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CONESTOGA-ROVERS
& ASSOCIATES

4050 East Cotton Center Boulevard, Suite 49, Phoenix, Arizona 85040
Telephone: 602-749-9400 Facsimile: 602-749-9500
www.CRAworld.com

March 2, 2009

Reference No. 006029-50

Mr. Regan S. Williams
State Project Coordinator
Ohio EPA
Division of Emergency & Remedial Response
2110 East Aurora Road
Twinsburg, Ohio 44087

Dear Mr. Williams:

Re: November 2008 Groundwater Monitoring Report
Summit National Superfund Site
Deerfield, Ohio

In accordance with the Consent Decree and Statement of Work (SOW) requirements for the Summit National Superfund Site (Site) in Deerfield, Ohio, the Summit National Facility Trust (SNFT) herewith submits two copies of the results of the November 2008 semi-annual groundwater monitoring event at the Site, in accordance with the revised groundwater monitoring schedule provided in the August 2006 Groundwater Monitoring Report (CRA, January 19, 2007), as amended in the response to the Ohio Environmental Protection Agency (OEPA) April 17, 2007 comments (CRA, July 23, 2007). The groundwater sampling was conducted on November 4, 2008, and a full round of groundwater level measurements was obtained on the same day prior to commencing the sampling program.

A. GROUNDWATER QUALITY MONITORING

As proposed in the August 2006 Groundwater Monitoring Report and the July 2007 response to OEPA comments, the November 2008 round of groundwater sampling included sampling of the following groundwater monitoring wells:

1. Water Table Unit (WTU) wells:
   - On-Site wells: MW-11, MW-107, MW-108 and MW-111; and
   - Off-Site downgradient wells: MW-4, MW-113, MW-114 and MW-115.
2. Upper Intermediate Unit (UIU) wells:
   - On-Site wells: MW-207; and
   - Off-Site downgradient wells: MW-209, MW-220, and MW-224.

The samples were analyzed by Accutest of Dayton, New Jersey for the Site Specific Indicator Parameter List (SSIPL) provided in Table 1.

Attachment A is a memorandum summarizing the groundwater monitoring field activities for the November 2008 groundwater monitoring event. Three of the eight WTU wells, and two of the four UIU wells were purged dry. All wells recovered sufficiently for complete sample sets to be obtained. The fact that these wells purged dry is indicative that there is limited groundwater movement in these groundwater units.

Attachment B presents the analytical results for the detected compounds in the groundwater samples collected in November 2008, as follows:

Tables in Attachment B	*Analytical Results*
Table B.1	Analytical Data Summary – WTU Monitoring Wells
Table B.2	Analytical Data Summary – UIU Monitoring Wells
Table B.3	Analytical Data Summary – Sediment Sample
Table B.4	Analytical Data Summary – Rinse Blanks
Table B.5	Analytical Data Summary – Trip Blanks

CRA's data quality assessment for the November 2008 analyses is included in **Attachment C.** The groundwater data were determined to be usable without qualification.

A summary of the SSIPL compounds (see Table 1) detected in the groundwater samples for the sampling events conducted in 1994 (Baseline), 1999 (5-year sampling event), 2004 (10-year sampling event), August 2005 (pre-shutdown sampling event), August 2006 (1-year post shutdown sampling event), April 2007, November 2007, April 2008, and November 2008 are presented on the attached Plans WTU (November, 2008), and UIU (November, 2008), respectively. Trends in the WTU and UIU are noted as follows.

Water Table Unit (WTU) Trends:

No significant increases in WTU groundwater concentrations are evident when compared to the April 2008 groundwater concentrations. When compared to the 2005 groundwater concentrations (pre-shutdown sampling event), the detected concentrations for some compounds at on-Site monitoring well MW-108 have increased more than a factor of two.

SSIPL concentrations in the downgradient off-Site monitoring wells have remained non-detect at MW-4 and MW-114. At MW-113, acetone was the only compound detected (at a concentration of 7.4 µg/L) in November 2008. However, as this is the first detection of acetone at this well, and acetone is a common laboratory contaminant, continued monitoring will confirm whether this contaminant is related to the Site groundwater or to laboratory contamination. The concentrations of 1,1-Dichloroethane (1,1-DCA), 1,2-Dichloroethane (1,2-DCA), 1,2-Dichloroethene (1,2-DCE) and cis-1,2-Dichloroethene

(cis-1,2-DCE) detected in off-Site monitoring well MW-115 are less than the concentrations detected during the August 2005 pre-shutdown sampling event. The concentrations of SSIPLs detected in the off-Site WTU monitoring wells are below Maximum Contaminant Levels.

Upper Intermediate Unit (UIU) Trends:

None of the SSIPL volatile organic compounds (VOCs) were detected in on-Site monitoring well MW-207, confirming that there is no downward migration of VOCs from the WTU to the UIU. SSIPL groundwater concentrations in the downgradient off-Site monitoring wells were non-detect, with the exception of acetone detected at MW-209 and MW-220. The concentration of acetone detected at MW-209 (9.7 µg/L) is within the range of detections of previous sampling events, and is lower than the 2005 pre-shutdown concentration. The concentration of acetone detected at MW-220 (12.8 µg/L) is lower than the 2005 pre-shutdown concentration.

B. GROUNDWATER HYDRAULIC MONITORING

Groundwater levels in the WTU, UIU, LIU and USU monitoring wells and piezometers at the Site were measured on November 4, 2008, and are presented in **Attachment D**. **Attachment D** also includes the groundwater levels measured over the duration of the shutdown period. The groundwater hydraulic data were reduced to elevations and entered into a computer database as required by the SOW. Groundwater contours for the November 2008 groundwater hydraulic monitoring event are presented on figures in **Attachment D**.

The groundwater elevation contours for the November 2008 hydraulic monitoring demonstrate that the horizontal direction of groundwater flow is generally southeasterly in the WTU, as has been consistently observed in the past. The groundwater flow direction in the UIU bedrock unit appears to be in a generally easterly direction, and is consistent with the pre-shutdown groundwater flow direction in this unit.

C. SEDIMENT SAMPLING

A sediment sample was collected from the confluence of the south and east drainage ditches in November 2008 since the drainage ditches were dry. The analytical results of detected compounds in the sediment sample are provided in **Table B.3** of **Attachment B**. The 2008 concentrations of detected compounds are lower than historic concentrations detected in the sediment samples. The next sampling of water and sediment at the confluence of the south and east drainage ditches is scheduled for April 2009.

