

TO: Mr. James Innes
FROM: Mr. Anthony Finch
RE: Off-Site Light Non-Aqueous Phase Liquid Investigation:
Mini-Storage 3425 South Saginaw Street
FILE: 15388/ 50138
DATE: March 7, 2014

cc: Mr. David Favero - RACER Trust

O'Brien & Gere Engineers, Inc. (O'Brien & Gere) has prepared this memo on behalf of Revitalizing Auto Communities Environmental Response Trust (RACER Trust) to document the partial completion of the offsite light non-aqueous phase liquid (LNAPL) delineation in accordance with the MDEQ-approved July 3, 2012 Work Plan associated with the RACER Trust Hemphill Road Industrial Land Site (HRIL- formerly known as Burton Parcel). This memo documents the procedures during the installation of soil borings and monitoring wells south of the RACER Trust HRIL. These activities were conducted to assess the extent of LNAPL that has been observed in monitoring wells OBG MW-4S and MW-401 at the southern portion of the HRIL.

In July 2012, a Work Plan was submitted to the MDEQ which outlined the methods to be implemented to assess the potential presence of LNAPL offsite to the east and south of the HRIL Site. The Work Plan was approved by the MDEQ in July 2012. An Access Agreement was entered into with the southern adjacent property owner in November 2012. Implementation of this work was placed on hold while waiting for access to another adjacent property. However, due to delays receiving access to that other parcel, the decision was made to implement this scope.

MONITORING WELL AND SOIL BORING INSTALLATION

Soil borings were installed on November 11, 2013 using a Rotasonic® drill rig in accordance with the MDEQ-approved July 2012 Work Plan.

O'Brien & Gere's drilling contractor installed three soil borings (two completed as monitoring wells OBG OS MW-1 and OBG OS MW-2) south of the HRIL to evaluate the extent of LNAPL observed in monitoring wells OBG MW-4S and MW-401 at the HRIL Site. These borings were also used to confirm the presence of waste fill materials (soil boring logs are included in Exhibit A). The locations of the soil borings are shown on Figure 1.

An O'Brien & Gere geologist was on-site during boring advancement to describe soil samples. Additionally, soils were screened using a photoionization detector (PID) and assessed for the presence of LNAPL using an ultraviolet light and FLUTE® ribbon (hydrophobic-treated tape). The O'Brien & Gere geologist did not observe indications of LNAPL during the installation of the borings using the field screening methods.

Soil cuttings and well development water was contained in 55-gal Department of Transportation (DOT)-approved drums and staged at the HRIL Site pending disposal on December 19, 2013.

Subsequent to monitoring well installation, a location and elevation survey was performed to establish top-of-casing and grade elevations for the newly installed wells and soil boring. The survey data for the newly installed monitoring wells (OBG OS MW-1 and OBG OS MW-2) is included on the well construction logs included in Exhibit A.

LNAPL DELINEATION RESULTS

During installation of the newly installed monitoring wells (OBG OS MW-1 and OBG OS MW-2) and the soil boring at the southern adjacent property to the HRIL Site, no field observations indicating the presence of LNAPL were observed. On December 10, 2013 the newly installed wells were developed and during the well development no indications of LNAPL in the wells was observed. On December 19, 2013 (6 weeks after well installation) and February 13, 2014 (13 weeks after well installation) the wells were checked for the potential presence of LNAPL and no LNAPL was observed in the wells.

MR. JAMES INNES
MARCH 7, 2014
PAGE 2

Based on the slow recharge of the LNAPL from the formation, subsequent evaluation will be performed during site visits to the HRIL Site to assess the potential presence of LNAPL in the newly installed wells.

