



June 28, 2016

Reference No. 11114941

Mr. Mark Umholtz
Project Hydrogeologist
Minnesota Pollution Control Agency
520 Lafayette Road North
Saint Paul, Minnesota 55155

Dear Mr. Umholtz:

**Re: Groundwater Assessment North of Coon Creek
Waste Disposal Engineering Inc. Closed Landfill
Andover, Minnesota**

This letter presents the results of recent groundwater investigations conducted on the north side of Coon Creek at the Waste Disposal Engineering Inc. (WDE) Closed Landfill in Andover, Minnesota (Site). The objectives of the investigations were to install new monitoring wells in order to better understand groundwater flow direction and chemical constituents in the upper sand aquifer north of Coon Creek. GHD Services Inc. (GHD)'s scope of work included the following tasks:

- 1 Assist with property access
- 2 Procure drilling contractor
- 3 Supervise drilling and installation of monitoring wells; including utility clearance, soil descriptions according to the Unified Soil Classification System (USCS), well development oversight, and preliminary well elevation data
- 4 Measure groundwater elevations at all Site wells
- 5 Evaluate groundwater volatile organic compound (VOC) analytical results for the four new wells (data provided by others)
- 6 Prepare a report that documents well installations and includes well logs, geologic cross sections, and groundwater contours for the shallow and deep portions of the upper sand aquifer

The results of these tasks are described in the following sections. A Site Plan is provided as Figure 1.

1. Property Access

One monitoring well nest was installed on MPCA property adjacent to MW26D and the second well nest was installed on property owned by the Nature's Run Townhome Association. GHD assisted in

the siting of the MW39 well nest and met with the townhome association officers. An access agreement with the townhome association was completed on April 1, 2016.

2. Monitoring Well Installation

GHD conducted oversight of the services of Thein Well Company of Spicer, Minnesota (Thein). Prior to initiating field activities, Thein conducted public utility locating using Gopher State One Call and also retained the services of Private Underground to perform a private utility locate near the four new well locations. All four locations were free of underground utilities. Prior to mobilizing to the field, GHD prepared a site specific health and safety plan to ensure safe completion of the field tasks.

Well installation activities were conducted on April 12th through the 14th. The well installation scope of work included the following tasks:

1. Installation of four ground water monitoring wells
2. Development of the four newly installed groundwater monitoring wells
3. Surveying of the four newly installed groundwater monitoring wells

2.1 Field Activities

Thein installed four groundwater monitoring wells at two nested locations, MW26 and MW39 as shown on Figure 1. Each location consisted of a well in the shallow portion of the upper sand aquifer and a well in the deeper portion of the shallow sand aquifer. MW26A and MW26B were drilled and installed utilizing a truck mounted hollow stem auger drill rig. Split-spoon soil samples were collected continuously to fifty-feet below grade. MW39A and MW39B were drilled and installed utilizing a track mounted Geoprobe drill rig capable of turning hollow stem augers. A track mounted drill rig was needed to access the MW39 well nest due to soft ground conditions. Continuous samples were collected to fifty-feet below grade at the MW39 nest. Soils from both locations were logged in accordance with the USCS. The stratigraphy encountered at the two locations is illustrated on the well logs provided in Attachment 1.

The two shallow groundwater monitoring wells (MW-26A and MW-39A) were screened from four to fourteen feet below ground surface (bgs). At each shallow well location, 2-inch diameter PVC screen was attached to a 2-inch diameter, flush threaded, PVC riser. A filter sand pack was placed in the borehole annulus to 6-inches above the top of the screen. A 6-inch thick bentonite seal was placed above the sand pack and the remaining of the borehole was filled with cement grout. The wells were completed with a lockable protective top.

MW26B was screened from 40 to 45 feet bgs and MW39B was screened from 27.5 to 32.5 feet bgs. These screen intervals were chosen based on the stratigraphy encountered and in consultation with the MPCA project hydrogeologist, IngridVerhagen. Each well was constructed using a 2-inch diameter, 5-foot stainless steel well screen attached to a 2-inch diameter black steel riser pipe. A filter sand pack was placed in the borehole annulus to 2-feet above the top of the screen. Bentonite grout was placed above the sand pack to approximately 4 feet bgs. The remaining boreholes were filled with

cement grout and finished with a lockable protective top. Department of Health Well and Boring Construction Records and stratigraphic logs for the four wells are provided in Attachment 1.

Auger cuttings were thin spread around the drilling areas and development water was discharged to the ground surface. The wells were developed by Thein utilizing a submersible pump. Each well was developed to a sand free condition.

Upon completion of the monitoring wells, GHD established provisional elevations for the four new wells in reference to existing site wells. The top of each casing was measured to the nearest 0.01-foot and the ground surface was measured to the nearest 0.1-foot. The provisional elevations were used to determine groundwater elevations at the new wells. At a later date, the MPCA utilized the Minnesota Department of Natural Resources (MDNR) to perform the record survey of the new monitoring well locations and elevations. The results of the MDNR survey are provided in Attachment 2 and also stated on the Stratigraphic and Instrumentation Logs provided in Attachment 1.

2.2 Stratigraphy North of Coon Creek

The stratigraphy of the shallow aquifer at MW26 consisted primarily of fine to coarse gray sand, which is consistent with the rest of the Site. A gray silt layer was encountered at a depth of 17 to 25 feet bgs and the top of the brown till that separates the shallow sand aquifer from the lower sand aquifer was encountered at 48 feet bgs.

The soils at MW39 contained more silty soils and silt layers compared to the MW26 area. Layers of sand ranged from 4.5 feet to 8.5 feet thick and the silt layers ranged from 3 feet to 12 feet thick. The top of the brown till that separates the shallow sand aquifer from the lower sand aquifer was encountered at 49 feet bgs. Stratigraphic cross-sections for the north side of Coon Creek are shown on Figure 2. The locations of the cross-sections are shown on Figure 1.

3. Site Water Levels

After the new wells were installed and developed, GHD measured water levels at all Site wells and piezometers (approximately 80 wells total). Water levels were measured on April 18, 2016, and June 2, 2016. Groundwater elevations are presented in Table 1 and groundwater contours for the upper portion of the shallow aquifer and the lower portion of the shallow aquifer are presented on Figures 3, 4, 5, and 6.

Groundwater contours for both the upper portion of the shallow aquifer and the lower portion of the shallow aquifer indicate that groundwater flow on the north side of Coon Creek is to the southwest toward the creek.

4. VOC Analytical Results

Groundwater samples were collected from the four new wells on May 31, 2016. The samples were collected by Interpoll Labs Field Services and were analyzed by Interpoll Labs for VOCs by EPA method 8260B and for dissolved iron, manganese, cobalt, and arsenic by EPA methods 6010C and 6020C. Copies of the laboratory reports are provided in Attachment 3.

VOCs were not detected at MW26A, MW39A, and MW39B. At MW26B, methyl isobutyl ketone (MIBK) was detected with a concentration of 0.61 µg/L and ethyl ether was detected with a concentration of 0.40 µg/L. Both concentrations were estimated because they were below their method reporting limits. The drinking water criteria for MIBK and ethyl ether are 300 µg/L and 200 µg/L, respectively.

Arsenic and cobalt concentrations were low at all four wells. The highest arsenic concentration was 6.0 µg/L at MW39A and the highest cobalt concentration was 1.9 µg/L at MW39A. The drinking water criteria for arsenic and cobalt are 10 µg/L and 30 µg/L, respectively.

Manganese concentrations were higher than its secondary drinking water criteria (SDWC) at all four well locations. Concentrations ranged from 210 µg/L to 1000 µg/L. The SDWC for manganese is 50 µg/L and the MDH health-based DWC is 300 µg/L.

Iron concentrations ranged from 130 µg/L to 3000 µg/L. The SDWC for iron is 300 µg/L, which was exceeded at MW26B, MW39A, and MW39B. There is no health-based DWC for iron.

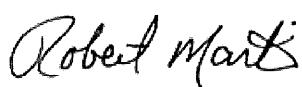
5. Conclusions

- The shallow aquifer on the north side of Coon Creek consisted predominantly of fine to coarse sand and extended to approximately 50 feet bgs. Soils observed at the MW39 location contained more silt layers than encountered at the MW26 location.
- The shallow water table at the two new well locations was encountered at approximately 5 feet bgs. Groundwater contours indicate that groundwater flow on the north side of Coon Creek is to the southwest toward the creek.
- VOC analytical results and groundwater flow patterns do not indicate a potential for impacted groundwater from the WDE Closed Landfill to have any effect on private wells along Andover Blvd. NW.

Should you have any questions about the proposal, please contact me at (651) 639-0913.

Sincerely,

GHD



Robert Martin

CA/sb/1

Encl.



Charles Ahrens



LEGEND

WELL LOCATION

CROSS-SECTION LOCATION

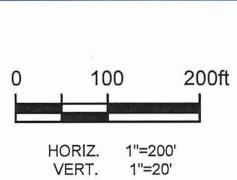
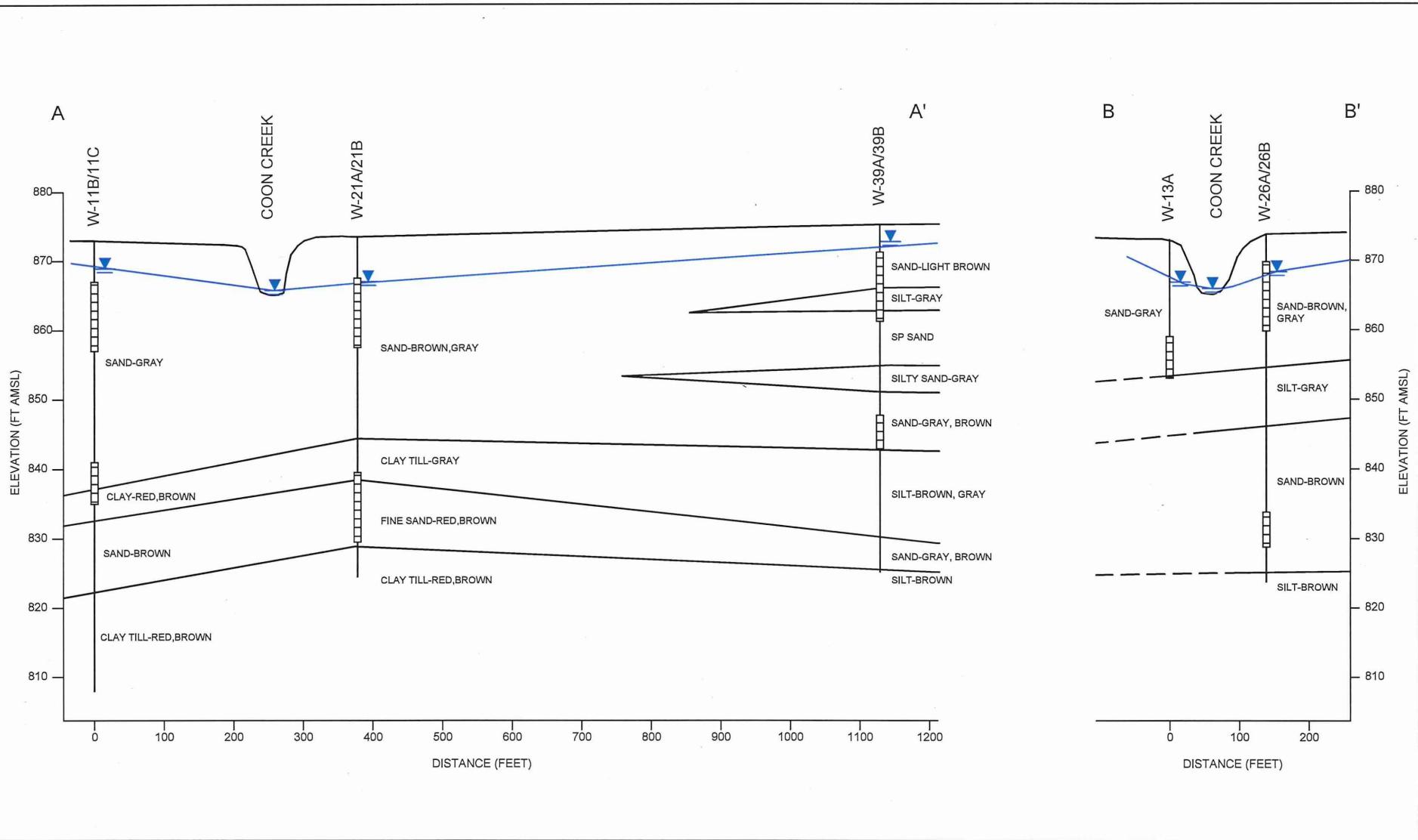


WASTE DISPOSAL ENGINEERING INC. CLOSED LANDFILL
ANDOVER, MINNESOTA
GROUNDWATER ASSESSMENT NORTH OF COON CREEK

ACTIVE MONITORING WELL LOCATIONS

11114941-03
Jun 24, 2016

FIGURE 1

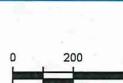


WASTE DISPOSAL ENGINEERING INC. CLOSED LANDFILL
ANDOVER, MINNESOTA
GROUNDWATER ASSESSMENT NORTH OF COON CREEK

STRATIGRAPHIC CROSS-SECTIONS

11114941-03
Jun 28, 2016

FIGURE 2



LEGEND

- WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER CONTOUR
- GROUNDWATER ELEVATION (FT AMSL)

851,48



WASTE DISPOSAL ENGINEERING INC. CLOSED LANDFILL
ANDOVER, MINNESOTA
GROUNDWATER ASSESSMENT NORTH OF COON CREEK
GROUNDWATER CONTOURS
UPPER SAND AQUIFER - 4/18/16

11114941-03
Jun 28, 2016

FIGURE 3



0 200 400 ft



LEGEND

- WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER CONTOUR
- GROUNDWATER ELEVATION (FT AMSL)

651.48



WASTE DISPOSAL ENGINEERING INC. CLOSED LANDFILL
ANDOVER, MINNESOTA
GROUNDWATER ASSESSMENT NORTH OF COON CREEK
GROUNDWATER CONTOURS
LOWER PORTION OF UPPER SAND AQUIFER - 4/18/16

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FIGURE 4



0 200 400 ft.