D. DISCUSSION

Except for the expected increasing groundwater levels in the vicinity of the pipe and media drain after shutdown of the groundwater extraction system in August 2005, no significant changes in the groundwater flow patterns have been noted since the system shutdown. Groundwater concentrations in downgradient off-Site monitoring wells have remained either non-detect or within the range of concentrations detected since 2004 (baseline sampling event for the shutdown evaluation).

In accordance with the reinstatement conditions outlined in the August 2006 Groundwater Monitoring Report (CRA, January 19, 2007), as amended in the response to the OEPA April 17, 2007 comments (CRA, July 23, 2007), since there is no indication of adverse impact to the off-Site groundwater in the WTU or the UIU groundwater units either before any remedial action at the Site during the 10 years of active groundwater pump and treatment operations, or during the third year of shutdown of the groundwater extraction system, the groundwater extraction system will remain off pending the results of the April 2009 groundwater sampling event.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES, INC.

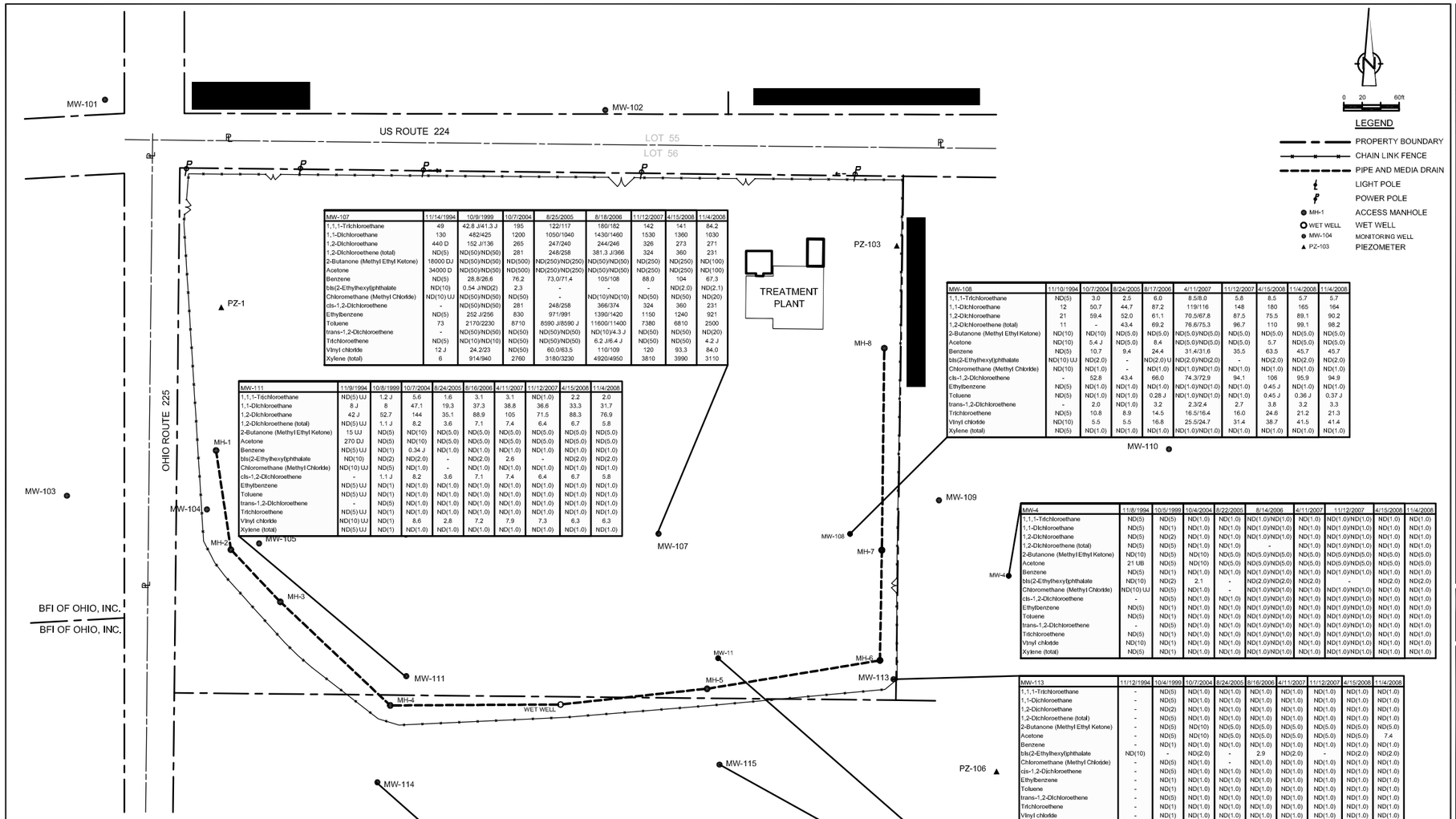
Steve Whillier

SW/ams/Will-059

Attachments

cc: Pablo Valentin (USEPA) (2 hardcopies & 1 e-copy)
Kenneth Walanski (SNFT)
Jeff Sussman (SNFT)
Joe Montello (SNFT)
Douglas G. Haynam (Shumaker, Loop & Kendrick)
Jack Michels (CRA, e-mail)
Eric Mannlein (CRA, e-mail)
Mike Mateyk (CRA, e-mail)