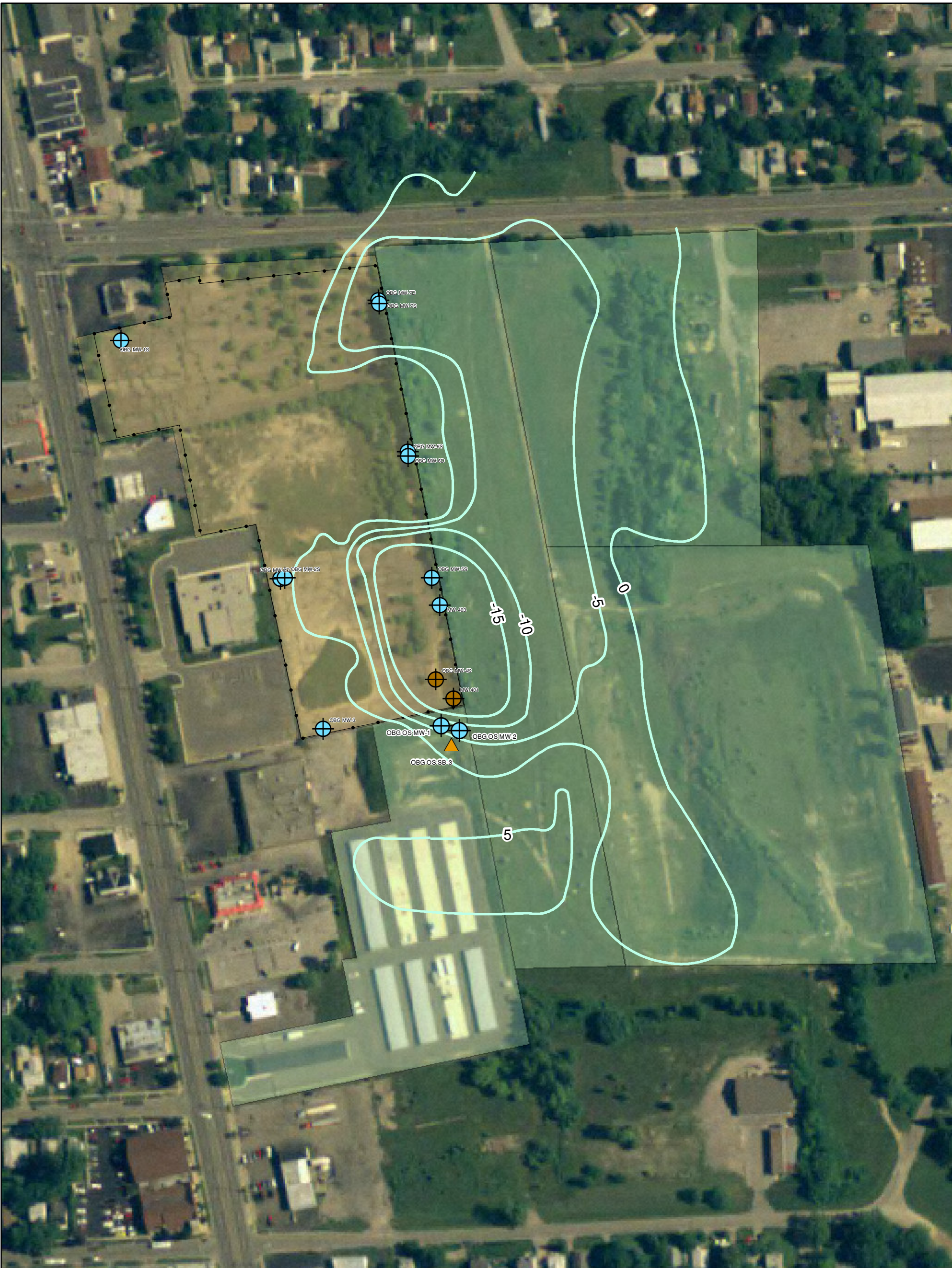
The current results of the offsite investigation on the southern adjacent property to the HRIL indicate the LNAPL has been delineated to the south of the onsite monitoring wells in which LNAPL was observed.

