	32 U
Xylenes (total)	µg/kg	160 U	170 U	120 U
Semivolatile Organic Compounds				
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	310 U	300 U	--
2,4,5-Trichlorophenol	µg/kg	310 U	300 U	--
2,4,6-Trichlorophenol	µg/kg	310 U	300 U	--
2,4-Dichlorophenol	µg/kg	310 U	300 U	--
2,4-Dimethylphenol	µg/kg	310 U	300 U	--
2,4-Dinitrophenol	µg/kg	170 U	170 U	--
2,4-Dinitrotoluene	µg/kg	310 U	300 U	--
2,6-Dinitrotoluene	µg/kg	310 U	300 U	--
2-Chloronaphthalene	µg/kg	310 U	300 U	--
2-Chlorophenol	µg/kg	310 U	300 U	--
2-Methylnaphthalene	µg/kg	310 U	300 U	--
2-Methylphenol	µg/kg	310 U	300 U	--
2-Nitroaniline	µg/kg	230 U	230 U	--
2-Nitrophenol	µg/kg	310 U	300 U	--
3&4-Methylphenol	µg/kg	310 U	300 U	--
3,3'-Dichlorobenzidine	µg/kg	1900 U	1800 U	--
3-Nitroaniline	µg/kg	230 U	230 U	--
4,6-Dinitro-2-methylphenol	µg/kg	170 U	170 U	--
4-Bromophenyl phenyl ether	µg/kg	310 U	300 U	--
4-Chloro-3-methylphenol	µg/kg	310 U	300 U	--
4-Chloroaniline	µg/kg	230 U	230 U	--
4-Chlorophenyl phenyl ether	µg/kg	310 U	300 U	--
4-Nitroaniline	µg/kg	230 U	230 U	--
4-Nitrophenol	µg/kg	380 U	380 U	--
Acenaphthene	µg/kg	310 U	300 U	--
Acenaphthylene	µg/kg	310 U	5.9 J	--
Acetophenone	µg/kg	310 U	300 U	--
Anthracene	µg/kg	310 U	300 U	--
Atrazine	µg/kg	46 U	46 U	--
Benzaldehyde	µg/kg	310 U	300 U	--
Benzo(a)anthracene	µg/kg	5.5 J	17 J	--

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1028SB	GHD-1028SB	Trip Blank
Sample Name:		S-17358-033116-BW-010	S-17358-033116-BW-009	TRIP BLANK
Sample Date:		03/31/2016	03/31/2016	03/31/2016
Depth:		7-9 ft BGS	0-2.5 ft BGS	--
Parameters	**Unit**			
Benzo(a)pyrene	µg/kg	6.5 J	20 J	--
Benzo(b)fluoranthene	µg/kg	6.7 J	31 J	--
Benzo(g,h,i)perylene	µg/kg	6.8 J	18 J	--
Benzo(k)fluoranthene	µg/kg	310 U	19 J	--
Biphenyl (1,1-Biphenyl)	µg/kg	310 U	300 U	--
bis(2-Chloroethoxy)methane	µg/kg	310 U	300 U	--
bis(2-Chloroethyl)ether	µg/kg	93 U	92 U	--
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	310 U	300 U	--
Butyl benzylphthalate (BBP)	µg/kg	310 U	36 J	--
Caprolactam	µg/kg	310 U	300 U	--
Carbazole	µg/kg	310 U	300 U	--
Chrysene	µg/kg	6.4 J	26 J	--
Di-n-butylphthalate (DBP)	µg/kg	310 U	300 U	--
Di-n-octyl phthalate (DnOP)	µg/kg	310 U	300 U	--
Dibenz(a,h)anthracene	µg/kg	310 U	300 U	--
Dibenzofuran	µg/kg	310 U	300 U	--
Diethyl phthalate	µg/kg	310 U	300 U	--
Dimethyl phthalate	µg/kg	310 U	300 U	--
Fluoranthene	µg/kg	9.0 J	38 J	--
Fluorene	µg/kg	310 U	300 U	--
Hexachlorobenzene	µg/kg	310 U	300 U	--
Hexachlorobutadiene	µg/kg	46 U	46 U	--
Hexachlorocyclopentadiene	µg/kg	310 U	300 U	--
Hexachloroethane	µg/kg	310 U	300 U	--
Indeno(1,2,3-cd)pyrene	µg/kg	310 U	14 J	--
Isophorone	µg/kg	310 U	300 U	--
N-Nitrosodi-n-propylamine	µg/kg	310 U	300 U	--
N-Nitrosodiphenylamine	µg/kg	310 U	300 U	--
Naphthalene	µg/kg	310 U	300 U	--
Nitrobenzene	µg/kg	310 U	300 U	--
Pentachlorophenol	µg/kg	170 U	170 U	--
Phenanthrene	µg/kg	4.2 J	15 J	--
Phenol	µg/kg	310 U	300 U	--
Pyrene	µg/kg	8.4 J	34 J	--
Metals				
Aluminum	mg/kg	3700	5300	--
Antimony	mg/kg	0.16 U	0.23 J	--
Arsenic	mg/kg	19	4.8	--
Barium	mg/kg	16	31	--
Beryllium	mg/kg	0.19	0.23	--