LEGEND

- WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER CONTOUR
- GROUNDWATER ELEVATION (FT AMSL)

B51.4B



WASTE DISPOSAL ENGINEERING INC. CLOSED LANDFILL
ANDOVER, MINNESOTA
GROUNDWATER ASSESSMENT NORTH OF COON CREEK
GROUNDWATER CONTOURS
UPPER SAND AQUIFER - 6/2/16

11114941-03
Jun 28, 2016

FIGURE 5



LEGEND

- WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER CONTOUR
- GROUNDWATER ELEVATION (FT AMSL)

851.48



WASTE DISPOSAL ENGINEERING INC. CLOSED LANDFILL
ANDOVER, MINNESOTA
GROUNDWATER ASSESSMENT NORTH OF COON CREEK
GROUNDWATER CONTOURS
LOWER PORTION OF UPPER SAND AQUIFER - 6/2/16

11114941-03
Jun 28, 2016

FIGURE 6

Table 1

Page 1 of 3

Groundwater Elevations
WDE Closed Landfill
Andover, Minnesota

Station ID	Unique Station ID	Measuring Point Elevation	Water Level Measurement 4-18-16	Groundwater Elevation 4-18-16	Water Level Measurement 6-2-16	Groundwater Elevation 6-2-16
Upper Portion of Shallow Aquifer						
B1	740930	873.76	7.85	865.91	7.77	865.99
B2	740932	875.44	8.75	866.69	8.68	866.76
B3	740934	875.44	8.66	866.78	8.60	866.84
NW-1B	536350	905.86	33.98	871.88	33.91	871.95
NW-2B	536344	905.07	33.48	871.59	33.28	871.79
NW-3B	536358	907.67	35.79	871.88	35.83	871.84
NW-4B	536355	914.13	41.54	872.59	41.58	872.55
W-1A	245745	894.08	17.26	876.82	16.54	877.54
W-2A	245639	875.11	6.86	868.25	6.77	868.34
W-3	245748	874.92	7.51	867.41	7.55	867.37
W-4	245750	875.60	6.86	868.74	6.96	868.64
W-7	245756	875.69	8.48	867.21	8.37	867.32
W-10A	245642	877.43	7.44	869.99	7.86	869.57
W-11A	245759	875.84	6.97	868.87	6.94	868.90
W-13A	245766	875.76	9.08	866.68	8.96	866.80
W-14A	524969	895.03	19.35	875.68	19.53	875.50
W-15A	536360	891.40	16.64	874.76	15.64	875.76
W-16	245772	875.18	6.36	868.82	6.18	869.00
W-17	245773	900.14	24.74	875.40	24.91	875.23
W-19	245780	877.72	6.67	871.05	6.78	870.94
W-21A	245535	875.46	8.45	867.01	8.46	867.00
W-22A	524974	905.68	33.98	871.70	33.98	871.70
W-23A	245784	885.68	9.47	876.21	8.62	877.06
W-24A	245788	893.52	20.99	872.53	21.18	872.34
W-25A	245775	880.95	12.68	868.27	12.68	868.27
W-26A	815789	875.71	7.33	868.38	7.14	868.57
W-32A	524980	904.87	34.51	870.36	34.76	870.11
W-39A	815791	877.30	4.46	872.84	4.53	872.77
EW-6	485497	878.26	22.03	856.23	12.05	866.21
EW-7	485498	881.11	30.74	850.37	20.48	860.63
EW-8	699622	878.99	22.24	856.75	21.92	857.07
EW-10	740925	878.92	23.90	855.02	23.53	855.39
EW-11	740926	878.74	20.28	858.46	16.37	862.37
EW-12	740927	889.44	35.52	853.92	33.82	855.62
EW-13	740928	881.43	25.58	855.85	10.03	871.40
SG-3		878.72	12.25	866.47	12.12	866.60
SG-4		876.48	11.73	864.75	11.66	864.82

Table 1

Page 2 of 3

Groundwater Elevations
WDE Closed Landfill
Andover, Minnesota

Station ID	Unique Station ID	Measuring Point Elevation	Water Level Measurement 4-18-16	Groundwater Elevation 4-18-16	Water Level Measurement 6-2-16	Groundwater Elevation 6-2-16
Lower Portion of Shallow Aquifer						
A1	740929	873.99	3.59	870.40	3.91	870.08
A2	740931	875.78	5.32	870.46	5.71	870.07
A3	740933	875.56	4.24	871.32	4.32	871.24
NW-1C	536351	905.62	33.56	872.06	33.90	871.72
NW-2C	536353	905.09	33.08	872.01	33.41	871.68
NW-3C	536359	907.39	35.35	872.04	35.71	871.68
NW-4C	536356	914.27	41.86	872.41	42.20	872.07
PZ-1	482905	882.17	10.58	871.59	10.92	871.25
PZ-2	482906	877.15	6.69	870.46	7.01	870.14
PZ-3	482907	876.57	5.28	871.29	5.36	871.21
PZ-4	482908	890.10	18.89	871.21	19.04	871.06
PZ-5	482909	876.03	4.35	871.68	4.41	871.62
PZ-6	482910	876.29	4.02	872.27	4.16	872.13
PZ-8	485499	885.03	11.67	873.36	11.97	873.06
W-1C	245747	896.64	21.35	875.29	21.26	875.38
W-2B	245640	874.95	3.08	871.87	3.19	871.76
W-10B	536345	878.46	7.27	871.19	7.60	870.86
W-11C	245763	875.16	4.51	870.65	4.96	870.20
W-14B	524970	896.33	21.68	874.65	21.82	874.51
W-15B2	245771	889.21	16.12	873.09	16.41	872.80
W-21B	245536	875.43	4.99	870.44	5.26	870.17
W-23B	245785	885.50	11.85	873.65	12.12	873.38
W-26B	815790	875.82	3.18	872.64	3.17	872.65
W-32B	524981	904.86	33.64	871.22	34.03	870.83
W-38B	245995	889.86	18.42	871.44	18.92	870.94
W-39B	815792	877.56	5.38	872.18	5.46	872.10
EW-6	485497	878.26	22.03	856.23	12.05	866.21
EW-7	485498	881.11	30.74	850.37	20.48	860.63
EW-8	699622	878.99	22.24	856.75	21.92	857.07
EW-10	740925	878.92	23.90	855.02	23.53	855.39
EW-11	740926	878.74	20.28	858.46	16.37	862.37
EW-12	740927	889.44	35.52	853.92	33.82	855.62
EW-13	740928	881.43	25.58	855.85	10.03	871.40
SG-3		878.72	12.25	866.47	12.12	866.60
SG-4		876.48	11.73	864.75	11.66	864.82

Table 1

Page 3 of 3

Groundwater Elevations
WDE Closed Landfill
Andover, Minnesota

Station ID	Unique Station ID	Measuring Point Elevation	Water Level Measurement 4-18-16	Groundwater Elevation 4-18-16	Water Level Measurement 6-2-16	Groundwater Elevation 6-2-16
Deep Aquifer and Others						
W-1D	416121	897.28	23.60	873.68	24.10	873.18
W-6	524968	905.47	Dry @ 33.5	Dry @ 33.5	33.53	871.94
W-11B	245762	875.26	6.84	868.42	6.91	868.35
W-11D	245533	878.09	8.08	870.01	8.88	869.21
W-12A	245643	875.02	NA	NA	NA	NA
W-12C	245994	874.58	3.57	871.01	3.99	870.59
W-15B	245531	890.75	16.25	874.50	15.76	874.99
W-15C	245532	891.34	19.26	872.08	20.23	871.11
W-15D	416137	891.28	19.17	872.11	20.12	871.16
W-23E	416138	886.60	14.01	872.59	14.89	871.71
W-26D	245789	877.81	5.11	872.70	6.17	871.64
W-34D	536348	882.55	10.49	872.06	11.37	871.18
EW-3B	439844	889.78	18.31	871.47	18.72	871.06
EW-14	757614	NA	36.14	NA	25.74	NA
EW-15	757615	NA	36.61	NA	36.36	NA
EW-9	534895	906.17	NA	NA	NA	NA
W-12B	245993	875.90	9.34	866.56	9.29	866.61
W-13B	245767	875.73	8.83	866.90	8.76	866.97

**Attachment 1
GHD Well Logs,
MDH Construction Records**



STRATIGRAPHIC AND INSTRUMENTATION LOG

Page 1 of 1

PROJECT NAME: WDE Closed Landfill

HOLE DESIGNATION: MW-26A

PROJECT NUMBER: 11114941

DATE COMPLETED: April 12, 2016

CLIENT: Minnesota Pollution Control Agency

DRILLING METHOD: 4 1/4" HSA

LOCATION: Andover, Minnesota

EQUIPE PERSONNEL : R. Aamot



STRATIGRAPHIC AND INSTRUMENTATION LOG

Page 1 of 1

PROJECT NAME: WDE Closed Landfill

HOLE DESIGNATION: MW-26B

PROJECT NUMBER: 11114941

DATE COMPLETED: April 12, 2016

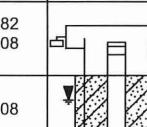
CLIENT: Minnesota Pollution Control Agency

DRILLING METHOD: 4 1/4" HSA

LOCATION: Andover, Minnesota

FIELD PERSONNEL: R. Aamot

MINNESOTA UNIQUE WELL NUMBER: 815790

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	Monitoring Well	SAMPLE		
				NUMBER	INTERVAL	REC (ft)
	NORTHING: 5008517.61 EASTING: 475893.09	TOP OF CASING GROUND SURFACE	875.82 874.08			
5	SM-SAND, silty, medium grained, dark brown, moist SP-SAND, medium grained, light brown/red, moist to dry - becoming dark brown/red at 4.5ft BGS - 2" silty sand later, dark brown, saturated at 5.5ft BGS - 2" silty sand layer, dark brown at 7.5ft BGS - becoming light brown/gray at 9.0ft BGS - becoming finer grained, gray at 13.0ft BGS - becoming medium grained at 16.0ft BGS	872.08		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	1.0 1.0 2.0 1.0 2.0 2.0 1.5 0.5 1.5 1.5 1.5 1.5 2.0 1.0 0.5 1.5 1.5 2.0 2.0 2.0 2.0 2.0 2.0	6 4 4 4 4 9 9 13 17 17 15 14 14 16 10 16 33 13 12 18 18 19 19 51 61 75 72 20
10						
15						
20						
25						
30						
35						
40						
45						
50						
55						
60						
65						
70						
75						
WELL DETAILS						
Screened interval: 834.08 to 829.08ft 40.00 to 45.00ft BGS						
Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 870.08 to 836.08ft 4.00 to 38.00ft BGS Material: Bentonite Grout Sand Pack: 836.08 to 829.08ft 38.00 to 45.00ft BGS Material: Sand ----- Seal: 874.08 to 870.08ft 0.00 to 4.00ft BGS Material: Cement Grout						

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

STATIC WATER LEVEL 



STRATIGRAPHIC AND INSTRUMENTATION LOG

Page 1 of 1

PROJECT NAME: WDE Closed Landfill

PROJECT NUMBER: 11114941

CLIENT: Minnesota Pollution Control Agency

LOCATION: Andover, Minnesota

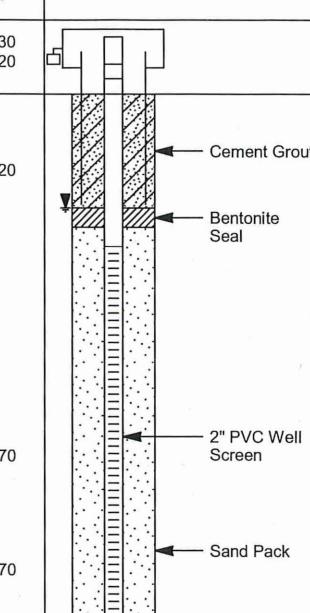
HOLE DESIGNATION: MW-39A

DATE COMPLETED: April 14, 2016

DRILLING METHOD: Geoprobe - 4 1/4" HSA

FIELD PERSONNEL: R. Aamot

MINNESOTA UNIQUE WELL NUMBER: 815791

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	Monitoring Well	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	N' VALUE
	NORTHING: 5008867.53 EASTING: 475655.09	TOP OF CASING GROUND SURFACE	877.30 875.20				
-2	Topsoil		873.20				
-4	SP-SAND, medium grained, light brown/red, moist to saturated						
-6	- becoming light brown/gray at 7.0ft BGS						
-8							
-10	ML-SILT, low plasticity, gray, saturated	865.70					
-12							
-14	SP-SAND, medium grained, light brown/red, saturated	862.70					
-16	END OF BOREHOLE @ 14.0ft BGS	861.20					
-18	Stratigraphy taken from MW-38B						
-20							
-22							
-24							
-26							
-28							
-30							
-32							
-34							
<p>NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE STATIC WATER LEVEL </p>							



STRATIGRAPHIC AND INSTRUMENTATION LOG

Page 1 of 1

PROJECT NAME: WDE Closed Landfill

HOLE DESIGNATION: MW-39B

PROJECT NUMBER: 11114941

DATE COMPLETED: April 13, 2016

CLIENT: Minnesota Pollution Control Agency

DRILLING METHOD: Geoprobe - 4 1/4" HSA

LOCATION: Andover, Minnesota

FIELD PERSONNEL: R. Aamot

MINNESOTA UNIQUE WELL NUMBER: 815792

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	Monitoring Well	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	'N' VALUE
	NORTHING: 5008869.21 EASTING: 475653.79	TOP OF CASING GROUND SURFACE	877.56 875.32				
5	Topsoil	873.32		1		1.5	
10	SP-SAND, medium grained, light brown/red, moist to saturated - becoming light brown/gray at 7.0ft BGS	865.82	Cement Grout	2		5.0	
15	ML-SILT, low plasticity, gray, saturated	862.82	Bentonite Grout	3		3.0	
20	SP-SAND, medium grained, light brown/red, moist to saturated	855.32	2" Steel Casing	4		0.0	
25	SM-SAND/SILT, medium grained, gray, saturated	851.32	Sand Pack	5		5.0	
30	SW-SAND, fine to coarse grained, brown/gray, saturated	842.82	2" Stainless Steel Screen	6		5.0	
35	ML-SILT, low plasticity, brown/gray, saturated	830.82	Native Backfill	7		4.0	
40				8		5.0	
45	SW-SAND, fine to coarse grained, brown/gray, saturated	826.32		9		5.0	
50	ML-SILT, with sand/clay, trace fine gravel, low plasticity, moist	825.32		10		3.0	
	END OF BOREHOLE @ 50.0ft BGS						
55							
60							
65							
70							
75							
WELL DETAILS Screened interval: 847.82 to 842.82ft 27.50 to 32.50ft BGS Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 871.32 to 849.82ft 4.00 to 25.50ft BGS Material: Bentonite Grout Sand Pack: 849.82 to 842.82ft 25.50 to 32.50ft BGS Material: Sand ----- Seal: 875.32 to 871.32ft 0.00 to 4.00ft BGS Material: Cement Grout							
<u>NOTES:</u> MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE STATIC WATER LEVEL							

WELL OR BORING LOCATION		
County Name <i>Anoka</i>		

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING CONSTRUCTION RECORD
Minnesota Statutes, Chapter 103I

MINNESOTA UNIQUE WELL
AND BORING NO.