Attempts to acquire access to the property east of the RACER Trust property were finally successful in late February 2014, therefore, the offsite investigation previously approved by the MDEQ for the property east of the HRIL Site will be implemented as soon as the work can be scheduled. Along with this work and to better understand potential risks associated with the onsite LNAPL, groundwater samples from wells OBG MW-4S and MW-401 will be collected from below the LNAPL. These samples will be analyzed for the presence of VOCs and total and dissolved lead and will be used to evaluate if these chemicals are partitioning from the LNAPL to the dissolved phase in groundwater. These parameters were selected based on the results of previous LNAPL analysis performed in 2011 indicating leachable detections of VOCs and lead.






Please contact David Favero with RACER Trust at 217-741-6235 or Anthony Finch at 248-477-5701 if you have any questions.

I:\Racer-Trust_15388\50138_Racer-Hemphill\Docs\DWG\z\MXD\003A-FIGURE 1 memo.mxd

PLOT DATE: 07-3-2012 AJF



KEY

-  MONITORING WELL LOCATION
-  LNAPL OBSERVED IN WELL
-  SOIL BORING LOCATION
-  ESTIMATED EXTENT AND THICKNESS OF FILL
-  FENCE LINE

RACER TRUST
HEMPHILL ROAD INDUSTRIAL LAND
BURTON, MICHIGAN

MONITORING WELL LOCATIONS

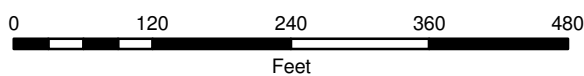


Exhibit A
Soil Boring Logs and Well
Construction Details



OBRIEN & GERE

BORING LOG

WELL NO. **OBG-OS-MW1**

PROJECT: Hemphill Road Industrial Land Offsite Investigation
CLIENT: RACER Trust
INSPECTOR: Kevin Schneider

SHEET 1 OF 1

JOB NO. 50138

DRILLING CONTRACTOR: Cascade Drilling

GROUND ELEV. 774.09

DRILLER: Steve Auger

DATUM NAVD88

PURPOSE: Offsite Investigation

DATE STARTED 11/11/2013

DRILLING METHOD: Rotasonic

	SAMPLE	CORE	CASING
TYPE	SS	SS	SS
DIA.	4"	4"	6"

DRILL RIG TYPE: Track-Mounted Sonic ATV

DATE FINISHED 11/11/2013

DEPTH (ft)	Sample Type Number	Blows/6" (N Value)	Penetration/ Recovery	MATERIAL DESCRIPTION	Graphic Log	USCS Symbol	Stratum Change	Field Testing PID (ppm)	Well Graphic	REMARKS
2	SS-1		10.0/ 7.5'	773.2 dark yellowish brown, dry, sandy SILT, roots, little clay	0.9	MLS		0		
				772.4 dark yellowish brown, dry, silty CLAY, trace large gravel, soft, plastic	1.7	CL				
				771.7 moderate yellowish brown, dry, medium to fine SAND	2.4	SP				
				771.1 moderate yellowish brown, dry, medium to fine SAND	3.0	ML				
				770.6 dark yellowish brown, dry, clayey SILT	3.5	SP				
4				light brown, dry, medium to fine SAND						
6				dark yellowish brown, dry, silty CLAY		CL				
8										
10				764.1 large gravel at 9' asphalt pieces at 9.5 to 10'	10.0	CL CL				
12				762.1 dark yellowish brown, dry, clayey SILT, brick pieces at 12'	12.0	ML				
14	SS-2		10.0/ 10.0'	medium gray, dry, silty CLAY, trace gravel, stiff, non-plastic		CL				
16										
18				dark gray, dry, silty CLAY, stiff		CL				
20				medium gray, silty CLAY, stiff, brick pieces at 20'		CL				
22										
24	SS-3		10.0/ 9.0'	751.1 dark gray to black, wet, silty medium to fine SAND, metal pieces, cinders, slight sheen	23.0	SP- SM				
				749.8 medium gray, moist, silty CLAY, very soft	24.3	CL				
				747.9 olive brown, dry, silty sandy CLAY, large gravel, brick pieces	26.2	CL				
				747.8 fine SAND seam	26.3					
26				olive gray, dry, silty sandy CLAY		CL				
28										
30				744.1 medium dark gray, dry, silty CLAY, wood pieces, fabric pieces, solvent/chemical odor	30.0	CL				
32				End of Borehole at 30.0'.						