Table 2B

Validated Analytical Data Summary - Soil
North Lot West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March - April 2016

Location ID:		GHD-1028SB	GHD-1028SB	Trip Blank
Sample Name:		S-17358-033116-BW-010	S-17358-033116-BW-009	TRIP BLANK
Sample Date:		03/31/2016	03/31/2016	03/31/2016
Depth:		7-9 ft BGS	0-2.5 ft BGS	--
Parameters	**Unit**			
Cadmium	mg/kg	0.11	0.17	--
Calcium	mg/kg	15000 J	8600 J	--
Chromium	mg/kg	6.8	8.1	--
Cobalt	mg/kg	2.9	4.4	--
Copper	mg/kg	9.2	7.6	--
Iron	mg/kg	8000	11000	--
Lead	mg/kg	6.7	12	--
Magnesium	mg/kg	4300 J	4100 J	--
Manganese	mg/kg	130	330	--
Mercury	mg/kg	0.041 U	0.047 U	--
Nickel	mg/kg	8.6	9.5	--
Potassium	mg/kg	370 J	280 J	--
Selenium	mg/kg	1.1	1.1	--
Silver	mg/kg	0.015 J	0.017 J	--
Sodium	mg/kg	33 J	23 J	--
Thallium	mg/kg	0.078	0.088	--
Vanadium	mg/kg	11	13	--
Zinc	mg/kg	22	35	--
Pesticides/PCBs				
Aroclor-1016 (PCB-1016)	µg/kg	38 U	39 U	--
Aroclor-1221 (PCB-1221)	µg/kg	38 U	39 U	--
Aroclor-1232 (PCB-1232)	µg/kg	38 U	39 U	--
Aroclor-1242 (PCB-1242)	µg/kg	38 U	39 U	--
Aroclor-1248 (PCB-1248)	µg/kg	38 U	39 U	--
Aroclor-1254 (PCB-1254)	µg/kg	38 U	39 U	--
Aroclor-1260 (PCB-1260)	µg/kg	38 U	39 U	--
Aroclor-1262 (PCB-1262)	µg/kg	38 U	39 U	--
Aroclor-1268 (PCB-1268)	µg/kg	38 U	39 U	--

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.