FIGURES



MW-107	11/14/1994	10/9/1999	10/7/2004	8/25/2005	8/18/2006	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	49	42.8 J/41.3 J	195	122/117	180/182	142	141	84.2
1,1-Dichloroethane	130	482/425	1200	1050/1040	1430/1460	1530	1360	1030
1,2-Dichloroethane	440 D	152 J/136	265	247/240	244/246	326	273	271
1,2-Dichloroethene (total)	ND(5)	ND(50)/ND(50)	281	248/258	381.3 J/366	324	360	231
2-Butanone (Methyl Ethyl Ketone)	16000 DJ	ND(50)/ND(50)	ND(500)	ND(250)/ND(250)	ND(50)/ND(50)	ND(250)	ND(250)	ND(100)
Acetone	34000 D	ND(50)/ND(50)	ND(500)	ND(250)/ND(250)	ND(50)/ND(50)	ND(250)	ND(250)	ND(100)
Benzene	ND(5)	28.8/26.6	76.2	73.0/71.4	105/108	88.0	104	67.3
bis(2-Ethylhexyl)phthalate	ND(10)	0.54 J/ND(2)	2.3	-	-	-	ND(2.0)	ND(2.1)
Chloromethane (Methyl Chloride)	ND(10) UJ	ND(50)/ND(50)	ND(50)	-	ND(10)/ND(10)	ND(50)	ND(50)	ND(20)
cis-1,2-Dichloroethene	-	ND(50)/ND(50)	281	248/258	366/374	324	360	231
Ethylbenzene	ND(5)	252 J/256	830	971/991	1390/1420	1150	1240	921
Toluene	73	2170/2230	8710	8590 J/8590 J	11600/11400	7380	6810	2500
trans-1,2-Dichloroethene	-	ND(50)/ND(50)	ND(50)	ND(50)/ND(50)	ND(10)/4.3 J	ND(50)	ND(50)	ND(20)
Trichloroethene	ND(5)	ND(10)/ND(10)	ND(50)	ND(50)/ND(50)	6.2 J/6.4 J	ND(50)	ND(50)	4.2 J
Vinyl chloride	12 J	24.2/23	ND(50)	60.0/63.5	110/109	120	93.3	84.0
Xylene (total)	6	914/940	2760	3180/3230	4920/4950	3810	3990	3110

MW-111	11/9/1994	10/8/1999	10/7/2004	8/24/2005	8/16/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	ND(5) UJ	1.2 J	5.6	1.6	3.1	3.1	ND(1.0)	2.2	2.0
1,1-Dichloroethane	8 J	8	47.1	19.3	37.3	38.8	36.6	33.3	31.7
1,2-Dichloroethane	42 J	52.7	144	35.1	88.9	105	71.5	88.3	76.9
1,2-Dichloroethene (total)	ND(5) UJ	1.1 J	8.2	3.6	7.1	7.4	6.4	6.7	5.8
2-Butanone (Methyl Ethyl Ketone)	15 UJ	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	270 DJ	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(5) UJ	ND(1)	0.34 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.0)	-	ND(2.0)	2.6	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10) UJ	ND(5)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	1.1 J	8.2	3.6	7.1	7.4	6.4	6.7	5.8
Ethylbenzene	ND(5) UJ	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(5) UJ	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(5) UJ	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(10) UJ	ND(1)	8.6	2.8	7.2	7.9	7.3	6.3	6.3
Xylene (total)	ND(5) UJ	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-108	11/10/1994	10/7/2004	8/24/2005	8/17/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008	11/4/2008
1,1,1-Trichloroethane	ND(5)	3.0	2.5	6.0	8.5/8.0	5.8	8.5	5.7	5.7
1,1-Dichloroethane	12	50.7	44.7	87.2	119/116	148	180	165	164
1,2-Dichloroethane	21	59.4	52.0	61.1	70.5/67.8	87.5	75.5	89.1	90.2
1,2-Dichloroethene (total)	11	-	43.4	69.2	76.6/75.3	96.7	110	99.1	98.2
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	5.4 J	ND(5.0)	8.4	ND(5.0)/ND(5.0)	ND(5.0)	5.7	ND(5.0)	ND(5.0)
Benzene	ND(5)	10.7	9.4	24.4	31.4/31.6	35.5	63.5	45.7	45.7
bis(2-Ethylhexyl)phthalate	ND(10) UJ	ND(2.0)	-	ND(2.0) U	ND(2.0)/ND(2.0)	-	ND(2.0)	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10)	ND(1.0)	-	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	52.8	43.4	66.0	74.3/72.9	94.1	106	95.9	94.9
Ethylbenzene	ND(5)	ND(1.0)	ND(1.0)	0.28 J	ND(1.0)/ND(1.0)	ND(1.0)	0.45 J	ND(1.0)	ND(1.0)
Toluene	ND(10)	5.5	5.5	16.8	25.5/24.7	31.4	38.7	41.5	41.4
trans-1,2-Dichloroethene	-	2.0	ND(1.0)	3.2	2.3/2.4	2.7	3.8	3.2	3.3
Trichloroethene	ND(5)	10.8	8.9	14.5	16.5/16.4	16.0	24.6	21.2	21.3
Vinyl chloride	ND(10)	5.5	5.5	16.8	25.5/24.7	31.4	38.7	41.5	41.4
Xylene (total)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-4	11/8/1994	10/5/1999	10/4/2004	8/22/2005	8/14/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	ND(5)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(5)	ND(2)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(5)	ND(5)	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5)	ND(10)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)
Acetone	21 UB	ND(5)	ND(10)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	2.1	-	ND(2.0)/ND(2.0)	ND(2.0)	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10) UJ	ND(5)	ND(1.0)	-	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(10)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)

MW-113	11/12/1994	10/4/1999	10/7/2004	8/24/2005	8/16/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	-	ND(2)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	-	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	-	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	7.4
Benzene	-	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(10)	-	ND(2.0)	-	2.9	ND(2.0)	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	-	ND(5)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	-	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	-	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	-	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	-	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	-	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-11	11/14/1994	10/8/1999	10/7/2004	8/24/2005	8/16/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	130	63.8	54.3	46.0	18.5	55.2	58.7	43.1/43.0	42.4
1,1-Dichloroethane	93	84.4	73.7	74.9	43.3	86.2	112	75.2/74.9	83.7
1,2-Dichloroethane	ND(5)	ND(2)	1.8	1.7	1.1	2.0	2.3	1.6/1.7	2.0
1,2-Dichloroethene (total)	ND(5)	31.3	64.3	65.2	27.68 J	58.4	72.7	58.5/58.5	53.4
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)
Acetone	24	ND(5)	ND(10)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)
Benzene	ND(5)	ND(1)	0.55 J	0.76	0.24 J	0.96 J	0.78 J	0.73 J/0.73 J	0.73 J
bis(2-Ethylhexyl)phthalate	ND(10) UJ	-	ND(2.0)	-	ND(2.0)	ND(2.0)	-	ND(2.0)/ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10) UJ	ND(5)	0.71 J	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	0.61 J
cis-1,2-Dichloroethene	-	31.3	62.3	62.7	26.9	56.5	70.2	56.0/56.0	51.3
Ethylbenzene	ND(5)	ND(1)	ND(1.0)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
Toluene	ND(5)	ND(1)	ND(1.0)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	2.0	2.5	0.78 J	2.0	2.5	2.5/2.5	2.1
Trichloroethene	7	22.1	186	200	55.7	133	141	147/145	121
Vinyl chloride	ND(10) UJ	2.8	2.2	3.4	0.38 J	3.5	5.0	4.3/4.4	4.0
Xylene (total)	ND(5)	ND(1)	ND(1.0)	ND(2.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)