Report Name: NEW OBG BORING LOG Data Template: OBG GINT STD US.GDT

Notes: Monitoring well is constructed of 2" diameter schedule 40 PVC riser with 10' of 0.010-inch slot screen extending from 17'-27' below grade (completed as stick-up with protective casing). Top of casing elevation is 776.57 ft.



O'BRIEN & GERE

BORING LOG

WELL NO. **OBG-OS-MW2**

PROJECT: Hemphill Road Industrial Land Offsite Investigation
CLIENT: RACER Trust
INSPECTOR: Kevin Schneider

SHEET 1 OF 1

JOB NO. 50138
GROUND ELEV. 774.02

DRILLING CONTRACTOR: Cascade Drilling
DRILLER: Steve Auger
PURPOSE: Offsite Investigation

DATUM NAVD88
DATE STARTED 11/11/2013

DRILLING METHOD: Rotasonic
DRILL RIG TYPE: Track-Mounted Sonic ATV

	SAMPLE	CORE	CASING
TYPE	SS	SS	SS
DIA.	4"	4"	6"

DATE FINISHED 11/11/2013

DEPTH (ft)	Sample Type Number	Blows/6" (N Value)	Penetration/Recovery	MATERIAL DESCRIPTION	Graphic Log	USCS Symbol	Stratum Change	Field Testing PID (ppm)	Well Graphic	REMARKS
0.2				top soil						
1.7				pale yellowish brown, dry, silty CLAY, medium soft, medium plastic		CL				
5.0				moderate yellowish brown, dry, sandy SILT		MLS				
5.0	SS-1		10.0/ 8.0'	pale yellowish brown, dry, silty CLAY		CL				
6.0				pale yellowish brown, dry, clayey SILT		ML				
6.0				dark gray wood pieces at 6 to 6.3'						
7.5				medium gray, dry, silty CLAY, trace gravel, stiff, medium plastic		CL				
8.0				medium gray, dry, medium to fine SAND, stone block pieces		SP				
9.0				medium gray, dry, silty CLAY, trace gravel, hard		CL				
18.5			10.0/ 8.0'	pale olive, dry, silty CLAY		CL				
20.0				pale yellowish brown, dry, medium to fine SAND, trace gravel		SP				
21.0				pale yellowish brown, dry, silty CLAY, stiff		CL				
21.0				dark gray, dry silty CLAY		CL				
22.0				pale yellowish brown, wet to moist, medium to fine SAND		SP				
22.0				pale yellowish brown, moist, clayey fine SAND						
27.0			10.0/ 10.0'	dark gray, moist, silty CLAY		CL				
27.0				dark gray to black, moist, sandy CLAY, metal pieces, glass pieces, brick pieces, slag, plastic pieces, slight sheen, slight solvent/chemical odor, coarse sand at 29.5 to 30'		CL				
30.0				End of Borehole at 30.0'						

Report Name: NEW OBG BORING LOG Data Template: OBG GINT STD US.GDT

Notes: Monitoring well is constructed of 2" diameter schedule 40 PVC riser with 10' of 0.010-inch slot screen extending from 17'-27' below grade (completed as stick-up with protective casing). Top of casing elevation is 776.67 ft.