Table 3

Analytical Methods
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	Method [1]	Matrix	Holding Time: Collection to Extraction (Days)	Holding Time: Collection or Extraction to Analysis (Days)
TCL VOCs	SW 8260B	water	-	14
		soil	-	14
TCL SVOCs	SW 8270C	water	7	40
		soil	14	40
PCBs	SW 8082	water	7	40
		soil	14	40
TAL Metals	SW-846 6020/6010B	water	-	180 (Mercury - 28 days)
		soil	-	180 (Mercury - 28 days)
General Chemistry				
orthophosphate	SM 4500 PE	water	-	48 hours
Phosphorus	SM 4500 PE	water	-	28

Notes:

[1] Method References:

SW - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
SM - "Standards Methods for the Examination of Water and Wastewater", current edition
PCBs - Polychlorinated biphenyls
SVOCs - Semi-Volatile Organic Compounds
VOCs - Volatile Organic Compounds
TAL -Target Analyte List
TCL - Target Compound List

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	Analyte	Analysis Date	Blank Result	Sample ID	Original Result	Qualified Result	Units
TCL VOCs	Acetone	4/5/2016	256 J	S-17358-033016-BW-001	690 JB	1100 U	ug/kg
				S-17358-033016-BW-002	370 JB	700 U	ug/kg
				S-17358-033016-BW-003	480 JB	830 U	ug/kg
				S-17358-033016-BW-008	690 JB	810 U	ug/kg
				S-17358-033116-BW-017	310 JB	750 U	ug/kg
				S-17358-033116-BW-019	450 JB	750 U	ug/kg
TAL Metals	Beryllium	4/6/2016	0.054 J	GW-17358-040116-JY-024	0.073 JB	1.0 U	ug/L
				GW-17358-040116-JY-025	0.058 JB	1.0 U	ug/L
				GW-17358-040116-JY-028	0.076 JB	1.0 U	ug/L
TAL Metals	Selenium	4/5/2016	0.846 J	GW-17358-033116-JY-022	1.5 JB	5.0 U	ug/L
				GW-17358-033116-JY-023	0.60 JB	5.0 U	ug/L
TAL Metals	Sodium	4/5/2016	68.4 J	S-17358-033116-BW-018	81 JB	83 U	mg/kg
				S-17358-033116-BW-019	140 B	140 U	mg/kg
				S-17358-033116-BW-020	64 JB	65 U	mg/kg
				S-17358-033116-BW-021	57 JB	81 U	mg/kg
				S-17358-033116-BW-022	76 JB	86 U	mg/kg
TAL Metals	Zinc	4/6/2016	2.75 J	GW-17358-040116-JY-027	8.6 JB	50 U	ug/L
TAL Metals	Copper	4/6/2016	8.5 J	GW-17358-040116-JY-024	2.3 JB	4.0 U	ug/L
				GW-17358-040116-JY-025	2.8 JB	4.0 U	ug/L
				GW-17358-040116-JY-026	2.6 JB	4.0 U	ug/L
				GW-17358-040116-JY-027	5.1 B	5.1 U	ug/L
				GW-17358-040116-JY-028	3.3 JB	4.0 U	ug/L
TAL Metals	Copper	4/5/2016	1.05 J	GW-17358-033116-JY-022	0.96 JB	4.0 U	ug/L
				GW-17358-033116-JY-023	1.1 JB	4.0 U	ug/L

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	Analyte	Analysis Date	Blank Result	Sample ID	Original Result	Qualified Result	Units
TAL Metals	Antimony	4/6/2016	0.026 J	S-17358-033016-BW-002	0.089 JB	0.13 U	mg/kg
				S-17358-033016-BW-003	0.049 JB	0.14 U	mg/kg
				S-17358-033016-BW-004	0.057 JB	0.17 U	mg/kg
				S-17358-033016-BW-005	0.064 JB	0.13 U	mg/kg
				S-17358-033016-BW-006	0.069 JB	0.15 U	mg/kg
				S-17358-033016-BW-008	0.089 JB	0.13 U	mg/kg
				S-17358-033116-BW-010	0.047 JB	0.16 U	mg/kg
				S-17358-033116-BW-011	0.049 JB	0.17 U	mg/kg
				S-17358-033116-BW-012	0.098 JB	0.18 U	mg/kg
				S-17358-033116-BW-013	0.096 JB	0.14 U	mg/kg
				S-17358-033116-BW-014	0.045 JB	0.17 U	mg/kg
				S-17358-033116-BW-015	0.13 JB	0.17 U	mg/kg
				S-17358-033116-BW-016	0.10 JB	0.14 U	mg/kg
				S-17358-033116-BW-017	0.047 JB	0.12 U	mg/kg
TAL Metals	Antimony	4/5/2016	0.314 J	GW-17358-033116-JY-022	0.73 JB	2.0 U	ug/L
				GW-17358-033116-JY-023	0.53 JB	2.0 U	ug/L