MW-114	11/16/1994	10/5/1999	10/5/2004	8/23/2005	8/15/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	ND(5)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(5)	ND(2)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(5)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10) UJ	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2) U	ND(2.0)	-	1.1 J	ND(2.0)	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10)	ND(5)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	9.6	3.6	7.6	1.7	5.1	4.5	4.2	5.8
Ethylbenzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(10)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-115	11/10/1994	10/6/1999	10/5/2004	8/23/2005	8/15/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	ND(5)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(5)	2.5 J	1.3	2.0	1.1	1.6	2.0	1.7	1.7
1,2-Dichloroethane	ND(5)	ND(2)	ND(1.0)	0.77	ND(1.0)	ND(1.0)	ND(1.0)	0.48 J	0.56 J
1,2-Dichloroethene (total)	6	9.6	3.6	7.6	1.7	5.1	4.5	4.2	5.8
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2) U	ND(2.0)	-	1.1 J	ND(2.0)	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10)	ND(5)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	9.6	3.6	7.6	1.7	5.1	4.5	4.2	5.8
Ethylbenzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(10)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(5)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

Nº	Revision	Date	Initial

SAMPLING DATE

WELL DESIGNATION

CHEMICAL CONCENTRATIONS IN µg/L	MW-109	11/08/1994	11/08/1994	05/03/1995
	Acetone	ND(10)	11 U	ND(50)

NOTE: ONLY SSIPL COMPOUNDS SHOWN.

CONCENTRATION CODES

B	DETECTED IN ASSOCIATED METHOD BLANK
D	RESULT WAS OBTAINED FROM AN ANALYSIS PERFORMED AT A SECONDARY DILUTION
E	THE REPORTED RESULT IS AN ESTIMATE THAT EXCEEDS THE CALIBRATION RANGE OF THE GC/MS INSTRUMENT. NO RESULT WITHIN CALIBRATION RANGE COULD BE OBTAINED DUE TO HIGH CONCENTRATIONS OF TARGET ANALYTES, WHICH NECESSITATED LARGE DILUTIONS.
J	THE ASSOCIATED VALUE IS AN ESTIMATED QUANTITY.
R	THE DATA ARE UNUSABLE. THE COMPOUND MAY OR MAY NOT BE PRESENT.
X	THE REPORTED RESULT WAS WITHIN THE GC/MS CALIBRATION RANGE BETWEEN THE REPORTING LIMIT AND THE DETECTION LIMIT OF THE COMPOUND.
-	NOT ANALYZED
ND	NOT DETECTED
ND( )	THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT LISTED IN PARENTHESES.
µg/L	MICROGRAMS PER LITER
U	THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED. THE ASSOCIATED NUMERICAL VALUE IS THE SAMPLE QUANTITATION LIMIT.
UJ	THE MATERIAL WAS ANALYZED FOR, BUT WAS NOT DETECTED. THE SAMPLE QUANTITATION LIMIT IS AN ESTIMATED QUANTITY.
SSIPL	SITE SPECIFIC INDICATOR PARAMETER LIST
NS	NOT SAMPLED

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

GROUNDWATER QUALITY MONITORING

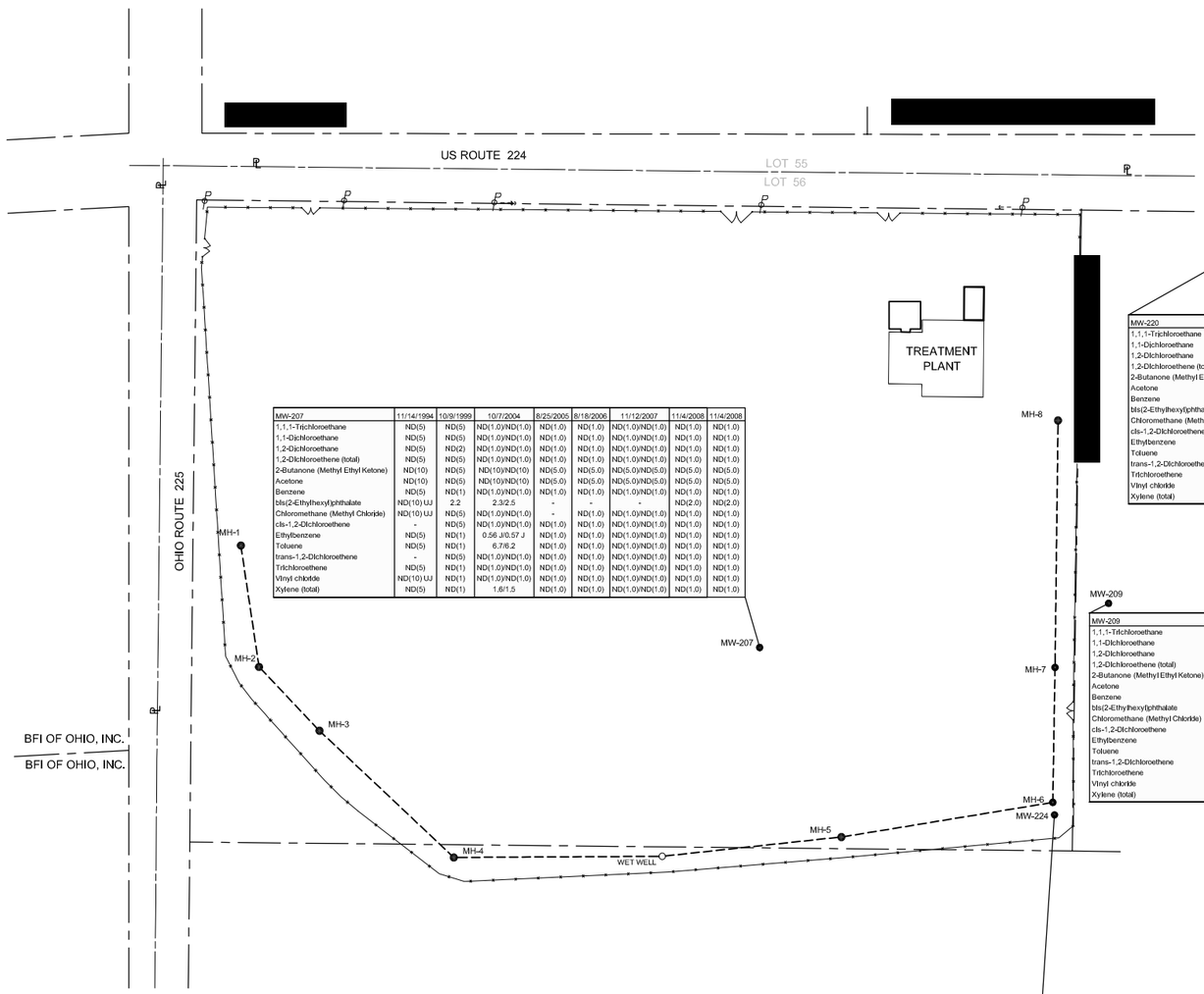
WATER TABLE UNIT

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:	
SAW	SW	JANUARY 2009	
Scale: 1"=60'	Project Nº: 06029-50	Report Nº: WILL059	Drawing Nº: WTU(11/08)