O'BRIEN & GERE

BORING LOG

BORING NO. **OBG-OS-SB3**

PROJECT: Hemphill Road Industrial Land Offsite Investigation
CLIENT: RACER Trust
INSPECTOR: Kevin Schneider

SHEET 1 OF 1

JOB NO. 50138

DRILLING CONTRACTOR: Cascade Drilling

GROUND ELEV. 771.15

DRILLER: Steve Auger

PURPOSE: Offsite Investigation

DATUM NAVD88

DRILLING METHOD: Rotasonic

	SAMPLE	CORE	CASING
TYPE	SS	SS	SS
DIA.	4"	4"	6"

DATE STARTED 11/11/2013

DRILL RIG TYPE: Track-Mounted Sonic ATV

DATE FINISHED 11/11/2013

DEPTH (ft)	Sample Type Number	Blows/6" (N Value)	Penetration/ Recovery	MATERIAL DESCRIPTION	Graphic Log	USCS Symbol	Stratum Change	Field Testing PID (ppm)	REMARKS
0.0				top soil				0	
0.2				moderate yellowish brown, dry, silty CLAY, stiff, low plastic		CL		0	
2									
4	SS-1		10.0/9.0'	dark yellowish brown, dry, silty CLAY, stiff, low plastic		CL		0	
6				medium gray, dry, silty CLAY, little sand, little olive brown mottling		CL		0	
8				medium gray, dry, silty CLAY, large wood piece, stone block pieces, plastic pieces		CL		0	
10				pale yellowish brown, dry, silty CLAY		CL		0	
10.0				medium gray, dry, sandy CLAY		CL		0	
12				pale yellowish brown, dry, silty CLAY, stiff, low plastic				0	
14	SS-2		10.0/9.0'	medium dark gray, dry coarse to fine SAND, little clay		SP		0	
16				pale yellowish brown, dry, silty CLAY, little sand, trace coarse sand		CL		0	
18								0	
20				pale yellowish brown, dry, sandy CLAY, little silt, stiff, glass pieces at 18.5'		CL		0	
20.0				End of Borehole at 20.0'.				0	
22									
24									
26									
28									
30									
32									