Notes:

TAL - Target Analyte List
TCL - Target Compound List
VOCs - Volatile Organic Compounds
B - Laboratory qualifier - result detected in associated method blank
J - Estimated concentration
U - Not detected at the associated reporting limit

Table 5

Qualified Sample Results Due to Outlying Laboratory Control Sample Results
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	LCS Date	Analyte	LCS % Recovery	Control Limits % Recovery	Associated Sample ID	Qualified Result	Units
TCL VOC	04/08/2016	Trichlorofluoromethane (CFC-11)	55	61-133	GW-17358-033116-JY-022	1.0 UJ	ug/L
					GW-17358-033116-JY-023	1.0 UJ	ug/L
TCL VOC	04/11/2016	Trichlorofluoromethane (CFC-11)	59	61-133	TB-17358-033116	1.0 UJ	ug/L

Notes:

LCS - Laboratory Control Sample

UJ - Not detected; associated reporting limit is estimated

Table 6

Qualified Sample Results Due to Outlying MS/MSD Results
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Associated Samples	Qualified Result	Units
TAL Metals	S-17358-033016-BW-001	Calcium	55	284	83	75-125	20	S-17358-033016-BW-001	6100 J	mg/kg
								S-17358-033016-BW-002	46000 J	mg/kg
								S-17358-033016-BW-003	21000 J	mg/kg
								S-17358-033016-BW-004	40000 J	mg/kg
								S-17358-033016-BW-005	56000 J	mg/kg
								S-17358-033016-BW-006	61000 J	mg/kg
								S-17358-033016-BW-007	780 J	mg/kg
								S-17358-033016-BW-008	75000 J	mg/kg
								S-17358-033116-BW-009	8600 J	mg/kg
								S-17358-033116-BW-010	15000 J	mg/kg
								S-17358-033116-BW-011	28000 J	mg/kg
								S-17358-033116-BW-012	58000 J	mg/kg
								S-17358-033116-BW-013	2200 J	mg/kg
								S-17358-033116-BW-014	1100 J	mg/kg
								S-17358-033116-BW-015	42000 J	mg/kg
								S-17358-033116-BW-016	52000 J	mg/kg
								S-17358-033116-BW-017	23000 J	mg/kg
TAL Metals	S-17358-033016-BW-001	Magnesium	77	198	65	75-125	20	S-17358-033016-BW-001	2700 J	mg/kg
								S-17358-033016-BW-002	7300 J	mg/kg
								S-17358-033016-BW-003	3000 J	mg/kg
								S-17358-033016-BW-004	6400 J	mg/kg
								S-17358-033016-BW-005	7100 J	mg/kg
								S-17358-033016-BW-006	14000 J	mg/kg
								S-17358-033016-BW-007	1500 J	mg/kg
								S-17358-033016-BW-008	18000 J	mg/kg
								S-17358-033116-BW-009	4100 J	mg/kg
								S-17358-033116-BW-010	4300 J	mg/kg
								S-17358-033116-BW-011	15000 J	mg/kg
								S-17358-033116-BW-012	18000 J	mg/kg
								S-17358-033116-BW-013	1900 J	mg/kg
								S-17358-033116-BW-014	1100 J	mg/kg
								S-17358-033116-BW-015	12000 J	mg/kg
								S-17358-033116-BW-016	15000 J	mg/kg
								S-17358-033116-BW-017	4700 J	mg/kg