06029-50(WILL059)GN-PX002 FEB 11/2009



MW-207	11/14/1994	10/9/1999	10/7/2004	8/25/2005	8/18/2006	11/12/2007	11/4/2008	11/4/2008
1,1,1-Trichloroethane	ND(5)	ND(5)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(5)	ND(5)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(5)	ND(2)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(5)	ND(5)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5)	ND(10)/ND(10)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5)	ND(10)/ND(10)	ND(5.0)	ND(5.0)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(5)	ND(1)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(10) UJ	2.2	2.3/2.5	-	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10) UJ	ND(5)	ND(1.0)/ND(1.0)	-	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	ND(5)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(5)	ND(1)	0.56 J/0.57 J	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(5)	ND(1)	6.7/6.2	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(5)	ND(1)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(10) UJ	ND(1)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(5)	ND(1)	1.6/1.5	ND(1.0)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)

MW-220	10/5/1999	10/5/2004	8/23/2005	2/22/2006	8/14/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(2)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(5)	ND(10)	19.7	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	23.5	12.8
Benzene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2)	ND(2.0)	-	-	ND(2.0)	ND(2.0)	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(5)	ND(1.0)	-	-	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1)	ND(1.0)	0.30	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-209	11/8/1994	10/4/1999	10/4/2004	8/22/2005	2/21/2006	8/14/2006	4/11/2007	11/12/2007	4/15/2008	11/4/2008
1,1,1-Trichloroethane	ND(5)	ND(5)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(5)	ND(1)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(5)	ND(2)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(5)	ND(5)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5)	ND(10)	ND(5.0)/ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5)	3.2 J	15.6/15.8	14.7	18.8	ND(5.0)	8.7	18.7	9.7
Benzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(10)	ND(2)	ND(2.1)	-	-	ND(2.0)	3.4	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(10)	ND(5)	ND(1.0)	-	-	0.56 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(5)	ND(1)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(5)	ND(1)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	-	ND(5)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(5)	ND(1)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(10)	ND(1)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(5)	ND(1)	ND(1.0)	ND(1.0)/ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

MW-224	10/8/1999	10/7/2004	8/24/2005	8/16/2006	11/12/2007	11/4/2008
1,1,1-Trichloroethane	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(2)	ND(1.0)	0.84	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(5)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2)	ND(2.0)	-	ND(2.0)	-	ND(2.0)
Chloromethane (Methyl Chloride)	ND(5)	ND(1.0)	-	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

0 20 60ft

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- PIPE AND MEDIA DRAIN
- LIGHT POLE
- POWER POLE
- MH-1 ACCESS MANHOLE
- WET WELL WET WELL
- MW-104 MONITORING WELL
- PIEZOMETER

SAMPLING DATE

WELL DESIGNATION

CHEMICAL CONCENTRATIONS IN µg/L

MW-109	11/08/1994	11/08/1994	05/03/1995
Acetone	ND(10)	11 U	ND(50)

NOTE: ONLY SSIPL COMPOUNDS SHOWN.

CONCENTRATION CODES

- B DETECTED IN ASSOCIATED METHOD BLANK
- D RESULT WAS OBTAINED FROM AN ANALYSIS PERFORMED AT A SECONDARY DILUTION
- E THE REPORTED RESULT IS AN ESTIMATE THAT EXCEEDS THE CALIBRATION RANGE OF THE GC/MS INSTRUMENT. NO RESULT WITHIN CALIBRATION RANGE COULD BE OBTAINED DUE TO HIGH CONCENTRATIONS OF TARGET ANALYTES, WHICH NECESSITATED LARGE DILUTIONS.
- J THE ASSOCIATED VALUE IS AN ESTIMATED QUANTITY.
- R THE DATA ARE UNUSABLE. THE COMPOUND MAY OR MAY NOT BE PRESENT.
- X THE REPORTED RESULT WAS WITHIN THE GC/MS CALIBRATION RANGE BETWEEN THE REPORTING LIMIT AND THE DETECTION LIMIT OF THE COMPOUND.
- \- NOT ANALYZED
- ND NOT DETECTED
- ND( ) THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED ABOVE THE REPORTED SAMPLE QUANTITATION LIMIT LISTED IN PARENTHESES.
- µg/L MICROGRAMS PER LITER
- U THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED. THE ASSOCIATED NUMERICAL VALUE IS THE SAMPLE QUANTITATION LIMIT.
- UJ THE MATERIAL WAS ANALYZED FOR, BUT WAS NOT DETECTED. THE SAMPLE QUANTITATION LIMIT IS AN ESTIMATED QUANTITY.
- SSIPL SITE SPECIFIC INDICATOR PARAMETER LIST
- NS NOT SAMPLED

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

Nº	Revision	Date	Initial

SUMMIT NATIONAL SUPERFUND SITE DEERFIELD, OHIO

GROUNDWATER QUALITY MONITORING

UPPER INTERMEDIATE UNIT

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:	
SAW	SW	JANUARY 2009	
Scale: 1"=60'	Project Nº: 06029-50	Report Nº: WILL059	Drawing Nº: UIU(11/08)

06029-50(WILL059)GN-PX003 FEB 11/2009

TABLE

TABLE 1

SITE-SPECIFIC INDICATOR PARAMETER LIST
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Volatile Organic Compounds (VOCs):

1,1,1-Trichloroethane
1,1-Dichloroethane
1,2-Dichloroethane
1,2-Dichloroethene, Total
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
2-Butanone (Methyl Ethyl Ketone)
Acetone
Benzene
Chloromethane (Methyl Chloride)
Ethylbenzene
Toluene
Trichloroethene
Vinyl Chloride
Xylenes, Total