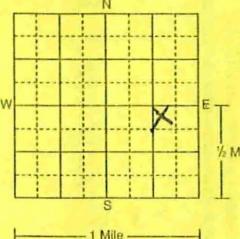
815791

Township Name **Andover** Township No. **32N** Range No. **24W** Section No. **27** Fraction **NW NE SE**
GPS LOCATION—decimal degrees (to four decimal places).
Latitude **N 45 13.968**, Longitude **W 93 18.611**

House Number, Street Name, City, and ZIP Code of Well Location

None - Hummingbird St NW Andover

Show exact location of well/boring in section grid with "X". Sketch map of well/boring location.
Showing property lines, roads, buildings, and direction.



See attached map

PROPERTY OWNER'S NAME/COMPANY NAME

Nature's Run Townhome Association

Property owner's mailing address if different than well location address indicated above.

**14360 Hummingbird St NW
Andover MN 55304**

WELL OWNER'S NAME/COMPANY NAME

MPCA Closed Landfill Program

Well/boring owner's mailing address if different than property owner's address indicated above.

**520 Lafayette Rd N
St Paul MN 55116**

GEOLOGICAL MATERIALS	COLOR	HARDNESS OF MATERIAL	FROM	TO
Silty clay	Bk	Soft	0	3
Dry fine sand	Brn	Soft	3	4
Wet fine sand	Brn/brey	Soft	4	14

Use a second sheet, if needed.

REMARKS, ELEVATION, SOURCE OF DATA, etc.

MW-38A

MPCA

IMPORTANT - FILE WITH PROPERTY PAPERS
WELL OWNER COPY

815791

WELL/BORING DEPTH (completed)
14'

DATE WORK COMPLETED
4-14-16

DRILLING METHOD

- Cable Tool Driven
 Auger Rotary
 Other

DRILLING FLUID

None

WELL HYDROFRACTURED? Yes No

From _____ ft. To _____ ft.

USE

- Domestic Monitoring Heating/Cooling
 Noncommunity PWS Environ. Bore Hole Industry/Commercial
 Community PWS Irrigation Remedial
 Elevator Dewatering

CASING MATERIAL

- Steel Drive Shoe? Yes No
 Plastic Threaded Welded

HOLE DIAM.

CASING

Diameter **2** in. To **4** ft. Weight _____ lbs./ft. **8 1/4** in. To **14** ft.
in. To _____ ft. lbs./ft. in. To _____ ft.
in. To _____ ft. lbs./ft. in. To _____ ft.

SCREEN

Make **TMCO** OPEN HOLE
Type **PVC** From _____ ft. To _____ ft.
Slot/Gauze **10 SLO+** Diam. **2"**
Set between **4** ft. and **14** ft. Length **10'**
FITTERS

STATIC WATER LEVEL

Measured from **4** ft. Below Above land surface Date measured **4-14-16**

PUMPING LEVEL (below land surface)

ft. after **N/A** hrs. pumping _____ g.p.m.

WELLHEAD COMPLETION

- Pitless/adapter manufacturer Model
 Casing protection **6" PRO-TOP** 12 in. above grade
 At-grade Well House Hand Pump

GROUT INFORMATION (specify bentonite, cement-sand, neat-cement, concrete, cuttings, or other)

Material **Neat Cement** From **0** To **3** ft. **2** Yds. Bags
Material **Bentonite** From **3** To **3.5** ft. **1/4** Yds. Bags

Material _____ From _____ To _____ ft. _____ Yds. Bags
Driven casing seal From _____ To _____ ft. _____ Yds. Bags

NEAREST KNOWN SOURCE OF CONTAMINATION **Unknown**

feet _____ direction _____ type _____

Well disinfected upon completion? Yes No

PUMP

Not installed Date installed _____

Manufacturer's name _____

Model Number _____ HP _____ Volts _____

Length of drop pipe _____ ft. Capacity _____ g.p.m.

Type: Submersible L.S. Turbine Reciprocating Jet

ABANDONED WELLS

Does property have any not in use and not sealed well(s)? Yes No

VARIANCE

Was a variance granted from the MDH for this well? Yes No TN# _____

WELL CONTRACTOR CERTIFICATION

This well was drilled under my supervision and in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.

Thein Well Co.

Licensor Business Name

Lic. or Reg. No.

Brian Hilbrands

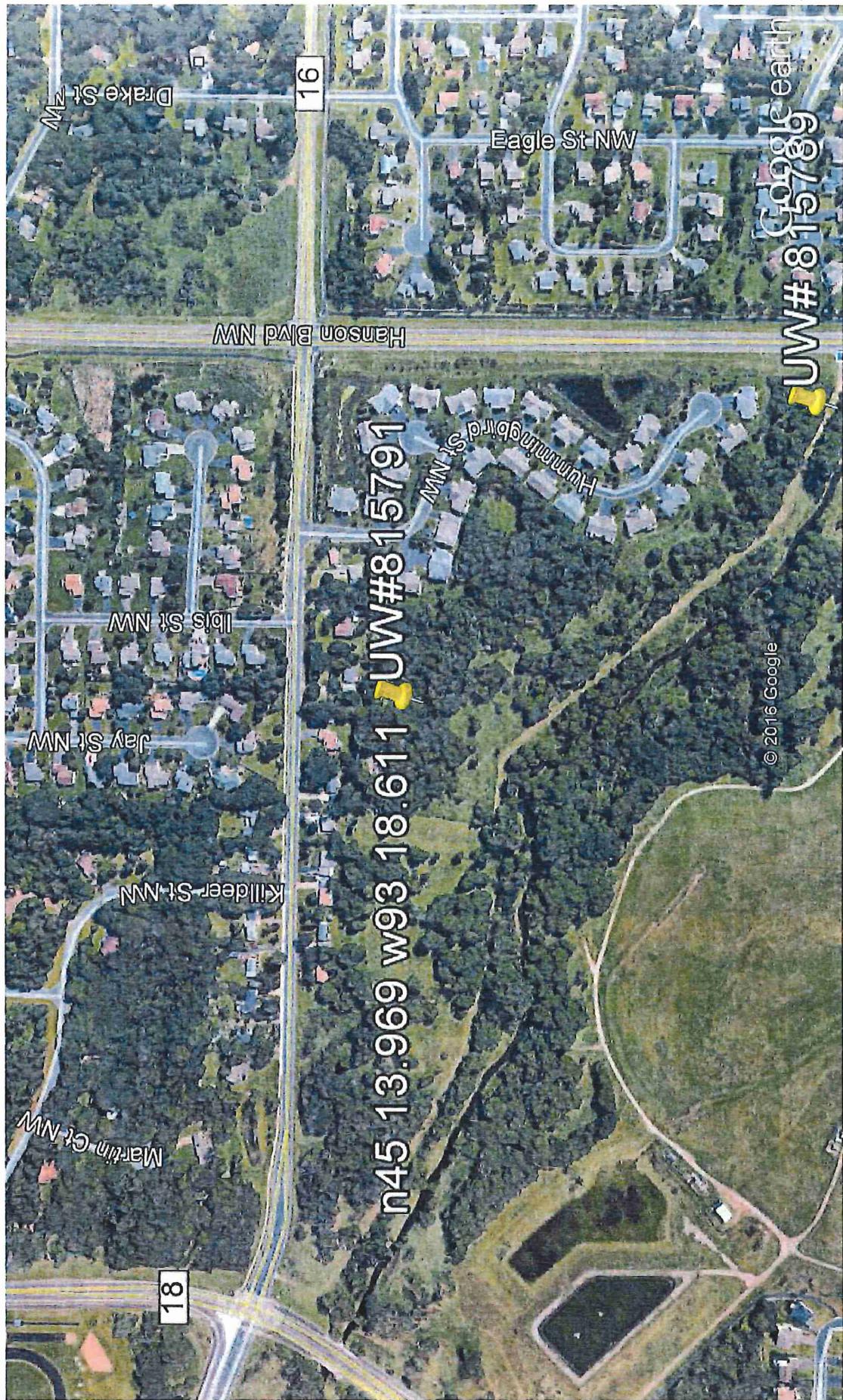
57b 5-26-16

Certified Representative Signature

Certified Rep. No. Date

Brian Hilbrands

Name of Driller



Property owner:
Nature's Run Townhome Association
UW#815791

WELL OR BORING LOCATION		
County Name <i>Anoka</i>		

Township Name **Andover** Township No. **32 N** Range No. **24 W** Section No. **27** Fraction **WW NE SE**

GPS LOCATION — decimal degrees (to four decimal places).
Latitude **N 45 13.970** Longitude **W 93 18.612**

House Number, Street Name, City, and ZIP Code of Well Location

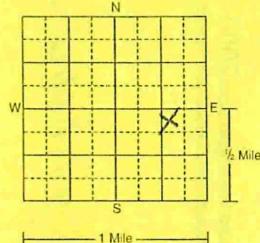
None - Hummingbird St NW Andover

Show exact location of well/boring in section grid with "X."

**MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING CONSTRUCTION RECORD
Minnesota Statutes, Chapter 103I**

MINNESOTA UNIQUE WELL
AND BORING NO.

815792



See attached map

PROPERTY OWNER'S NAME/COMPANY NAME

Nature's Run Townhome Association

Property owner's mailing address if different than well location address indicated above.

14360 Hummingbird St NW

Andover MN 55304

WELL OWNER'S NAME/COMPANY NAME

MPCA Closed Landfill Program

Well/boring owner's mailing address if different than property owner's address indicated above.

**520 Lafayette Rd N
St Paul MN 55116**

GEOLOGICAL MATERIALS	COLOR	HARDNESS OF MATERIAL	FROM	TO
Silty clay - Wet fine sand	Bk/Brn	Soft	0	5
Wet fine sand	Brn	Soft	5	10
Wet fine sand	Brn/Grey	Soft	10	15
Wet fine sand to Silt	Grey	Med	15	20
Silt to wet fine sand	Grey	Med	20	25
Wet fine med sand	Brn	Med	25	30
Wet fine med sand to silt	Brn	Med	30	35
Silt	Brn	Hard	35	40
Silt w/sand on bottom	Brn	Hard	40	45
Fine med sand to Silty sandy clay till	Brn	Hard	45	50

Use a second sheet, if needed.

REMARKS, ELEVATION, SOURCE OF DATA, etc.

MN - 38B

Hole sampled w/geoprobe to 50'. Bottom geoprobe hole grouted from 32.5 to 50'

MPCA

IMPORTANT - FILE WITH PROPERTY PAPERS
WELL OWNER COPY

815792

WELL/BORING DEPTH (completed) **32.5** ft. DATE WORK COMPLETED **4-13-16**

DRILLING METHOD
 Cable Tool Driven
 Auger Rotary
 Other

DRILLING FLUID **NONE** WELL HYDROFRACTURED? Yes No

From _____ ft. To _____ ft.
 USE
 Domestic Monitoring Heating/Cooling
 Noncommunity PWS Environ. Bore Hole Industry/Commercial
 Community PWS Irrigation Remedial
 Elevator Dewatering

CASING MATERIAL
 Steel Drive Shoe? Yes No
 Plastic Threaded Welded

HOLE DIAM.
 Casing Diameter **2** Weight Specifications
 in. To **27.5** ft. lbs./ft. **8 1/4** in. To **32.5** ft.
 in. To _____ ft. lbs./ft. in. To _____ ft.
 in. To _____ ft. lbs./ft. in. To _____ ft.

SCREEN
 Make **Johnson** OPEN HOLE
 Type **Stainless Steel** From _____ ft. Diam. **2 1/4** in. To _____ ft.
 Slot/Gauze **10 slot** Length **5'**
 Set between **27.5** ft. and **32.5** ft. FITTINGS

STATIC WATER LEVEL
4 ft. Below Above land surface Date measured **4-13-16**
 Measured from _____ ft. after _____ hrs. pumping g.p.m.

PUMPING LEVEL (below land surface) **N/A**
 ft. after _____ hrs. pumping g.p.m.
 WELLHEAD COMPLETION
 Pitless/adapter manufacturer Model _____
 Casing protection **6"** Pro-TOP 12 in. above grade
 At-grade Well House Hand Pump

GROUT INFORMATION (specify bentonite, cement-sand, neat-cement, concrete, cuttings, or other)
 Material **Neat cement** From **0** To **4** ft. Yds. Bags
 Material **Bentonite** From **4** To **25.5** ft. Yds. Bags
 Material From _____ To _____ ft. Yds. Bags
 Driven casing seal From _____ To _____ ft. Yds. Bags

NEAREST KNOWN SOURCE OF CONTAMINATION **Unknown**
 feet direction type

Well disinfected upon completion? Yes No
 PUMP
 Not installed Date installed _____

Manufacturer's name _____
 Model Number _____ HP _____ Volts _____
 Length of drop pipe _____ ft. Capacity _____ g.p.m.

Type: Submersible L.S. Turbine Reciprocating Jet

ABANDONED WELLS
 Does property have any not in use and not sealed well(s)? Yes No
 VARIANCE

Was a variance granted from the MDH for this well? Yes No TN# _____
 WELL CONTRACTOR CERTIFICATION
 This well was drilled under my supervision and in accordance with Minnesota Rules, Chapter 4725.
 The information contained in this report is true to the best of my knowledge.

Thein Well Co. 1337
 Licensee/Business Name Lic. or Reg. No.

Robert J. Thein 576 5-26-16
 Certified Representative Signature Certified Rep. No. Date

Brian Hilbrands
 Name of Driller



Google earth

feet
meters

2000
700

UW#815792

Property owner:
Nature's Run Townhome Association

WELL OR BORING LOCATION				
County Name				

Anoka

Ownership Name

Andover

Township No.

Range No.

Section No.

Fraction

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING CONSTRUCTION RECORD
Minnesota Statutes, Chapter 103I

MINNESOTA UNIQUE WELL
AND BORING NO.

815789

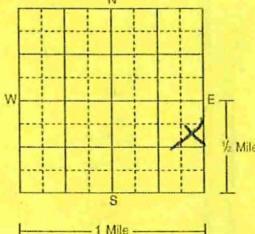
GPS LOCATION — decimal degrees (to four decimal places).

Latitude N45.13.782 Longitude W93.18.424

House Number, Street Name, City, and ZIP Code of Well Location

None - Hanson Blvd NW

Show exact location of well/boring in section grid with "X."

Sketch map of well/boring location.
Showing property lines,
roads, buildings, and direction.See attached
map

PROPERTY OWNER'S NAME/COMPANY NAME

MPCA

Property owner's mailing address if different than well location address indicated above.

520 Lafayette Rd N
St. Paul MN 55116

WELL OWNER'S NAME/COMPANY NAME

Same

Well/boring owner's mailing address if different than property owner's address indicated above.