Report Name: NEW OBG BORING LOG Data. Template: OBG GINT STD US.GDT

Notes: Soil boring was backfilled to surface with coarse granular bentonite

WELL CONSTRUCTION LOG

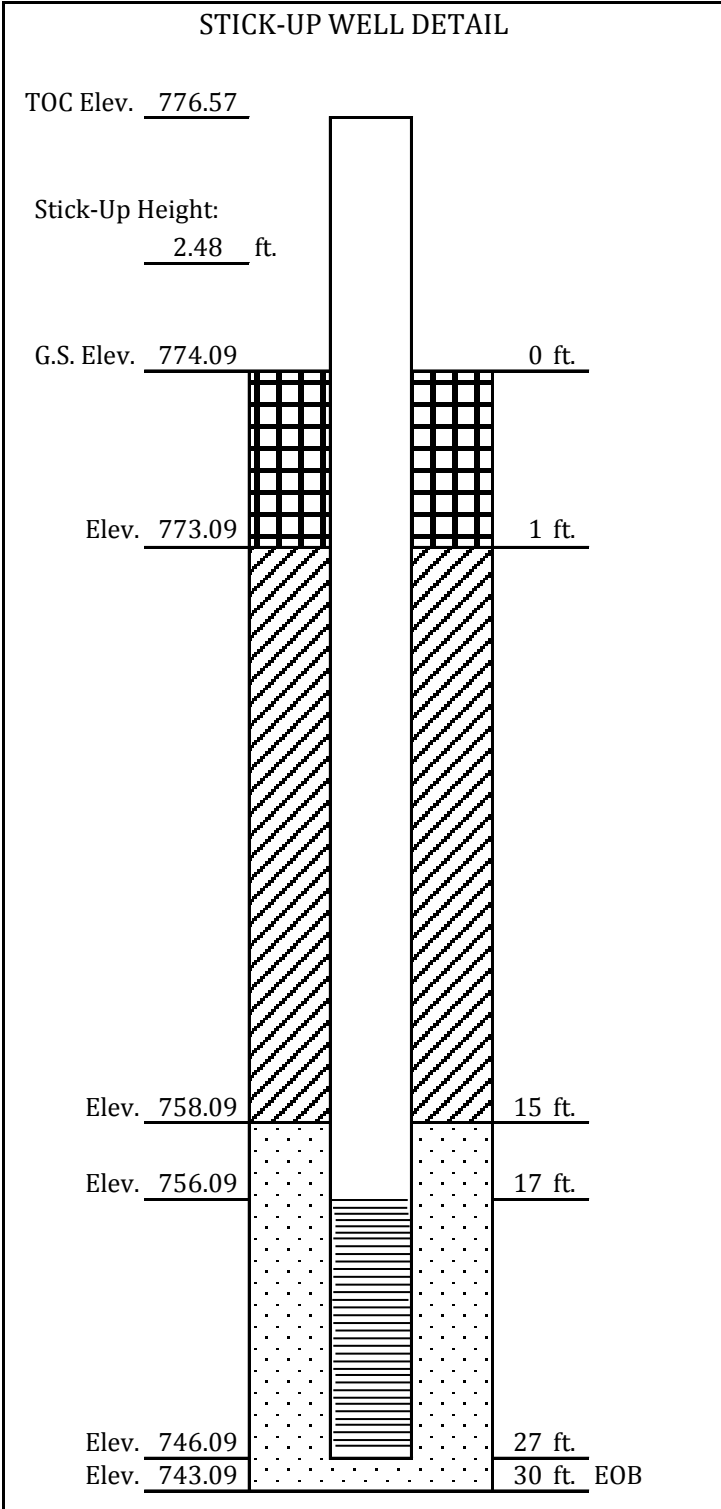
Well ID: OBG-OS-MW1

Project: Hemphill Road Industrial Land Offsite Investigation
Location: Flint, MI
Project No.: 50138

Client: RACER Trust
Date Installed: 11/11/2013

Inspection Notes:

Inspector: Kevin Schneider
 Drilling Contractor: Cascade Drilling
 Type of Well: Environmental Monitoring Well



Drilling Method:

Type: Rotosonic
 Casing: Stainless Steel Diameter: 6 inch

Protective Casing:

Type: Steel Stick-Up Diameter: _____

Surface Seal:

Type: Cement Interval: 0 - 1 fbg

Isolation Casing:

Casing: NA Diameter: NA
 Interval: _____

Riser Pipe:

Material: Sch. 40 PVC Diameter: 2" ID
 Interval: 0 fbg - 17 fbg

Grout:

Type: Bentonite Interval: 0 fbg - 15 fbg

Bentonite Seal:

Type: _____ Interval: _____

Sand Pack:

Type: Silica Sand Interval: 15 fbg - 27 fbg

Screen Material:

Material: Sch. 40 PVC Diameter: 2" ID
 Interval: 17 fbg - 27 fbg Slot Size: 0.010

Material Below Sand Pack:

Type: N/A Interval: 27 fbg - 30 EOB

Notes:

1. All Elevations in feet above mean sea level.
2. Steel protective casing has cement collar.
3. "NA" indicates not applicable.
4. "fbg" indicates feet below grade.