Semi-Volatile Organic Compounds (SVOCs):

bis(2-ethylhexyl)phthalate

ATTACHMENT A

GROUNDWATER MONITORING FIELD ACTIVITIES SUMMARY NOVEMBER 2008

CONESTOGA-ROVERS & ASSOCIATES

2055 Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO: Stephen Whillier

REF. NO.: 006029-50

FROM: David Tyran/adh/3

DATE: November 6, 2008

Via E-Mail and Interoffice Mail

RE: Post Shutdown Hydraulic Monitoring and Groundwater Quality Monitoring
November 2008
Summit National Superfund Site
Deerfield Township of Portage County, Ohio

The following is a brief summary of the Site activities associated with the November 2008 round of groundwater sampling conducted on November 4, 2008, at the Summit National Superfund Site (Site) in Deerfield Township of Portage County, Ohio.

On-Site Personnel

Field activities were conducted by Conestoga-Rovers & Associates' (CRA's) Shawn Gardner and Dave Tyran.

Water Levels

A round of water level readings were taken from all on-Site and off-Site monitoring wells on November 4, 2008, using a Solinist electronic water level tape. The water level tape was decontaminated between water level measurements at each monitoring well. The decontamination sequence involved first rinsing the tape with potable water, and final rinsing with deionized water.

Purging and Sampling of Monitoring Wells

During purging of all monitoring wells, readings of specific conductivity, temperature, and turbidity (dependent on field observations) were taken after the removal of each standing well volume. Due to malfunctioning pH probe on the multi parameter meter, field pH readings were not obtained during the purging of the monitoring wells. A summary of the well purge data is provided in Table 1. The quality of the evacuated water was also noted for color and clarity. All purge waters (approximately 114 gallons) from the monitoring wells were containerized in three steel 55-gallon drums for later disposal off Site.

Once the monitoring wells were purged, groundwater samples were collected for analyses of the Site-Specific Indicator Parameter List (SSIPL) for volatile organic compounds (VOCs) and Bis(2ethylhexl) phthalate.

All 12 monitoring wells were purged using dedicated Waterra foot valves and tubing and were sampled using a precleaned stainless steel bailer (as detailed below). Once purging of the monitoring well was completed, the tubing was removed from the well and drained. The standing water within the well was allowed to settle so that a clear sample could be collected. After sampling of the well was completed, the tubing was placed back down the well.

As shown in Table 1, 5 out of the 12 wells were purged dry and then allowed to recover so a complete sample set could be taken. The remaining seven wells had sufficient recharge to allow for stabilization by purging three or more volumes.

Collected samples were labeled and placed in a cooler and maintained cool with ice. The samples were shipped by Federal Express to Accutest Laboratories in Dayton, New Jersey, under Chain of Custody protocols.

Decontamination Procedures

Stainless steel bailers were cleaned between monitoring wells by using the following decontamination sequence:

i) clean with brush in potable water and Alconox detergent;
ii) rinse thoroughly with potable water;
iii) rinse thoroughly with deionized water; and
iv) allow the bailer to air dry on clean aluminum foil.

Field Quality Assurance/Quality Control (QA/QC) Program

Field QA/QC samples collected during the November 2008 round of groundwater sampling included two blind field duplicates and two stainless steel bailer rinsate blanks. One matrix spike and matrix spike duplicate (MS/MSDs) was also collected. One trip blank was sent with the shipment of samples to the laboratory by placing all VOC samples in the same cooler with the trip blank.

Stainless steel bailer rinsate blanks were collected by pouring lab supplied deionized water into a precleaned bailer and then filling the sample containers.

Sediment Sample

A sediment sample was collected at the confluence of the south and east ditches. This sample was analyzed for VOCs, semi-volatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs).

TABLE 1

SUMMARY OF MONITORING WELL PURGE DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
NOVEMBER 2008

Well ID	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-4	11/04/08	11.1	11.1	14:24	3.19	NM	13.9	243.6	Clear, colorless	Waterra/SS bailer	Well dry @ 16.0 gallons
	11/04/08		Sample	16:30					Clear, colorless	for all parameters	
MW-11	11/04/08	2.6	2.6	11:28	3.16	NM	13.11	48.7	Clear, colorless	Waterra/SS bailer	Good recharge
			5.2	11:32	2.88	NM	12.36	19.2		for all parameters	
			7.8	11:36	2.76	NM	12.64	16.2			
			Sample	17:10					Clear, colorless		
MW-107	11/04/08	3.0	3.0	16:05	3.21	NM	12.4	14.7	Clear, colorless, strong chemical odor	Waterra/SS bailer	Good recharge
			6.0	16:09	3.22	NM	12.3	20.2		for all parameters	
			9.0	16:12	3.22	NM	12.1	17.9			
			Sample	18:10					Clear, colorless		
MW-108	11/04/08	1.9	1.9	11:59	2.10	NM	15.0	151.7	Clear, colorless	Waterra/SS bailer	Good recharge
			3.8	12:00	2.11	NM	14.0	276.3		for all parameters	
			5.7	12:02	2.31	NM	13.6	204.3			
			Sample	18:20					Slightly cloudy orange		
MW-111	11/04/08	2.4	2.4	15:22	3.92	NM	12.9	16.2	Clear, colorless	Waterra/SS bailer	Good recharge
			4.8	15:23	3.90	NM	12.6	14.8		for all parameters	
			7.2	15:25	3.91	NM	12.4	7.1			
			Sample	16:50					Clear, colorless		
MW-113	11/04/08	1.4	1.4	11:07	4.26	NM	15.15	374	Cloudy, dark gray	Waterra/SS bailer	Well dry @ 3.0 gallons
			2.8	11:12	4.25	NM	14.62	1610		for all parameters	
			Sample	17:20					Clear, colorless		
MW-114	11/04/08	1.9	1.9	12:17	2.72	NM	12.9	101.9	Clear, colorless	Waterra/SS bailer	Well dry @ 3.5 gallons
			Sample	16:10					Slightly cloudy, red brown	for all parameters	