					WELL/BORING DEPTH (completed)	DATE WORK COMPLETED		
					14'	ft. 4-12-16		
					DRILLING METHOD			
					<input type="checkbox"/> Cable Tool <input checked="" type="checkbox"/> Auger <input type="checkbox"/> Other	<input type="checkbox"/> Driven <input type="checkbox"/> Rotary		
					DRILLING FLUID	WELL HYDROFRACTURED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
					NONE	From	ft. To ft.	
					USE	<input type="checkbox"/> Domestic <input type="checkbox"/> Noncommunity PWS <input type="checkbox"/> Community PWS <input type="checkbox"/> Elevator <input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Environ. Bore Hole <input type="checkbox"/> Irrigation <input type="checkbox"/> Dewatering <input type="checkbox"/> Heating/Cooling <input type="checkbox"/> Industry/Commercial <input type="checkbox"/> Remedial		
					CASING MATERIAL	Drive Shoe?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
					<input type="checkbox"/> Steel <input checked="" type="checkbox"/> Plastic	<input type="checkbox"/> Threaded <input type="checkbox"/> Welded	HOLE DIAM.	
					CASING Diameter	Weight	Specifications	
					2 in. To 4 ft.	lbs./ft.	8 1/4 in. To 14 ft.	
					in. To ft.	lbs./ft.	in. To ft.	
					in. To ft.	lbs./ft.	in. To ft.	
					SCREEN	OPEN HOLE		
					Make TIMCO	From	ft. To ft.	
					Type PVC	Diam.	2"	
					Slot/Gauze 10 slot	Length	10'	
					Set between 4 ft. and 14 ft.	FITTINGS		
					STATIC WATER LEVEL	Measured from		
					6 ft. <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above land surface	Date measured	4-12-16	
					PUMPING LEVEL (below land surface) N/A	ft. after	hrs. pumping	g.p.m.
					WELLHEAD COMPLETION			
					<input type="checkbox"/> Pipeless/adapter manufacturer <input checked="" type="checkbox"/> Casing protection 6" Pro-top <input type="checkbox"/> At-grade <input type="checkbox"/> Well House <input type="checkbox"/> Hand Pump	Model		
					<input type="checkbox"/> 12 in. above grade			
					GROUT INFORMATION (specify bentonite, cement-sand, neat-cement, concrete, cuttings, or other)			
					Material Neat cement From 0 To 3 ft. 2 ft. <input type="checkbox"/> Yds. <input checked="" type="checkbox"/> Bags			
					Material Bentonite From 3 To 3.5 ft. 1/2 ft. <input type="checkbox"/> Yds. <input checked="" type="checkbox"/> Bags			
					Material From To ft. <input type="checkbox"/> Yds. <input type="checkbox"/> Bags			
					Driven casing seal From To ft. <input type="checkbox"/> Yds. <input type="checkbox"/> Bags			
					NEAREST KNOWN SOURCE OF CONTAMINATION Unknown			
					feet direction	type		
					Well disinfected upon completion? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
					PUMP			
					<input checked="" type="checkbox"/> Not installed Date installed			
					Manufacturer's name			
					Model Number	HP	Volts	
					Length of drop pipe	ft.	Capacity	
					Type: <input type="checkbox"/> Submersible <input type="checkbox"/> L.S. Turbine <input type="checkbox"/> Reciprocating <input type="checkbox"/> Jet <input type="checkbox"/>			
					ABANDONED WELLS			
					Does property have any not in use and not sealed well(s)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
					VARIANCE			
					Was a variance granted from the MDH for this well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No TN#			
					WELL CONTRACTOR CERTIFICATION			
					This well was drilled under my supervision and in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.			

REMARKS, ELEVATION, SOURCE OF DATA, etc.

MW-26A

MPCA

IMPORTANT - FILE WITH PROPERTY PAPERS
WELL OWNER COPY

815789

The in Well Co. Inc.

1337

Lic. or Reg. No.

Robert Hansen

576

5-25-16

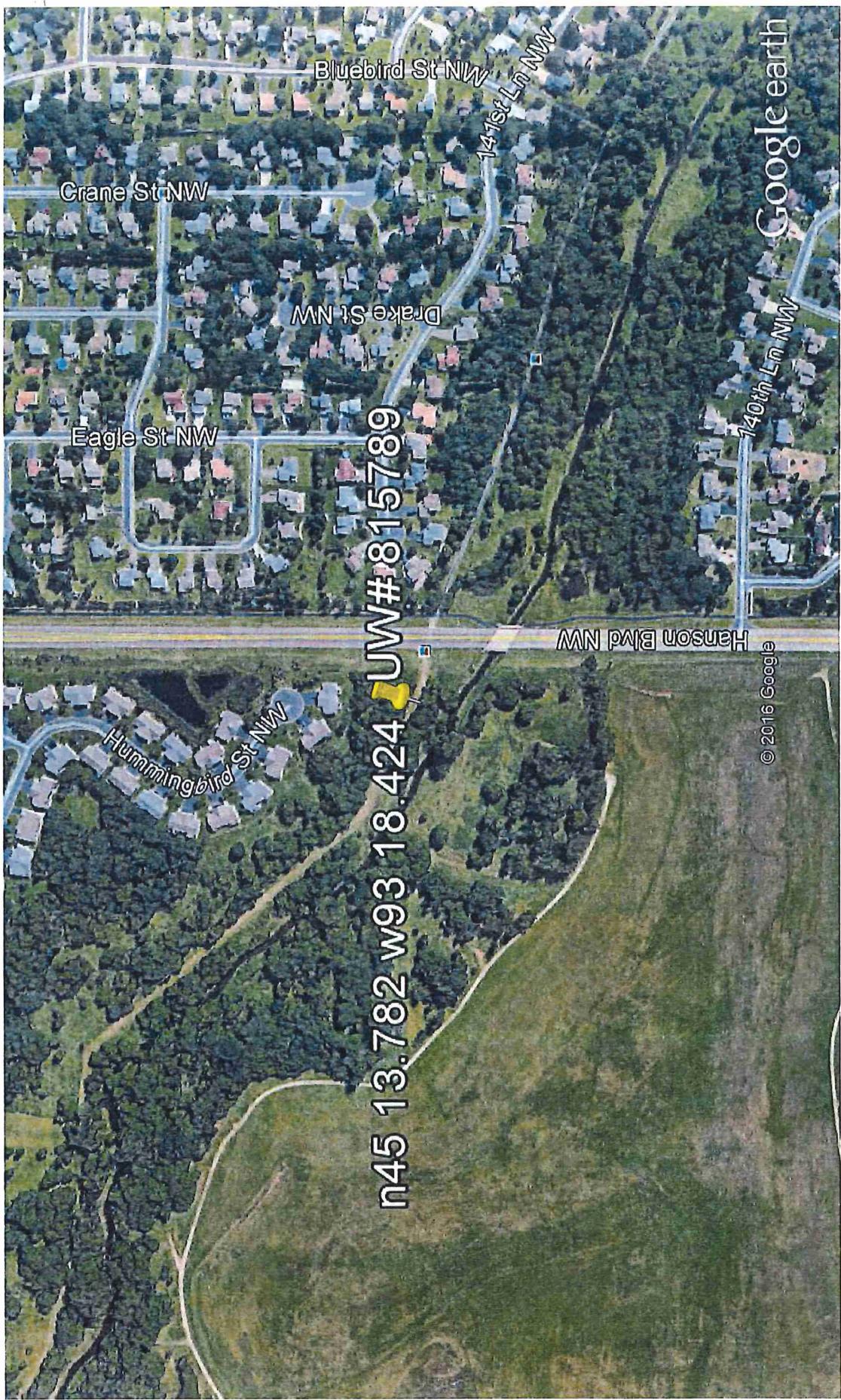
Certified Representative Signature

Certified Rep. No.

Date

Brian Hilbrands

Name of Driller



Google earth

Property owner : MPA
UW# 815789

2000 700

WELL OR BORING LOCATION		
County Name <i>Anoka</i>		

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING CONSTRUCTION RECORD
Minnesota Statutes, Chapter 1031

MINNESOTA UNIQUE WELL
AND BORING NO.

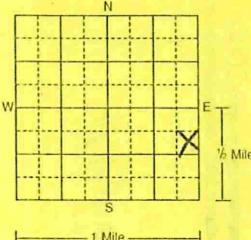
815790

Wmship Name <i>Andover</i>	Township No. <i>32N</i>	Range No. <i>24W</i>	Section No. <i>27</i>	Fraction <i>SE 1/4 NE 1/4 SE 1/4</i>
-------------------------------	----------------------------	-------------------------	--------------------------	---

GPS LOCATION — decimal degrees (to four decimal places).
Latitude *N 45 13.783* Longitude *W 93 18.426*

House Number, Street Name, City, and ZIP Code of Well Location
None - Hanson Blvd NW

Show exact location of well/boring in section grid with "X".



See attached map

Sketch map of well/boring location, showing property lines, roads, buildings, and direction.

WELL/BORING DEPTH (completed) <i>45'</i>	DATE WORK COMPLETED <i>4-12-16</i>
---	---------------------------------------

DRILLING METHOD <input checked="" type="checkbox"/> Cable Tool <input checked="" type="checkbox"/> Auger <input type="checkbox"/> Other	<input type="checkbox"/> Driven <input type="checkbox"/> Rotary
--	--

DRILLING FLUID <i>None</i>	WELL HYDROFRACTURED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
-------------------------------	--

USE <input type="checkbox"/> Domestic <input type="checkbox"/> Noncommunity PWS <input type="checkbox"/> Community PWS <input type="checkbox"/> Elevator	<input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Environ. Bore Hole <input type="checkbox"/> Irrigation <input type="checkbox"/> Dewatering	<input type="checkbox"/> Heating/Cooling <input type="checkbox"/> Industry/Commercial <input type="checkbox"/> Remedial
--	---	---

CASING MATERIAL <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Plastic	Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	HOLE DIAM. <i>8 1/4 in. To 50 ft.</i>
--	---	--

CASING Diameter <i>2 in. To 40 ft.</i>	Weight <i>lbs./ft.</i>	Specifications
<i>in. To 45 ft.</i>	<i>lbs./ft.</i>	<i>in. To ft.</i>
<i>in. To 50 ft.</i>	<i>lbs./ft.</i>	<i>in. To ft.</i>

SCREEN Make <i>Johnson</i>	OPEN HOLE From <i>ft. To ft.</i>
-------------------------------	-------------------------------------

Type <i>Stainless steel 1</i>	Diam. <i>2"</i>
-------------------------------	-----------------

Slot/Gauze *10 slot* Length *5"*

Set between *40 ft. and 45 ft.* FITTINGS

STATIC WATER LEVEL
Measured from
6 ft. Below land surface Date measured *4-12-16*

PUMPING LEVEL (below land surface) *N/A*

It. after hrs. pumping g.p.m.

WELLHEAD COMPLETION
 Pitless/adapter manufacturer
 Casing protection *6" Pro-top* Model *12 in. above grade*

At-grade Well House Hand Pump

GROUT INFORMATION (specify bentonite, cement-sand, neat-cement, concrete, cuttings, or other)

Material *Neat cement* From *0* To *4 ft.* *4* Yds. Bags

Material *Bentonite* From *4* To *38 ft.* *3* Yds. Bags

Material From To ft. Yds. Bags

Driven casing seal From To Bags

NEAREST KNOWN SOURCE OF CONTAMINATION *Unknown*
feet direction type

Well disinfected upon completion? Yes No

PUMP

Not installed Date installed

Manufacturer's name

Model Number HP Volts

Length of drop pipe It. Capacity g.p.m.

Type: Submersible L.S. Turbine Reciprocating Jet

ABANDONED WELLS

Does property have any not in use and not sealed well(s)? Yes No

VARIANCE

Was a variance granted from the MDH for this well? Yes No TN#

WELL CONTRACTOR CERTIFICATION

This well was drilled under my supervision and in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.

Thein Well Co. *1337*
Licensee/Business Name Lic. or Reg. No.

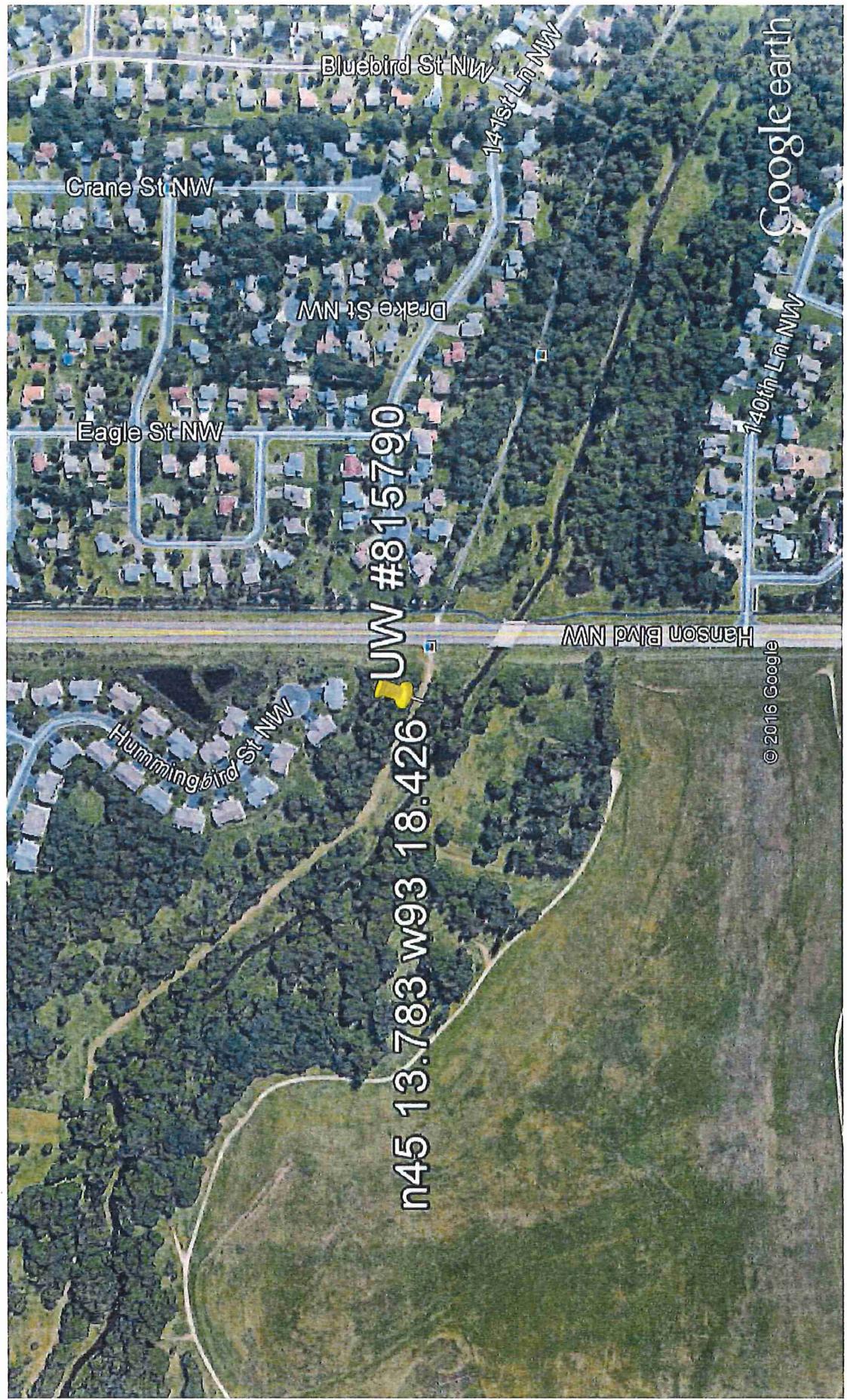
Robert Othen *576* *5-25-16*
Certified Representative Signature Certified Rep. No. Date