Table 6

Qualified Sample Results Due to Outlying MS/MSD Results
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Associated Samples	Qualified Result	Units
TAL Metals	S-17358-033116-BW-018	Calcium	39	349	54	75-125	20	S-17358-033116-BW-018	20000 J	mg/kg
								S-17358-033116-BW-019	91000 J	mg/kg
								S-17358-033116-BW-020	16000 J	mg/kg
								S-17358-033116-BW-021	1700 J	mg/kg
								S-17358-033116-BW-022	31000 J	mg/kg
TAL Metals	S-17358-033116-BW-018	Lead	73	74	2	75-125	20	S-17358-033116-BW-018	12 J	mg/kg
								S-17358-033116-BW-019	5.3 J	mg/kg
								S-17358-033116-BW-020	12 J	mg/kg
								S-17358-033116-BW-021	10 J	mg/kg
								S-17358-033116-BW-022	2.1 J	mg/kg
TAL Metals	S-17358-033116-BW-018	Manganese	28	57	9	75-125	20	S-17358-033116-BW-018	150 J	mg/kg
								S-17358-033116-BW-019	220 J	mg/kg
								S-17358-033116-BW-020	340 J	mg/kg
								S-17358-033116-BW-021	600 J	mg/kg
								S-17358-033116-BW-022	190 J	mg/kg
TAL Metals	S-17358-033016-BW-001	Antimony	46	49	6	75-125	20	S-17358-033016-BW-001	0.23 J	mg/kg
								S-17358-033016-BW-007	0.15 J	mg/kg
								S-17358-033016-BW-009	0.23 J	mg/kg
TAL Metals	S-17358-033116-BW-018	Antimony	45	45	0	75-125	20	S-17358-033116-BW-018	0.19 J	mg/kg
								S-17358-033116-BW-019	0.11 J	mg/kg
								S-17358-033116-BW-020	0.13 J	mg/kg
								S-17358-033116-BW-021	0.091 J	mg/kg
								S-17358-033116-BW-022	0.023 J	mg/kg

Notes:

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
J - Estimated concentration

Table 7

Qualified Sample Data Due to Analyte Concentrations in the Trip Blanks
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	Blank Date (mm/dd/yyyy)	Analyte	Blank Result	Associated Sample ID	Original Result	Qualified Result	Units
TCL VOC	4/1/2016 TB-17358-040116	Acetone	5.8 J	GW-17358-040116-JY-027 GW-17358-040116-JY-024	6.5 J 2.6 J	10 U 10 U	ug/L ug/L
TCL VOC	3/31/2016 TB-17358-033116	Acetone	4.2 J	GW-17358-033116-JY-023	2.8 J	10 U	ug/L

Notes:

U - Not detected at the associated reporting limit

J - Estimated concentration

Table 8

Qualified Sample Data Due to Variability in Field Duplicate Results
North Lot & West Out Sampling
Willow Run Powertrain
Ypsilanti, Michigan
March-April 2016

Parameter	Analyte	RPD/Diff	Sample ID	Qualified Results	Field Duplicate Sample ID	Qualified Results	Units
General Chemistry	Orthophosphate	Diff=0.027	GW-17358-040116-JY-025	0.048 J	GW-17358-040116-JY-026	0.021 J	mg/L
TAL Metals	Lead	RPD=110	S-17358-033116-BW-017	3.6 J	S-17358-033116-BW-018	12 J	mg/kg
TAL Metals	Calcium Magnesium	RPD =160 RPD =110	S-17358-033116-BW-020	16000J 4500 J	S-17358-033116-BW-021	1700 J 1300 J	mg/kg mg/kg

Notes:

Diff - Difference (i.e., >1X RL for waters or >2XRL for soils)
RPD - Relative Percent Difference
J - Estimated concentration