TABLE 1

SUMMARY OF MONITORING WELL PURGE DATA
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO
NOVEMBER 2008

Well ID	*Date Purged/ Sampled*	*Well Volume (Gallons)*	*Purged Volume (Gallons)*	*Time*	*Conductivity (ms/cm)*	*pH*	*Temperature (°C)*	*Turbidity (NTU)*	*Water Quality*	*Purge/Sampling Method*	*Comments*
MW-115	11/04/08	3.7	3.7	12:36	2.47	NM	13.2	18.2	Clear, colorless	Waterra/SS bailer	Good recharge
			7.4	12:46	2.50	NM	13.7	13.4		for all parameters	
			11.1	12:54	2.49	NM	13.3	7.3			
			Sample	16:00					Clear, light brown		
MW-207	11/04/08	6.0	6.0	15:43	3.36	NM	12.6	61.2	Clear, colorless	Waterra/SS bailer	Good recharge
			12.0	15:50	3.38	NM	9.0	9.0		for all parameters	
			18.0	15:56	3.37	NM	6.8	6.8			
			Sample	17:40					Clear, colorless		
MW-209	11/04/08	5.1	5.1	13:52	3.50	NM	12.8	29.6	Clear, colorless	Waterra/SS bailer	Well dry @ 11.5 gallons
			10.2	13:56	3.58	NM	12.2	62.6		for all parameters	
			Sample	16:40					Clear, colorless		
MW-220	11/04/08	4.9	4.9	13:25	3.70	NM	12.9	41.4	Clear, colorless	Waterra/SS bailer	Well dry @ 11.0 gallons
			9.8	13:35	3.75	NM	12.7	45.6		for all parameters	
			Sample	16:20					Clear, colorless		
MW-224	11/04/08	3.4	3.4	14:58	3.43	NM	13.3	19.6	Clear, colorless	Waterra/SS bailer	Good recharge
			6.8	15:04	3.36	NM	12.8	35.4		for all parameters	
			10.2	15:08	3.41	NM	12.5	80.2			
			Sample	17:30					Clear, colorless		

Notes:
ms/cm - milliSiemens per centimeter
°C - Degrees Celsius
NTU - Nephelometric Turbidity Units
NM - Not Measured
SS - Stainless Steel

ATTACHMENT B

ANALYTICAL DATA SUMMARY

TABLE B.1

ANALYTICAL DATA SUMMARY
WTU MONITORING WELLS
NOVEMBER 2008 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Sample Location		*MW-4*	*MW-11*	*MW-107*	*MW-108*	*MW-108*	*MW-111*	*MW-113*	*MW-114*	*MW-115*
Sample ID		*WG-6029-110408-004*	*WG-6029-110408-007*	*WG-6029-110408-012*	*WG-6029-110408-013*	*WG-6029-110408-014*	*WG-6029-110408-006*	*WG-6029-110408-008*	*WG-6029-110408-002*	*WG-6029-110408-001*
Sample Date		*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*
Sample Type						*Duplicate*				
	Units									
Semi-Volatile Organic Compounds										
bis(2-Ethylhexyl)phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.1)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Volatile Organic Compounds										
1,1,1-Trichloroethane	µg/L	ND(1.0)	42.4	84.2	5.7	5.7	2.0	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	µg/L	ND(1.0)	83.7	1030	165	164	31.7	ND(1.0)	ND(1.0)	1.7
1,2-Dichloroethane	µg/L	ND(1.0)	2.0	**271**	**89.1**	**90.2**	**76.9**	ND(1.0)	ND(1.0)	0.56 J
1,2-Dichloroethene (total)	µg/L	ND(1.0)	53.4	**231**	**99.1**	**98.2**	5.8	ND(1.0)	ND(1.0)	5.8
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(100)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	µg/L	ND(5.0)	ND(5.0)	ND(100)	ND(5.0)	ND(5.0)	ND(5.0)	7.4	ND(5.0)	ND(5.0)
Benzene	µg/L	ND(1.0)	0.73 J	**67.3**	**45.7**	**45.7**	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	µg/L	ND(1.0)	0.61 J	ND(20)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	µg/L	ND(1.0)	51.3	**231**	**95.9**	**94.9**	5.8	ND(1.0)	ND(1.0)	5.8
Ethylbenzene	µg/L	ND(1.0)	ND(1.0)	**921**	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	µg/L	ND(1.0)	ND(1.0)	**2500**	0.36 J	0.37 J	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	µg/L	ND(1.0)	2.1	ND(20)	3.2	3.3	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	µg/L	ND(1.0)	**121**	4.2 J	**21.2**	**21.3**	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	µg/L	ND(1.0)	**4.0**	**84.0**	**41.5**	**41.4**	**6.3**	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	µg/L	ND(1.0)	ND(1.0)	3110	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

Notes:
µg/L - micrograms per Liter
ND ( ) - Not present at or above the associated value
J - Estimated concentration

TABLE B.2

ANALYTICAL DATA SUMMARY
UIU MONITORING WELLS
NOVEMBER 2008 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Sample Location		*MW-207*	*MW-207*	*MW-209*	*MW-220*	*MW-224*
Sample ID		*WG-6029-110408-010*	*WG-6029-110408-011*	*WG-6029-110408-005*	*WG-6029-110408-003*	*WG-6029-110408-009*
Sample Date		*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*	*11/4/2008*
Sample Type			*Duplicate*			
	Units					
Semi-Volatile Organic Compounds						
bis(2-Ethylhexyl)phthalate	µg/L	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)	ND(2.0)
Volatile Organic Compounds						
1,1,1-Trichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	µg/L	ND(5.0)	ND(5.0)	9.7	12.8	ND(5.0)
Benzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Chloromethane (Methyl Chloride)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	µg/L	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

Notes:
µg/L - micrograms per Liter
ND ( ) - Not present at or above the associated value
J - Estimated concentration