Brian Hilbrands
Name of Driller

IC 140-0020 HE-01205-15 (Rev. 8/13)

IMPORTANT - FILE WITH PROPERTY PAPERS
WELL OWNER COPY

815790



UW# 815790
Google earth

feet
meters

Property Owner: MPCA

UW# 815790

Attachment 2

MDNR Survey Data

Attachment 2

MPCA - WDE Landfill
City of Andover, Anoka County, MN
Monitoring Well Survey - May 18, 2016
Prepared by: DNR Survey Department, Req 2214

Location Site	Ground Elevation (US Feet) NAVD88	Casing Elevation (US Feet) NAVD88	Northing County (US Feet) NAD83(2011)	Easting County (US Feet) NAD83(2011)	Northing UTM NAD83 Zone 15 (Meters)	Easting UTM NAD83 Zone 15 (Meters)	Unique Well ID	DNR Point No.
MW-26A	874.066	875.714	170904.678	489587.408	5008516.622	475894.379	815789	2010
MW-26B	874.081	875.817	170907.911	489583.172	5008517.611	475893.092	815790	2009
MW-39A	875.202	877.303	172053.837	488798.211	5008867.527	475655.094	815791	2002
MW-39B	875.323	877.560	172059.354	488793.912	5008869.212	475653.790	815792	2001

Attachment 3

Laboratory Reports

Interpoll Laboratories, Inc.
4500 Ball Road N.E.
Circle Pines, Minnesota 55014-1819

TEL: (763) 786-6020
FAX: (763) 786-7854

**ANALYTICAL RESULTS
AND QC DATA FOR THE
MPCA CLOSED LANDFILL PROGRAM
PROJECT #SW-28 (WDE LANDFILL)**

Submitted to:

**Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155**

Attention: Laura Marti

Approved By:

Laboratory Report #35382
June 22, 2016


Wayne A. Olson,
Quality Assurance Officer

cc: Mark Umholtz, MPCA
Robert Martin, GHD

PROJECT SUMMARY

The following laboratory report contains the analytical results and QC data for a total of five water samples submitted to Interpoll Laboratories by Interpoll Labs Field Services personnel for the MPCA's WDE Landfill Project. The samples were received on at 16:15 on May 31, 2016 according to Interpoll Labs documented sample acceptance procedures. The samples were analyzed for the parameters requested on the Chain-of-Custody forms that accompanied the samples.

Results are reported on an as received basis.

Note: One of the VOC vials submitted for sample 35382-04 contained air bubbles. The bubbles did not exceed 6mm in diameter.

<u>Unique Sample ID</u>	<u>Common Station ID</u>	<u>ILI Sample #</u>	<u>Date Collected</u>	<u>Time Collected</u>
815789	W-26A	35382-01	5/31/16	9:47
815790	W-26B	35382-02	5/31/16	11:02
815791	W-39A	35382-03	5/31/16	11:44
815792	W-39B	35382-04	5/31/16	12:26
Trip Blank	Trip Blank	35382-05	5/31/16	9:00

Qualifiers:

J = a reported value which is equal to or greater than the method detection limit (MDL), but less than or equal to the reporting limit (RL).

Abbreviations:

EXTR DATE	= extraction date
LCL	= lower control limit
UCL	= upper control limit
RPD	= relative percent difference
PCL	= precision control limit
DL	= detection limit
RL	= reporting limit

All parameters, with the exception of tetrahydrofuran and 1,1,2-trichlorotrifluoroethane, are certified by MDH. Certification for tetrahydrofuran and 1,1,2-trichlorotrifluoroethane is not offered by MDH.

As required by the Minnesota Department of Health (MDH) Laboratory Certification Program (MDH Rule 4740.2095, Section C, Subpart 15), Interpoll Laboratories must state that the results appearing in this report relate only to the samples identified in this report.

This report must not be reproduced, in part, without the written approval of Interpoll Laboratories as per MDH Rule 4740.2095, Section C, Subpart 16.

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfir	MDL	RL	Units
815789.201605310947.000S	W-26A	6010C	2016/06/02 12:00:00 Dissolved	35382-01	Iron	130	Y		20	50	ug/L
815789.201605310947.000S	W-26A	6010C	2016/06/02 12:01:00 Dissolved	35382-01	Manganese	210	Y		5.0	20	ug/L
815789.201605310947.000S	W-26A	6020A	2016/06/02 12:02:00 Dissolved	35382-01	Cobalt	0.29	Y	J	0.20	1.0	ug/L
815789.201605310947.000S	W-26A	6020A	2016/06/02 12:03:00 Dissolved	35382-01	Arsenic	0.77	Y	J	0.50	2.0	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfir	MDL	RL	Units
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Acetone		N		4.0	5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Allyl chloride		N		0.32	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Benzene		N		0.20	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Bromobenzene		N		0.29	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Bromochloromethane		N		0.23	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Bromodichloromethane		N		0.27	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Bromoform		N		0.17	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Bromomethane		N		0.19	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	n-Butylbenzene		N		0.18	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	sec-Butylbenzene		N		0.17	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	tert-Butylbenzene		N		0.16	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Carbon tetrachloride		N		0.28	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Chlorobenzene		N		0.20	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Chloroethane		N		0.24	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Chloroform		N		0.20	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Chloromethane		N		0.20	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	2-Chlorotoluene		N		0.16	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	4-Chlorotoluene		N		0.13	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2-Dibromo-3-chloropropane		N		0.23	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Dibromochloromethane		N		0.13	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2-Dibromoethane		N		0.15	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Dibromomethane		N		0.31	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1-Dichloro-1-propene		N		0.21	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2-Dichlorobenzene		N		0.19	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,3-Dichlorobenzene		N		0.17	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,4-Dichlorobenzene		N		0.10	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Dichlorodifluoromethane		N		0.23	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1-Dichloroethane		N		0.27	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2-Dichloroethane		N		0.22	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1-Dichloroethene		N		0.17	1	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	cis-1,2-Dichloroethene		N		0.10	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	trans-1,2-Dichloroethene		N		0.23	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Dichlorofluoromethane		N		0.17	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2-Dichloropropane		N		0.21	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,3-Dichloropropane		N		0.23	0.5	ug/L
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	2,2-Dichloropropane		N		0.36	0.5	ug/L

Interpoll Laboratories, Inc.

763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laborartory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	cis-1,3-Dichloropropene	N	0.21	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	trans-1,3-Dichloropropene	N	0.19	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Ethyl ether	N	0.39	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Ethylbenzene	N	0.15	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Hexachlorobutadiene	N	0.20	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Isopropylbenzene	N	0.20	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	p-Isopropyltoluene	N	0.17	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Methyl ethyl ketone	N	1.5	5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Methyl isobutyl ketone	N	0.31	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Methyl tertiary butyl ether	N	0.13	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Methylene chloride	N	0.20	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Naphthalene	N	0.20	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	n-Propylbenzene	N	0.17	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Styrene	N	0.15	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1,1,2-Tetrachloroethane	N	0.20	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1,2,2-Tetrachloroethane	N	0.20	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Tetrachloroethene	N	0.29	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Tetrahydrofuran	N	1.2	5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Toluene	N	0.20	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2,3-Trichlorobenzene	N	0.37	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2,4-Trichlorobenzene	N	0.15	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1,1-Trichloroethane	N	0.17	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1,2-Trichloroethane	N	0.16	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Trichloroethene	N	0.19	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Trichlorofluoromethane	N	0.19	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2,3-Trichloropropane	N	0.18	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,1,2-Trichlorotrifluoroethane	N	0.30	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,2,4-Trimethylbenzene	N	0.18	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	1,3,5-Trimethylbenzene	N	0.17	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Vinyl chloride	N	0.20	0.5	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Xylene (m/p)	N	0.32	1	ug/L		
815789.201605310947.000S	W-26A	8260B	2016/06/09 19:30:00 Total	35382-01	Xylene (o)	N	0.16	0.5	ug/L		

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
815790.201605311102.000S	W-26B	6010C	2016/06/02 12:00:00 Dissolved	35382-02	Iron	3000	Y		20	50	ug/L
815790.201605311102.000S	W-26B	6010C	2016/06/02 12:01:00 Dissolved	35382-02	Manganese	480	Y		5.0	20	ug/L
815790.201605311102.000S	W-26B	6020A	2016/06/02 12:02:00 Dissolved	35382-02	Cobalt	1.1	Y		0.20	1.0	ug/L
815790.201605311102.000S	W-26B	6020A	2016/06/02 12:03:00 Dissolved	35382-02	Arsenic	3.1	Y		0.50	2.0	ug/L

Interpoll Laboratories, Inc.

763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfir	MDL	RL	Units
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Acetone		N		4.0	5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Allyl chloride		N		0.32	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Benzene		N		0.20	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Bromobenzene		N		0.29	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Bromochloromethane		N		0.23	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Bromodichloromethane		N		0.27	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Bromoform		N		0.17	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Bromomethane		N		0.19	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	n-Butylbenzene		N		0.18	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	sec-Butylbenzene		N		0.17	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	tert-Butylbenzene		N		0.16	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Carbon tetrachloride		N		0.28	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Chlorobenzene		N		0.20	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Chloroethane		N		0.24	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Chloroform		N		0.20	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Chloromethane		N		0.20	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	2-Chlorotoluene		N		0.16	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	4-Chlorotoluene		N		0.13	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2-Dibromo-3-chloropropane		N		0.23	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Dibromochloromethane		N		0.13	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2-Dibromoethane		N		0.15	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Dibromomethane		N		0.31	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1-Dichloro-1-propene		N		0.21	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2-Dichlorobenzene		N		0.19	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,3-Dichlorobenzene		N		0.17	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,4-Dichlorobenzene		N		0.10	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Dichlorodifluoromethane		N		0.23	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1-Dichloroethane		N		0.27	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2-Dichloroethane		N		0.22	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1-Dichloroethene		N		0.17	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	cis-1,2-Dichloroethene		N		0.10	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	trans-1,2-Dichloroethene		N		0.23	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Dichlorofluoromethane		N		0.17	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2-Dichloropropane		N		0.21	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,3-Dichloropropane		N		0.23	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	2,2-Dichloropropane		N		0.36	0.5	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfir	MDL	RL	Units
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	cis-1,3-Dichloropropene		N		0.21	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	trans-1,3-Dichloropropene		N		0.19	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Ethyl ether	0.40	Y	J	0.39	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Ethylbenzene		N		0.15	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Hexachlorobutadiene		N		0.20	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Isopropylbenzene		N		0.20	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	p-Isopropyltoluene		N		0.17	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Methyl ethyl ketone		N		1.5	5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Methyl isobutyl ketone	0.61	Y	J	0.31	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Methyl tertiary butyl ether		N		0.13	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Methylene chloride		N		0.20	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Naphthalene		N		0.20	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	n-Propylbenzene		N		0.17	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Styrene		N		0.15	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1,1,2-Tetrachloroethane		N		0.20	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1,2,2-Tetrachloroethane		N		0.20	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Tetrachloroethene		N		0.29	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Tetrahydrofuran		N		1.2	5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Toluene		N		0.20	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2,3-Trichlorobenzene		N		0.37	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2,4-Trichlorobenzene		N		0.15	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1,1-Trichloroethane		N		0.17	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1,2-Trichloroethane		N		0.16	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Trichloroethene		N		0.19	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Trichlorofluoromethane		N		0.19	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2,3-Trichloropropane		N		0.18	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,1,2-Trichlorotrifluoroethane		N		0.30	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,2,4-Trimethylbenzene		N		0.18	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	1,3,5-Trimethylbenzene		N		0.17	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Vinyl chloride		N		0.20	0.5	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Xylene (m/p)		N		0.32	1	ug/L
815790.201605311102.000S	W-26B	8260B	2016/06/09 20:01:00 Total	35382-02	Xylene (o)		N		0.16	0.5	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfcr	MDL	RL	Units
815791.201605311144.000S	W-39A	6010C	2016/06/02 12:00:00	Dissolved	35382-03 Iron	440	Y		20	50	ug/L
815791.201605311144.000S	W-39A	6010C	2016/06/02 12:01:00	Dissolved	35382-03 Manganese	1000	Y		5.0	20	ug/L
815791.201605311144.000S	W-39A	6020A	2016/06/02 12:02:00	Dissolved	35382-03 Cobalt	1.9	Y		0.20	1.0	ug/L
815791.201605311144.000S	W-39A	6020A	2016/06/02 12:03:00	Dissolved	35382-03 Arsenic	6.0	Y		0.50	2.0	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Acetone		N		4.0	5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Allyl chloride		N		0.32	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Benzene		N		0.20	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Bromobenzene		N		0.29	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Bromochloromethane		N		0.23	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Bromodichloromethane		N		0.27	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Bromoform		N		0.17	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Bromomethane		N		0.19	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	n-Butylbenzene		N		0.18	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	sec-Butylbenzene		N		0.17	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	tert-Butylbenzene		N		0.16	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Carbon tetrachloride		N		0.28	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Chlorobenzene		N		0.20	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Chloroethane		N		0.24	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Chloroform		N		0.20	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Chloromethane		N		0.20	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	2-Chlorotoluene		N		0.16	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	4-Chlorotoluene		N		0.13	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2-Dibromo-3-chloropropane		N		0.23	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Dibromochloromethane		N		0.13	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2-Dibromoethane		N		0.15	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Dibromomethane		N		0.31	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1-Dichloro-1-propene		N		0.21	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2-Dichlorobenzene		N		0.19	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,3-Dichlorobenzene		N		0.17	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,4-Dichlorobenzene		N		0.10	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Dichlorodifluoromethane		N		0.23	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1-Dichloroethane		N		0.27	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2-Dichloroethane		N		0.22	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1-Dichloroethene		N		0.17	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	cis-1,2-Dichloroethene		N		0.10	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	trans-1,2-Dichloroethene		N		0.23	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Dichlorofluoromethane		N		0.17	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2-Dichloropropane		N		0.21	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,3-Dichloropropane		N		0.23	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	2,2-Dichloropropane		N		0.36	0.5	ug/L