WELL CONSTRUCTION LOG

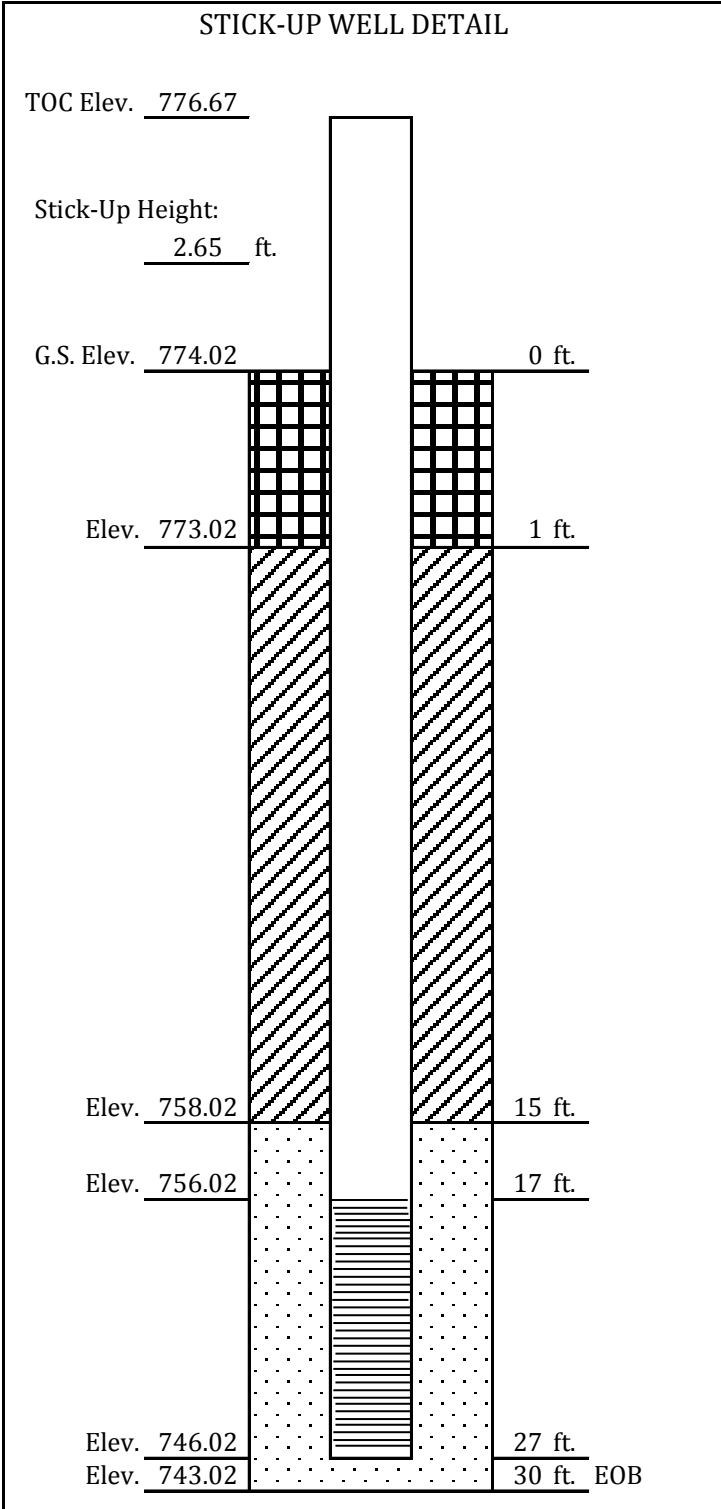
Well ID: OBG-OS-MW2

Project: Hemphill Road Industrial Land Offsite Investigation
Location: Flint, MI
Project No.: 50138

Client: RACER Trust
Date Installed: 11/11/2013

Inspection Notes:

Inspector: Kevin Schneider
 Drilling Contractor: Cascade Drilling
 Type of Well: Environmental Monitoring Well



Drilling Method:

Type: Rotosonic
 Casing: Stainless Steel Diameter: 6 inch

Protective Casing:

Type: Steel Stick-Up Diameter: _____

Surface Seal:

Type: Cement Interval: 0 - 1 fbg

Isolation Casing:

Casing: NA Diameter: NA
 Interval: _____

Riser Pipe:

Material: Sch. 40 PVC Diameter: 2" ID
 Interval: 0 fbg - 17 fbg

Grout:

Type: Bentonite Interval: 0 fbg - 15 fbg

Bentonite Seal:

Type: _____ Interval: _____

Sand Pack:

Type: Silica Sand Interval: 15 fbg - 27 fbg

Screen Material:

Material: Sch. 40 PVC Diameter: 2" ID
 Interval: 17 fbg - 27 fbg Slot Size: 0.010

Material Below Sand Pack:

Type: N/A Interval: 27 fbg - 30 EOB

Notes:

1. All Elevations in feet above mean sea level.
2. Steel protective casing has cement collar.
3. "NA" indicates not applicable.
4. "fbg" indicates feet below grade.



More than Engineering Solutions

All materials printed on recycled paper. 