Interpoll Laboratories, Inc.
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Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfir	MDL	RL	Units
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	cis-1,3-Dichloropropene		N		0.21	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	trans-1,3-Dichloropropene		N		0.19	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Ethyl ether		N		0.39	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Ethylbenzene		N		0.15	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Hexachlorobutadiene		N		0.20	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Isopropylbenzene		N		0.20	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	p-Isopropyltoluene		N		0.17	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Methyl ethyl ketone		N		1.5	5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Methyl isobutyl ketone		N		0.31	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Methyl tertiary butyl ether		N		0.13	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Methylene chloride		N		0.20	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Naphthalene		N		0.20	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	n-Propylbenzene		N		0.17	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Styrene		N		0.15	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1,1,2-Tetrachloroethane		N		0.20	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1,2,2-Tetrachloroethane		N		0.20	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Tetrachloroethene		N		0.29	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Tetrahydrofuran		N		1.2	5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Toluene		N		0.20	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2,3-Trichlorobenzene		N		0.37	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2,4-Trichlorobenzene		N		0.15	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1,1-Trichloroethane		N		0.17	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1,2-Trichloroethane		N		0.16	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Trichloroethene		N		0.19	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Trichlorofluoromethane		N		0.19	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2,3-Trichloropropane		N		0.18	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,1,2-Trichlorotrifluoroethane		N		0.30	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,2,4-Trimethylbenzene		N		0.18	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	1,3,5-Trimethylbenzene		N		0.17	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Vinyl chloride		N		0.20	0.5	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Xylene (m/p)		N		0.32	1	ug/L
815791.201605311144.000S	W-39A	8260B	2016/06/09 20:33:00 Total	35382-03	Xylene (o)		N		0.16	0.5	ug/L

Interpol! Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
815792.201605311226.000S	W-39B	6010C	2016/06/02 12:00:00	Dissolved	35382-04 Iron	1300	Y		20	50	ug/L
815792.201605311226.000S	W-39B	6010C	2016/06/02 12:01:00	Dissolved	35382-04 Manganese	990	Y		5.0	20	ug/L
815792.201605311226.000S	W-39B	6020A	2016/06/02 12:02:00	Dissolved	35382-04 Cobalt	0.30	Y	J	0.20	1.0	ug/L
815792.201605311226.000S	W-39B	6020A	2016/06/02 12:03:00	Dissolved	35382-04 Arsenic	2.3	Y		0.50	2.0	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Acetone		N		4.0	5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Allyl chloride		N		0.32	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Benzene		N		0.20	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Bromobenzene		N		0.29	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Bromochloromethane		N		0.23	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Bromodichloromethane		N		0.27	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Bromoform		N		0.17	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Bromomethane		N		0.19	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	n-Butylbenzene		N		0.18	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	sec-Butylbenzene		N		0.17	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	tert-Butylbenzene		N		0.16	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Carbon tetrachloride		N		0.28	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Chlorobenzene		N		0.20	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Chloroethane		N		0.24	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Chloroform		N		0.20	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Chloromethane		N		0.20	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	2-Chlorotoluene		N		0.16	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	4-Chlorotoluene		N		0.13	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,2-Dibromo-3-chloropropane		N		0.23	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Dibromochloromethane		N		0.13	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,2-Dibromoethane		N		0.15	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Dibromomethane		N		0.31	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,1-Dichloro-1-propene		N		0.21	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,2-Dichlorobenzene		N		0.19	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,3-Dichlorobenzene		N		0.17	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,4-Dichlorobenzene		N		0.10	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Dichlorodifluoromethane		N		0.23	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,1-Dichloroethane		N		0.27	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,2-Dichloroethane		N		0.22	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,1-Dichloroethene		N		0.17	1	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	cis-1,2-Dichloroethene		N		0.10	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	trans-1,2-Dichloroethene		N		0.23	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	Dichlorofluoromethane		N		0.17	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,2-Dichloropropane		N		0.21	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	1,3-Dichloropropane		N		0.23	0.5	ug/L
815792.201605311226.000S	W-39B	8260B	2016/06/09 21:04:00 Total	35382-04	2,2-Dichloropropane		N		0.36	0.5	ug/L

Interpoll Laboratories, Inc.
763-786-0020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfir	MDL	RL	Units
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	cis-1,3-Dichloropropene	N	0.21	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	trans-1,3-Dichloropropene	N	0.19	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Ethyl ether	N	0.39	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Ethylbenzene	N	0.15	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Hexachlorobutadiene	N	0.20	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Isopropylbenzene	N	0.20	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	p-Isopropyltoluene	N	0.17	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Methyl ethyl ketone	N	1.5	5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Methyl isobutyl ketone	N	0.31	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Methyl tertiary butyl ether	N	0.13	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Methylene chloride	N	0.20	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Naphthalene	N	0.20	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	n-Propylbenzene	N	0.17	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Styrene	N	0.15	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,1,1,2-Tetrachloroethane	N	0.20	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,1,2,2-Tetrachloroethane	N	0.20	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Tetrachloroethene	N	0.29	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Tetrahydrofuran	N	1.2	5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Toluene	N	0.20	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,2,3-Trichlorobenzene	N	0.37	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,2,4-Trichlorobenzene	N	0.15	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,1,1-Trichloroethane	N	0.17	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,1,2-Trichloroethane	N	0.16	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Trichloroethene	N	0.19	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Trichlorofluoromethane	N	0.19	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,2,3-Trichloropropane	N	0.18	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,1,2-Trichlorotrifluoroethane	N	0.30	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,2,4-Trimethylbenzene	N	0.18	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	1,3,5-Trimethylbenzene	N	0.17	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Vinyl chloride	N	0.20	0.5	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Xylene (m/p)	N	0.32	1	ug/L		
815792.201605311226.000S	W-39B	8260B	2016/09 21:04:00 Total	35382-04	Xylene (o)	N	0.16	0.5	ug/L		

Interpoll Laboratories, Inc.

763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Acetone		N		4.0	5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Allyl chloride		N		0.32	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Benzene		N		0.20	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Bromobenzene		N		0.29	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Bromoform		N		0.23	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Bromochloromethane		N		0.27	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Bromodichloromethane		N		0.17	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Bromomethane		N		0.19	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	n-Butylbenzene		N		0.18	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	sec-Butylbenzene		N		0.17	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	tert-Butylbenzene		N		0.16	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Carbon tetrachloride		N		0.28	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Chlorobenzene		N		0.20	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Chloroethane		N		0.24	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Chloroform		N		0.20	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Chloromethane		N		0.20	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	2-Chlorotoluene		N		0.16	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	4-Chlorotoluene		N		0.13	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2-Dibromo-3-chloropropane		N		0.23	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Dibromochloromethane		N		0.13	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2-Dibromoethane		N		0.15	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Dibromomethane		N		0.31	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1-Dichloro-1-propene		N		0.21	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2-Dichlorobenzene		N		0.19	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,3-Dichlorobenzene		N		0.17	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,4-Dichlorobenzene		N		0.10	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Dichlorodifluoromethane		N		0.23	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1-Dichloroethane		N		0.27	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2-Dichloroethane		N		0.22	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1-Dichloroethene		N		0.17	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	cis-1,2-Dichloroethene		N		0.10	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	trans-1,2-Dichloroethene		N		0.23	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Dichlorofluoromethane		N		0.17	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2-Dichloropropane		N		0.21	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,3-Dichloropropane		N		0.23	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	2,2-Dichloropropane		N		0.36	0.5	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	cis-1,3-Dichloropropene		N		0.21	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	trans-1,3-Dichloropropene		N		0.19	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Ethyl ether		N		0.39	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Ethylbenzene		N		0.15	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Hexachlorobutadiene		N		0.20	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Isopropylbenzene		N		0.20	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	p-Isopropyltoluene		N		0.17	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Methyl ethyl ketone		N		1.5	5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Methyl isobutyl ketone		N		0.31	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Methyl tertiary butyl ether		N		0.13	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Methylene chloride	0.47	Y	J	0.20	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Naphthalene		N		0.20	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	n-Propylbenzene		N		0.17	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Styrene		N		0.15	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1,1,2-Tetrachloroethane		N		0.20	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1,2,2-Tetrachloroethane		N		0.20	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Tetrachloroethene		N		0.29	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Tetrahydrofuran		N		1.2	5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Toluene		N		0.20	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2,3-Trichlorobenzene		N		0.37	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2,4-Trichlorobenzene		N		0.15	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1,1-Trichloroethane		N		0.17	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1,2-Trichloroethane		N		0.16	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Trichloroethene		N		0.19	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Trichlorofluoromethane		N		0.19	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2,3-Trichloropropane		N		0.18	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,1,2-Trichlorotrifluoroethane		N		0.30	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,2,4-Trimethylbenzene		N		0.18	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	1,3,5-Trimethylbenzene		N		0.17	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Vinyl chloride		N		0.20	0.5	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Xylene (m/p)		N		0.32	1	ug/L
QC.201605310900.TB	Trip Blank	8260B	2016/06/09 15:17:00 Total	35382-05	Xylene (o)		N		0.16	0.5	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
QC.201606021200.MB	Method Blank	6010C	2016/06/02 12:00:00 Total	35382	Iron		N		20	50	ug/L
QC.201606021201.MB	Method Blank	6010C	2016/06/02 12:01:00 Total	35382	Manganese		N		5.0	20	ug/L
QC.201606021202.MB	Method Blank	6020A	2016/06/02 12:02:00 Total	35382	Cobalt		N		0.20	1.0	ug/L
QC.201606021203.MB	Method Blank	6020A	2016/06/02 12:03:00 Total	35382	Arsenic		N		0.50	2.0	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfr	MDL	RL	Units
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Acetone		N		4.0	5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Allyl chloride		N		0.32	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Benzene		N		0.20	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Bromobenzene		N		0.29	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Bromochloromethane		N		0.23	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Bromodichloromethane		N		0.27	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Bromoform		N		0.17	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Bromomethane		N		0.19	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	n-Butylbenzene		N		0.18	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	sec-Butylbenzene		N		0.17	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	tert-Butylbenzene		N		0.16	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Carbon tetrachloride		N		0.28	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Chlorobenzene		N		0.20	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Chloroethane		N		0.24	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Chloroform		N		0.20	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Chloromethane		N		0.20	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	2-Chlorotoluene		N		0.16	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	4-Chlorotoluene		N		0.13	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2-Dibromo-3-chloropropane		N		0.23	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Dibromochloromethane		N		0.13	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2-Dibromoethane		N		0.15	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Dibromomethane		N		0.31	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1-Dichloro-1-propene		N		0.21	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2-Dichlorobenzene		N		0.19	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,3-Dichlorobenzene		N		0.17	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,4-Dichlorobenzene		N		0.10	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Dichlorodifluoromethane		N		0.23	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1-Dichloroethane		N		0.27	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2-Dichloroethane		N		0.22	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1-Dichloroethene		N		0.17	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	cis-1,2-Dichloroethene		N		0.10	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	trans-1,2-Dichloroethene		N		0.23	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Dichlorofluoromethane		N		0.17	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2-Dichloropropane		N		0.21	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,3-Dichloropropane		N		0.23	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	2,2-Dichloropropane		N		0.36	0.5	ug/L

Interpoll Laboratories, Inc.
763-786-6020

Analytical Results for the MPCA
WDE Landfill, SW-28

Laboratory Report #35382

Sample Code	Sample Name	Method	Analysis Date/Time	Lab Sample ID	Parameter	Result Value	Detect Flag	Qlfir	MDL	RL	Units
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	cis-1,3-Dichloropropene		N		0.21	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	trans-1,3-Dichloropropene		N		0.19	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Ethyl ether		N		0.39	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Ethylbenzene		N		0.15	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Hexachlorobutadiene		N		0.20	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Isopropylbenzene		N		0.20	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	p-Isopropyltoluene		N		0.17	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Methyl ethyl ketone		N		1.5	5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Methyl isobutyl ketone		N		0.31	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Methyl tertiary butyl ether		N		0.13	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Methylene chloride	0.45	Y	J	0.20	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Naphthalene		N		0.20	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	n-Propylbenzene		N		0.17	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Styrene		N		0.15	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1,1,2-Tetrachloroethane		N		0.20	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1,2,2-Tetrachloroethane		N		0.20	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Tetrachloroethene		N		0.29	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Tetrahydrofuran		N		1.2	5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Toluene		N		0.20	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2,3-Trichlorobenzene		N		0.37	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2,4-Trichlorobenzene		N		0.15	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1,1-Trichloroethane		N		0.17	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1,2-Trichloroethane		N		0.16	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Trichloroethene		N		0.19	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Trichlorofluoromethane		N		0.19	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2,3-Trichloropropane		N		0.18	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,1,2-Trichlorotrifluoroethane		N		0.30	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,2,4-Trimethylbenzene		N		0.18	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	1,3,5-Trimethylbenzene		N		0.17	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Vinyl chloride		N		0.20	0.5	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Xylene (m/p)		N		0.32	1	ug/L
QC.201609091446.MB	Method Blank	8260B	2016/06/09 14:46:00 Total	35382	Xylene (o)		N		0.16	0.5	ug/L

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: LABORATORY CONTROL SAMPLE

METHOD	EXTR DATE	ANALYSIS DATE	PARAMETER	UNITS	LCL	UCL	RESULT
SW-846, 6010C	6/1/16	6/2/16	Iron	%	85.0	115	105
SW-846, 6010C	6/1/16	6/2/16	Manganese	%	85.0	115	106
SW-846, 6020A	6/1/16	6/2/16	Arsenic	%	85.0	115	102
SW-846, 6020A	6/1/16	6/2/16	Cobalt	%	85.0	115	97.8

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: LABORATORY CONTROL SAMPLE DUPLICATE

METHOD	EXTR DATE	ANALYSIS DATE	PARAMETER	UNITS	RPD	PCL	RESULT
SW-846, 6010C	6/1/16	6/2/16	Iron	%	0.95	15	106
SW-846, 6010C	6/1/16	6/2/16	Manganese	%	0.0	15	106
SW-846, 6020A	6/1/16	6/2/16	Arsenic	%	2.9	15	105
SW-846, 6020A	6/1/16	6/2/16	Cobalt	%	3.2	15	101

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: MATRIX SPIKE

METHOD	EXTR DATE	ANALYSIS DATE	PARAMETER	UNITS	LCL	UCL	RESULT
SW-846, 6010C	6/1/16	6/2/16	Iron	%	80.0	120	105
SW-846, 6010C	6/1/16	6/2/16	Manganese	%	80.0	120	102
SW-846, 6020A	6/1/16	6/2/16	Arsenic	%	80.0	120	102
SW-846, 6020A	6/1/16	6/2/16	Cobalt	%	80.0	120	102

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: MATRIX SPIKE DUPLICATE

METHOD	EXTR DATE	ANALYSIS DATE	PARAMETER	UNITS	RPD	PCL	RESULT
SW-846, 6010C	6/1/16	6/2/16	Aluminum	%	0.96	20	104
SW-846, 6010C	6/1/16	6/2/16	Aluminum	%	0.99	20	101
SW-846, 6020A	6/1/16	6/2/16	Boron	%	7.5	20	110
SW-846, 6020A	6/1/16	6/2/16	Boron	%	1.9	20	104

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: LABORATORY CONTROL SAMPLE

METHOD	ANALYSIS DATE	PARAMETER	UNITS	LCL	UCL	RESULT
SW-846, 8260B	6/9/16	Acetone	%	63.2	128	99.4
SW-846, 8260B	6/9/16	Allyl chloride	%	95.0	124	107
SW-846, 8260B	6/9/16	Benzene	%	82.1	120	111
SW-846, 8260B	6/9/16	Bromobenzene	%	94.4	125	100
SW-846, 8260B	6/9/16	Bromochloromethane	%	88.3	119	112
SW-846, 8260B	6/9/16	Bromodichloromethane	%	86.4	107	106
SW-846, 8260B	6/9/16	Bromoform	%	88.0	127	115
SW-846, 8260B	6/9/16	Bromomethane	%	74.3	116	102
SW-846, 8260B	6/9/16	n-Butylbenzene	%	83.4	117	105
SW-846, 8260B	6/9/16	sec-Butylbenzene	%	91.6	119	109
SW-846, 8260B	6/9/16	tert-Butylbenzene	%	92.7	122	104
SW-846, 8260B	6/9/16	Carbon tetrachloride	%	89.6	115	109
SW-846, 8260B	6/9/16	Chlorobenzene	%	95.1	117	114
SW-846, 8260B	6/9/16	Chloroethane	%	84.1	124	111
SW-846, 8260B	6/9/16	Chloroform	%	81.9	109	107
SW-846, 8260B	6/9/16	Chloromethane	%	71.8	127	99.4
SW-846, 8260B	6/9/16	2-Chlorotoluene	%	85.2	114	94.8
SW-846, 8260B	6/9/16	4-Chlorotoluene	%	88.4	115	91.8
SW-846, 8260B	6/9/16	1,2-Dibromo-3-chloropropane	%	80.3	112	93.8
SW-846, 8260B	6/9/16	Dibromochloromethane	%	82.5	122	110
SW-846, 8260B	6/9/16	1,2-Dibromoethane	%	89.3	121	110
SW-846, 8260B	6/9/16	Dibromomethane	%	85.9	114	108
SW-846, 8260B	6/9/16	1,1-Dichloro-1-propene	%	92.5	123	111
SW-846, 8260B	6/9/16	1,2-Dichlorobenzene	%	94.2	117	103
SW-846, 8260B	6/9/16	1,3-Dichlorobenzene	%	96.5	120	107
SW-846, 8260B	6/9/16	1,4-Dichlorobenzene	%	94.5	123	98.3
SW-846, 8260B	6/9/16	Dichlorodifluoromethane	%	68.8	125	93.2
SW-846, 8260B	6/9/16	1,1-Dichloroethane	%	83.9	115	112
SW-846, 8260B	6/9/16	1,2-Dichloroethane	%	85.8	105	103
SW-846, 8260B	6/9/16	1,1-Dichloroethene	%	83.5	115	106
SW-846, 8260B	6/9/16	cis-1,2-Dichloroethene	%	87.0	113	108
SW-846, 8260B	6/9/16	trans-1,2-Dichloroethene	%	79.7	122	114
SW-846, 8260B	6/9/16	Dichlorofluoromethane	%	89.8	117	108

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: LABORATORY CONTROL SAMPLE

METHOD	ANALYSIS			UNITS	LCL	UCL	RESULT
	DATE	PARAMETER					
SW-846, 8260B	6/9/16	1,2-Dichloropropane		%	77.7	124	109
SW-846, 8260B	6/9/16	1,3-Dichloropropane		%	81.6	116	110
SW-846, 8260B	6/9/16	2,2-Dichloropropane		%	83.1	108	103
SW-846, 8260B	6/9/16	cis-1,3-Dichloropropene		%	84.8	122	105
SW-846, 8260B	6/9/16	trans-1,3-Dichloropropene		%	85.0	119	105
SW-846, 8260B	6/9/16	Ethyl ether		%	92.6	125	112
SW-846, 8260B	6/9/16	Ethylbenzene		%	80.4	118	97.0
SW-846, 8260B	6/9/16	Hexachlorobutadiene		%	81.4	118	97.4
SW-846, 8260B	6/9/16	Isopropylbenzene		%	94.1	112	111
SW-846, 8260B	6/9/16	p-Isopropyltoluene		%	95.8	113	102
SW-846, 8260B	6/9/16	Methyl ethyl ketone		%	80.9	112	103
SW-846, 8260B	6/9/16	Methyl isobutyl ketone		%	86.5	113	111
SW-846, 8260B	6/9/16	Methyl tertiary butyl ether		%	91.4	127	114
SW-846, 8260B	6/9/16	Methylene chloride		%	79.9	120	111
SW-846, 8260B	6/9/16	Naphthalene		%	64.6	121	108
SW-846, 8260B	6/9/16	n-Propylbenzene		%	84.9	117	107
SW-846, 8260B	6/9/16	Styrene		%	92.9	125	106
SW-846, 8260B	6/9/16	1,1,1,2-Tetrachloroethane		%	83.9	124	109
SW-846, 8260B	6/9/16	1,1,2,2-Tetrachloroethane		%	73.4	114	110
SW-846, 8260B	6/9/16	Tetrachloroethene		%	98.9	113	107
SW-846, 8260B	6/9/16	Tetrahydrofuran		%	76.0	121	106
SW-846, 8260B	6/9/16	Toluene		%	75.8	125	106
SW-846, 8260B	6/9/16	1,2,3-Trichlorobenzene		%	67.1	119	95.5
SW-846, 8260B	6/9/16	1,2,4-Trichlorobenzene		%	67.0	123	97.9
SW-846, 8260B	6/9/16	1,1,1-Trichloroethane		%	86.2	113	108
SW-846, 8260B	6/9/16	1,1,2-Trichloroethane		%	80.6	115	108
SW-846, 8260B	6/9/16	Trichloroethene		%	83.4	122	109
SW-846, 8260B	6/9/16	Trichlorofluoromethane		%	85.8	123	106
SW-846, 8260B	6/9/16	1,2,3-Trichloropropane		%	86.9	106	98.9
SW-846, 8260B	6/9/16	1,1,2-Trichlorotrifluoroethane		%	90.8	126	102
SW-846, 8260B	6/9/16	1,2,4-Trimethylbenzene		%	87.3	126	99.4
SW-846, 8260B	6/9/16	1,3,5-Trimethylbenzene		%	95.6	116	101
SW-846, 8260B	6/9/16	Vinyl chloride		%	84.7	118	106
SW-846, 8260B	6/9/16	Xylene (m/p)		%	86.7	115	108
SW-846, 8260B	6/9/16	Xylene (o)		%	88.2	114	102

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

IL1 LABORATORY LOG NO: 35382

QC SAMPLE ID: LABORATORY CONTROL SAMPLE DUPLICATE

METHOD	ANALYSIS			UNITS	RPD	PCL	RESULT
	DATE	PARAMETER					
SW-846, 8260B	6/9/16	Acetone		%	0.27	5.3	99.7
SW-846, 8260B	6/9/16	Allyl chloride		%	0.20	4.1	107
SW-846, 8260B	6/9/16	Benzene		%	0.39	4.7	111
SW-846, 8260B	6/9/16	Bromobenzene		%	0.71	3.4	99.5
SW-846, 8260B	6/9/16	Bromochloromethane		%	1.5	2.3	110
SW-846, 8260B	6/9/16	Bromodichloromethane		%	0.16	2.9	106
SW-846, 8260B	6/9/16	Bromoform		%	0.23	6.5	115
SW-846, 8260B	6/9/16	Bromomethane		%	1.6	6.7	103
SW-846, 8260B	6/9/16	n-Butylbenzene		%	1.3	5.2	103
SW-846, 8260B	6/9/16	sec-Butylbenzene		%	1.2	4.2	108
SW-846, 8260B	6/9/16	tert-Butylbenzene		%	3.0	8.3	107
SW-846, 8260B	6/9/16	Carbon tetrachloride		%	0.75	4.4	108
SW-846, 8260B	6/9/16	Chlorobenzene		%	0.37	3.3	113
SW-846, 8260B	6/9/16	Chloroethane		%	1.3	5.1	112
SW-846, 8260B	6/9/16	Chloroform		%	2.5	4.0	105
SW-846, 8260B	6/9/16	Chloromethane		%	4.2	6.4	104
SW-846, 8260B	6/9/16	2-Chlorotoluene		%	3.1	5.6	91.9
SW-846, 8260B	6/9/16	4-Chlorotoluene		%	2.7	6.2	94.4
SW-846, 8260B	6/9/16	1,2-Dibromo-3-chloropropane		%	0.14	6.7	93.7
SW-846, 8260B	6/9/16	Dibromochloromethane		%	0.73	4.9	109
SW-846, 8260B	6/9/16	1,2-Dibromoethane		%	0.20	3.5	110
SW-846, 8260B	6/9/16	Dibromomethane		%	0.79	3.8	109
SW-846, 8260B	6/9/16	1,1-Dichloro-1-propene		%	1.2	4.3	110
SW-846, 8260B	6/9/16	1,2-Dichlorobenzene		%	1.8	4.1	101
SW-846, 8260B	6/9/16	1,3-Dichlorobenzene		%	3.2	4.1	104
SW-846, 8260B	6/9/16	1,4-Dichlorobenzene		%	4.7	5.9	103
SW-846, 8260B	6/9/16	Dichlorodifluoromethane		%	1.4	4.7	94.5
SW-846, 8260B	6/9/16	1,1-Dichloroethane		%	0.0090	3.7	112
SW-846, 8260B	6/9/16	1,2-Dichloroethane		%	0.55	3.6	103
SW-846, 8260B	6/9/16	1,1-Dichloroethene		%	2.2	3.9	109
SW-846, 8260B	6/9/16	cis-1,2-Dichloroethene		%	0.40	6.1	107
SW-846, 8260B	6/9/16	trans-1,2-Dichloroethene		%	0.62	4.8	113
SW-846, 8260B	6/9/16	Dichlorofluoromethane		%	0.16	4.2	108

Interpoli Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: LABORATORY CONTROL SAMPLE DUPLICATE

METHOD	ANALYSIS			UNITS	RPD	PCL	RESULT
	DATE	PARAMETER					
SW-846, 8260B	6/9/16	1,2-Dichloropropane		%	0.055	5.5	109
SW-846, 8260B	6/9/16	1,3-Dichloropropane		%	2.8	6.1	107
SW-846, 8260B	6/9/16	2,2-Dichloropropane		%	0.31	5.5	103
SW-846, 8260B	6/9/16	cis-1,3-Dichloropropene		%	0.81	4.9	106
SW-846, 8260B	6/9/16	trans-1,3-Dichloropropene		%	2.5	5.5	103
SW-846, 8260B	6/9/16	Ethyl ether		%	0.74	5.3	113
SW-846, 8260B	6/9/16	Ethylbenzene		%	1.2	6.1	98.2
SW-846, 8260B	6/9/16	Hexachlorobutadiene		%	0.41	5.1	97.0
SW-846, 8260B	6/9/16	Isopropylbenzene		%	1.6	3.9	109
SW-846, 8260B	6/9/16	p-Isopropyltoluene		%	3.2	5.1	105
SW-846, 8260B	6/9/16	Methyl ethyl ketone		%	1.8	6.3	105
SW-846, 8260B	6/9/16	Methyl isobutyl ketone		%	0.31	4.3	112
SW-846, 8260B	6/9/16	Methyl tertiary butyl ether		%	0.47	3.7	113
SW-846, 8260B	6/9/16	Methylene chloride		%	1.2	8.1	113
SW-846, 8260B	6/9/16	Naphthalene		%	1.7	5.9	106
SW-846, 8260B	6/9/16	n-Propylbenzene		%	2.0	3.8	105
SW-846, 8260B	6/9/16	Styrene		%	3.4	3.7	103
SW-846, 8260B	6/9/16	1,1,1,2-Tetrachloroethane		%	3.2	4.2	105
SW-846, 8260B	6/9/16	1,1,2,2-Tetrachloroethane		%	0.94	7.1	109
SW-846, 8260B	6/9/16	Tetrachloroethene		%	0.52	3.4	106
SW-846, 8260B	6/9/16	Tetrahydrofuran		%	0.49	5.2	105
SW-846, 8260B	6/9/16	Toluene		%	1.4	4.1	105
SW-846, 8260B	6/9/16	1,2,3-Trichlorobenzene		%	1.6	6.7	97.0
SW-846, 8260B	6/9/16	1,2,4-Trichlorobenzene		%	0.61	4.0	98.5
SW-846, 8260B	6/9/16	1,1,1-Trichloroethane		%	2.2	4.3	110
SW-846, 8260B	6/9/16	1,1,2-Trichloroethane		%	0.76	1.8	108
SW-846, 8260B	6/9/16	Trichloroethene		%	3.0	6.6	112
SW-846, 8260B	6/9/16	Trichlorofluoromethane		%	0.81	2.6	105
SW-846, 8260B	6/9/16	1,2,3-Trichloropropane		%	0.63	4.6	99.5
SW-846, 8260B	6/9/16	1,1,2-Trichlorotrifluoroethane		%	0.59	4.8	102
SW-846, 8260B	6/9/16	1,2,4-Trimethylbenzene		%	1.4	4.9	101
SW-846, 8260B	6/9/16	1,3,5-Trimethylbenzene		%	2.2	3.6	104
SW-846, 8260B	6/9/16	Vinyl chloride		%	2.7	3.8	109
SW-846, 8260B	6/9/16	Xylene (m/p)		%	2.5	3.3	106
SW-846, 8260B	6/9/16	Xylene (o)		%	0.54	5.0	102

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35401-05

QC SAMPLE ID: MATRIX SPIKE

METHOD	DATE	ANALYSIS		UNITS	LCL	UCL	RESULT
		PARAMETER					
SW-846, 8260B	6/9/16	Acetone		%	71.4	121	104
SW-846, 8260B	6/9/16	Allyl chloride		%	98.0	125	104
SW-846, 8260B	6/9/16	Benzene		%	83.5	116	113
SW-846, 8260B	6/9/16	Bromobenzene		%	94.3	122	104
SW-846, 8260B	6/9/16	Bromochloromethane		%	90.8	113	108
SW-846, 8260B	6/9/16	Bromodichloromethane		%	88.4	103	101
SW-846, 8260B	6/9/16	Bromoform		%	77.8	124	108
SW-846, 8260B	6/9/16	Bromomethane		%	72.1	107	105
SW-846, 8260B	6/9/16	n-Butylbenzene		%	80.8	118	107
SW-846, 8260B	6/9/16	sec-Butylbenzene		%	93.0	119	110
SW-846, 8260B	6/9/16	tert-Butylbenzene		%	94.6	123	112
SW-846, 8260B	6/9/16	Carbon tetrachloride		%	88.9	119	109
SW-846, 8260B	6/9/16	Chlorobenzene		%	97.8	116	113
SW-846, 8260B	6/9/16	Chloroethane		%	87.2	117	108
SW-846, 8260B	6/9/16	Chloroform		%	78.5	112	107
SW-846, 8260B	6/9/16	Chloromethane		%	82.7	118	108
SW-846, 8260B	6/9/16	2-Chlorotoluene		%	83.4	115	102
SW-846, 8260B	6/9/16	4-Chlorotoluene		%	86.4	114	94.4
SW-846, 8260B	6/9/16	1,2-Dibromo-3-chloropropane		%	76.2	115	104
SW-846, 8260B	6/9/16	Dibromochloromethane		%	76.9	124	102
SW-846, 8260B	6/9/16	1,2-Dibromoethane		%	89.2	124	109
SW-846, 8260B	6/9/16	Dibromomethane		%	84.7	113	108
SW-846, 8260B	6/9/16	1,1-Dichloro-1-propene		%	90.3	124	113
SW-846, 8260B	6/9/16	1,2-Dichlorobenzene		%	92.0	122	97.4
SW-846, 8260B	6/9/16	1,3-Dichlorobenzene		%	95.4	123	103
SW-846, 8260B	6/9/16	1,4-Dichlorobenzene		%	95.7	124	100
SW-846, 8260B	6/9/16	Dichlorodifluoromethane		%	60.7	124	110
SW-846, 8260B	6/9/16	1,1-Dichloroethane		%	83.2	114	106
SW-846, 8260B	6/9/16	1,2-Dichloroethane		%	79.2	109	105
SW-846, 8260B	6/9/16	1,1-Dichloroethene		%	82.4	112	101
SW-846, 8260B	6/9/16	cis-1,2-Dichloroethene		%	83.8	120	109
SW-846, 8260B	6/9/16	trans-1,2-Dichloroethene		%	77.1	119	106
SW-846, 8260B	6/9/16	Dichlorofluoromethane		%	84.7	120	115

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35401-05

QC SAMPLE ID: MATRIX SPIKE

METHOD	ANALYSIS			UNITS	LCL	UCL	RESULT
	DATE	PARAMETER					
SW-846, 8260B	6/9/16	1,2-Dichloropropane		%	74.4	125	113
SW-846, 8260B	6/9/16	1,3-Dichloropropane		%	71.2	130	106
SW-846, 8260B	6/9/16	2,2-Dichloropropane		%	74.4	115	106
SW-846, 8260B	6/9/16	cis-1,3-Dichloropropene		%	81.8	124	101
SW-846, 8260B	6/9/16	trans-1,3-Dichloropropene		%	79.6	122	99.2
SW-846, 8260B	6/9/16	Ethyl ether		%	89.8	126	113
SW-846, 8260B	6/9/16	Ethylbenzene		%	86.8	115	98.6
SW-846, 8260B	6/9/16	Hexachlorobutadiene		%	76.8	121	86.2
SW-846, 8260B	6/9/16	Isopropylbenzene		%	94.0	105	103
SW-846, 8260B	6/9/16	p-Isopropyltoluene		%	91.9	113	106
SW-846, 8260B	6/9/16	Methyl ethyl ketone		%	81.3	112	110
SW-846, 8260B	6/9/16	Methyl isobutyl ketone		%	79.3	118	113
SW-846, 8260B	6/9/16	Methyl tertiary butyl ether		%	88.3	124	112
SW-846, 8260B	6/9/16	Methylene chloride		%	77.7	117	113
SW-846, 8260B	6/9/16	Naphthalene		%	60.8	122	90.0
SW-846, 8260B	6/9/16	n-Propylbenzene		%	82.4	120	107
SW-846, 8260B	6/9/16	Styrene		%	31.1	144	104
SW-846, 8260B	6/9/16	1,1,1,2-Tetrachloroethane		%	81.2	123	108
SW-846, 8260B	6/9/16	1,1,2,2-Tetrachloroethane		%	70.1	118	113
SW-846, 8260B	6/9/16	Tetrachloroethene		%	102	113	104
SW-846, 8260B	6/9/16	Tetrahydrofuran		%	75.9	124	113
SW-846, 8260B	6/9/16	Toluene		%	72.9	126	104
SW-846, 8260B	6/9/16	1,2,3-Trichlorobenzene		%	64.1	121	90.4
SW-846, 8260B	6/9/16	1,2,4-Trichlorobenzene		%	61.4	126	91.8
SW-846, 8260B	6/9/16	1,1,1-Trichloroethane		%	81.2	118	113
SW-846, 8260B	6/9/16	1,1,2-Trichloroethane		%	75.6	118	107
SW-846, 8260B	6/9/16	Trichloroethene		%	80.9	118	102
SW-846, 8260B	6/9/16	Trichlorofluoromethane		%	74.1	125	111
SW-846, 8260B	6/9/16	1,2,3-Trichloropropane		%	78.8	121	102
SW-846, 8260B	6/9/16	1,1,2-Trichlorotrifluoroethane		%	86.2	126	112
SW-846, 8260B	6/9/16	1,2,4-Trimethylbenzene		%	62.7	134	107
SW-846, 8260B	6/9/16	1,3,5-Trimethylbenzene		%	63.4	136	105
SW-846, 8260B	6/9/16	Vinyl chloride		%	84.1	116	108
SW-846, 8260B	6/9/16	Xylene (m/p)		%	78.6	120	101
SW-846, 8260B	6/9/16	Xylene (o)		%	83.3	111	94.6

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35401-05

QC SAMPLE ID: MATRIX SPIKE DUPLICATE

METHOD	ANALYSIS			UNITS	RPD	PCL	RESULT
	DATE	PARAMETER					
SW-846, 8260B	6/9/16	Acetone		%	2.1	4.5	107
SW-846, 8260B	6/9/16	Allyl chloride		%	3.0	4.3	108
SW-846, 8260B	6/9/16	Benzene		%	0.65	3.7	114
SW-846, 8260B	6/9/16	Bromobenzene		%	0.50	1.1	103
SW-846, 8260B	6/9/16	Bromochloromethane		%	2.1	4.3	106
SW-846, 8260B	6/9/16	Bromodichloromethane		%	1.9	3.1	99.1
SW-846, 8260B	6/9/16	Bromoform		%	0.99	2.8	109
SW-846, 8260B	6/9/16	Bromomethane		%	1.1	5.2	104
SW-846, 8260B	6/9/16	n-Butylbenzene		%	1.1	4.0	106
SW-846, 8260B	6/9/16	sec-Butylbenzene		%	0.83	5.2	109
SW-846, 8260B	6/9/16	tert-Butylbenzene		%	0.89	2.5	113
SW-846, 8260B	6/9/16	Carbon tetrachloride		%	2.7	4.1	106
SW-846, 8260B	6/9/16	Chlorobenzene		%	0.74	1.2	113
SW-846, 8260B	6/9/16	Chloroethane		%	2.7	4.6	105
SW-846, 8260B	6/9/16	Chloroform		%	0.36	3.7	107
SW-846, 8260B	6/9/16	Chloromethane		%	2.4	5.3	111
SW-846, 8260B	6/9/16	2-Chlorotoluene		%	3.4	4.8	105
SW-846, 8260B	6/9/16	4-Chlorotoluene		%	1.5	2.7	92.9
SW-846, 8260B	6/9/16	1,2-Dibromo-3-chloropropane		%	1.3	3.9	103
SW-846, 8260B	6/9/16	Dibromochloromethane		%	0.73	5.8	102
SW-846, 8260B	6/9/16	1,2-Dibromoethane		%	0.75	4.6	110
SW-846, 8260B	6/9/16	Dibromomethane		%	0.54	4.7	109
SW-846, 8260B	6/9/16	1,1-Dichloro-1-propene		%	0.93	4.4	114
SW-846, 8260B	6/9/16	1,2-Dichlorobenzene		%	2.5	3.5	95.0
SW-846, 8260B	6/9/16	1,3-Dichlorobenzene		%	0.77	5.8	103
SW-846, 8260B	6/9/16	1,4-Dichlorobenzene		%	2.9	6.9	103
SW-846, 8260B	6/9/16	Dichlorodifluoromethane		%	0.25	3.4	110
SW-846, 8260B	6/9/16	1,1-Dichloroethane		%	0.14	5.0	107
SW-846, 8260B	6/9/16	1,2-Dichloroethane		%	3.4	4.1	109
SW-846, 8260B	6/9/16	1,1-Dichloroethene		%	0.064	3.8	101
SW-846, 8260B	6/9/16	cis-1,2-Dichloroethene		%	2.2	3.9	107
SW-846, 8260B	6/9/16	trans-1,2-Dichloroethene		%	0.63	4.5	107
SW-846, 8260B	6/9/16	Dichlorofluoromethane		%	1.4	3.8	113

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35401-05

QC SAMPLE ID: MATRIX SPIKE DUPLICATE

METHOD	ANALYSIS		UNITS	RPD	PCL	RESULT
	DATE	PARAMETER				
SW-846, 8260B	6/9/16	1,2-Dichloropropane	%	0.62	4.9	114
SW-846, 8260B	6/9/16	1,3-Dichloropropane	%	2.8	5.2	103
SW-846, 8260B	6/9/16	2,2-Dichloropropane	%	1.6	3.8	104
SW-846, 8260B	6/9/16	cis-1,3-Dichloropropene	%	0.54	2.2	102
SW-846, 8260B	6/9/16	trans-1,3-Dichloropropene	%	2.6	3.9	102
SW-846, 8260B	6/9/16	Ethyl ether	%	1.1	3.0	114
SW-846, 8260B	6/9/16	Ethylbenzene	%	0.42	3.6	99.0
SW-846, 8260B	6/9/16	Hexachlorobutadiene	%	3.4	3.7	83.4
SW-846, 8260B	6/9/16	Isopropylbenzene	%	0.88	3.1	104
SW-846, 8260B	6/9/16	p-Isopropyltoluene	%	0.79	2.9	105
SW-846, 8260B	6/9/16	Methyl ethyl ketone	%	2.4	3.5	108
SW-846, 8260B	6/9/16	Methyl isobutyl ketone	%	0.053	4.6	113
SW-846, 8260B	6/9/16	Methyl tertiary butyl ether	%	0.67	4.7	112
SW-846, 8260B	6/9/16	Methylene chloride	%	1.7	4.6	115
SW-846, 8260B	6/9/16	Naphthalene	%	1.8	5.9	88.5
SW-846, 8260B	6/9/16	n-Propylbenzene	%	1.2	4.4	108
SW-846, 8260B	6/9/16	Styrene	%	2.1	2.8	106
SW-846, 8260B	6/9/16	1,1,1,2-Tetrachloroethane	%	0.0046	4.7	108
SW-846, 8260B	6/9/16	1,1,2,2-Tetrachloroethane	%	0.58	2.7	113
SW-846, 8260B	6/9/16	Tetrachloroethene	%	1.5	3.0	103
SW-846, 8260B	6/9/16	Tetrahydrofuran	%	1.4	7.3	112
SW-846, 8260B	6/9/16	Toluene	%	1.6	3.7	106
SW-846, 8260B	6/9/16	1,2,3-Trichlorobenzene	%	4.1	5.0	86.8
SW-846, 8260B	6/9/16	1,2,4-Trichlorobenzene	%	1.6	4.7	90.3
SW-846, 8260B	6/9/16	1,1,1-Trichloroethane	%	1.3	4.7	112
SW-846, 8260B	6/9/16	1,1,2-Trichloroethane	%	0.77	5.3	108
SW-846, 8260B	6/9/16	Trichloroethene	%	2.8	2.9	99.5
SW-846, 8260B	6/9/16	Trichlorofluoromethane	%	0.99	1.9	110
SW-846, 8260B	6/9/16	1,2,3-Trichloropropane	%	0.37	4.5	103
SW-846, 8260B	6/9/16	1,1,2-Trichlorotrifluoroethane	%	0.20	4.2	112
SW-846, 8260B	6/9/16	1,2,4-Trimethylbenzene	%	0.90	4.9	108
SW-846, 8260B	6/9/16	1,3,5-Trimethylbenzene	%	0.30	3.8	106
SW-846, 8260B	6/9/16	Vinyl chloride	%	1.8	4.0	106
SW-846, 8260B	6/9/16	Xylene (m/p)	%	0.14	2.4	101
SW-846, 8260B	6/9/16	Xylene (o)	%	0.063	4.3	94.6

Interpoll Laboratories, Inc.
763-786-6020

QC Data for the MPCA,
WDE Landfill, SW-28

Laboratory Report #35382

ILI LABORATORY LOG NO: 35382

QC SAMPLE ID: SURROGATE RECOVERY

METHOD	ANALYSIS DATE	PARAMETER	UNITS	SURROGATE RECOVERY	QC LIMITS
SAMPLE 35382-01:					
SW-846, 8260B	6/9/16	Dibromofluoromethane	%	98.6	77.3-127
SW-846, 8260B	6/9/16	1,2-Dichloroethane-D4	%	102	83.7-114
SW-846, 8260B	6/9/16	Toluene-D8	%	95.1	76.5-117
SW-846, 8260B	6/9/16	4-Bromofluorobenzene	%	103	88.7-111
SAMPLE 35382-02:					
SW-846, 8260B	6/9/16	Dibromofluoromethane	%	106	77.3-127
SW-846, 8260B	6/9/16	1,2-Dichloroethane-D4	%	105	83.7-114
SW-846, 8260B	6/9/16	Toluene-D8	%	92.2	76.5-117
SW-846, 8260B	6/9/16	4-Bromofluorobenzene	%	105	88.7-111
SAMPLE 35382-03:					
SW-846, 8260B	6/9/16	Dibromofluoromethane	%	107	77.3-127
SW-846, 8260B	6/9/16	1,2-Dichloroethane-D4	%	105	83.7-114
SW-846, 8260B	6/9/16	Toluene-D8	%	98.4	76.5-117
SW-846, 8260B	6/9/16	4-Bromofluorobenzene	%	103	88.7-111
SAMPLE 35382-04:					
SW-846, 8260B	6/9/16	Dibromofluoromethane	%	107	77.3-127
SW-846, 8260B	6/9/16	1,2-Dichloroethane-D4	%	101	83.7-114
SW-846, 8260B	6/9/16	Toluene-D8	%	98.9	76.5-117
SW-846, 8260B	6/9/16	4-Bromofluorobenzene	%	104	88.7-111
SAMPLE 35382-05:					
SW-846, 8260B	6/9/16	Dibromofluoromethane	%	106	77.3-127
SW-846, 8260B	6/9/16	1,2-Dichloroethane-D4	%	104	83.7-114
SW-846, 8260B	6/9/16	Toluene-D8	%	93.9	76.5-117
SW-846, 8260B	6/9/16	4-Bromofluorobenzene	%	97.4	88.7-111
METHOD BLANK:					
SW-846, 8260B	6/9/16	Dibromofluoromethane	%	104	77.3-127
SW-846, 8260B	6/9/16	1,2-Dichloroethane-D4	%	101	83.7-114
SW-846, 8260B	6/9/16	Toluene-D8	%	102	76.5-117
SW-846, 8260B	6/9/16	4-Bromofluorobenzene	%	98.1	88.7-111

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