TABLE B.3

ANALYTICAL DATA SUMMARY
SURFACE WATER SAMPLE
NOVEMBER 2008 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Sample Location		*S&E Ditches Sediment*
Sample ID		*SED-6029-110408-01*
Sample Date		*11/4/2008*
Sample Type		
	Units	
PCBs		
Aroclor-1016 (PCB-1016)	µg/L	ND(240)
Aroclor-1221 (PCB-1221)	µg/L	ND(240)
Aroclor-1232 (PCB-1232)	µg/L	ND(240)
Aroclor-1242 (PCB-1242)	µg/L	ND(240)
Aroclor-1248 (PCB-1248)	µg/L	ND(240)
Aroclor-1254 (PCB-1254)	µg/L	ND(240)
Aroclor-1260 (PCB-1260)	µg/L	ND(240)
Pesticides		
4,4'-DDD	µg/L	ND(8.9)
4,4'-DDE	µg/L	ND(8.9)
4,4'-DDT	µg/L	ND(8.9)
Aldrin	µg/L	ND(8.9)
alpha-BHC	µg/L	ND(8.9)
alpha-Chlordane	µg/L	ND(8.9)
beta-BHC	µg/L	ND(8.9)
delta-BHC	µg/L	ND(8.9)
Dieldrin	µg/L	ND(8.9)
Endosulfan I	µg/L	ND(8.9)
Endosulfan II	µg/L	ND(8.9)
Endosulfan sulfate	µg/L	ND(8.9)
Endrin	µg/L	ND(8.9)
Endrin aldehyde	µg/L	R
Endrin ketone	µg/L	ND(8.9)
gamma-BHC (Lindane)	µg/L	ND(8.9)
gamma-Chlordane	µg/L	ND(8.9)
Heptachlor	µg/L	ND(8.9)
Heptachlor epoxide	µg/L	ND(8.9)
Methoxychlor	µg/L	ND(8.9)
Toxaphene	µg/L	ND(110)
Semi-Volatile Organic Compounds		
1,2,4-Trichlorobenzene	µg/L	ND(160)
1,2-Dichlorobenzene	µg/L	ND(160)
1,3-Dichlorobenzene	µg/L	ND(160)
1,4-Dichlorobenzene	µg/L	ND(160)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND(160)

TABLE B.3

ANALYTICAL DATA SUMMARY
SURFACE WATER SAMPLE
NOVEMBER 2008 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Sample Location		*S&E Ditches Sediment*
Sample ID		*SED-6029-110408-01*
Sample Date		*11/4/2008*
Sample Type		
	Units	
Semi-Volatile Organic Compounds (cont.)		
2,4,5-Trichlorophenol	µg/L	ND(400)
2,4,6-Trichlorophenol	µg/L	ND(400)
2,4-Dichlorophenol	µg/L	ND(400)
2,4-Dimethylphenol	µg/L	ND(400)
2,4-Dinitrophenol	µg/L	ND(1600)
2,4-Dinitrotoluene	µg/L	ND(160)
2,6-Dinitrotoluene	µg/L	ND(160)
2-Chloronaphthalene	µg/L	ND(160)
2-Chlorophenol	µg/L	ND(400)
2-Methylnaphthalene	µg/L	96.6 J
2-Methylphenol	µg/L	ND(160)
2-Nitroaniline	µg/L	ND(400)
2-Nitrophenol	µg/L	ND(400)
3&4-Methylphenol	µg/L	ND(160)
3,3'-Dichlorobenzidine	µg/L	ND(400)
3-Nitroaniline	µg/L	ND(400)
4,6-Dinitro-2-methylphenol	µg/L	ND(1600)
4-Bromophenyl phenyl ether	µg/L	ND(160)
4-Chloro-3-methylphenol	µg/L	ND(400)
4-Chloroaniline	µg/L	ND(400)
4-Chlorophenyl phenyl ether	µg/L	ND(160)
4-Nitroaniline	µg/L	ND(400)
4-Nitrophenol	µg/L	ND(800)
Acenaphthene	µg/L	ND(80)
Acenaphthylene	µg/L	ND(80)
Anthracene	µg/L	ND(80)
Benzo(a)anthracene	µg/L	ND(80)
Benzo(a)pyrene	µg/L	ND(80)
Benzo(b)fluoranthene	µg/L	ND(80)
Benzo(g,h,i)perylene	µg/L	ND(80)
Benzo(k)fluoranthene	µg/L	ND(80)
bis(2-Chloroethoxy)methane	µg/L	ND(160)
bis(2-Chloroethyl)ether	µg/L	ND(160)
bis(2-Ethylhexyl)phthalate	µg/L	ND(160)
Butyl benzylphthalate	µg/L	ND(160)
Carbazole	µg/L	ND(160)
Chrysene	µg/L	ND(80)
Dibenz(a,h)anthracene	µg/L	ND(80)
Dibenzofuran	µg/L	ND(160)
Diethyl phthalate	µg/L	ND(160)

TABLE B.3

ANALYTICAL DATA SUMMARY
SURFACE WATER SAMPLE
NOVEMBER 2008 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Sample Location		*S&E Ditches Sediment*
Sample ID		*SED-6029-110408-01*
Sample Date		*11/4/2008*
Sample Type		
	Units	
Semi-Volatile Organic Compounds (cont.)		
Dimethyl phthalate	µg/L	ND(160)
Di-n-butylphthalate	µg/L	ND(160)
Di-n-octyl phthalate	µg/L	ND(160)
Fluoranthene	µg/L	ND(80)
Fluorene	µg/L	ND(80)
Hexachlorobenzene	µg/L	ND(160)
Hexachlorobutadiene	µg/L	ND(160)
Hexachlorocyclopentadiene	µg/L	ND(1600)
Hexachloroethane	µg/L	ND(400)
Indeno(1,2,3-cd)pyrene	µg/L	ND(80)
Isophorone	µg/L	ND(160)
Naphthalene	µg/L	99.9
Nitrobenzene	µg/L	ND(160)
N-Nitrosodi-n-propylamine	µg/L	ND(160)
N-Nitrosodiphenylamine	µg/L	ND(400)
Pentachlorophenol	µg/L	ND(800)
Phenanthrene	µg/L	61.3 J
Phenol	µg/L	ND(160)
Pyrene	µg/L	ND(80)
Volatile Organic Compounds		
1,1,1-Trichloroethane	µg/L	ND(13)
1,1,2,2-Tetrachloroethane	µg/L	ND(13)UJ
1,1,2-Trichloroethane	µg/L	ND(13)UJ
1,1-Dichloroethane	µg/L	ND(13)UJ
1,1-Dichloroethene	µg/L	ND(13)
1,2-Dichloroethane	µg/L	ND(2.5)UJ
1,2-Dichloroethene (total)	µg/L	ND(13)UJ
1,2-Dichloropropane	µg/L	ND(13)UJ
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(25)UJ
2-Hexanone	µg/L	ND(13)UJ
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND(13)UJ
Acetone	µg/L	ND(25)
Benzene	µg/L	ND(2.5)UJ
Bromodichloromethane	µg/L	ND(13)UJ
Bromoform	µg/L	ND(13)UJ
Bromomethane (Methyl Bromide)	µg/L	ND(13)
Carbon disulfide	µg/L	ND(13)
Carbon tetrachloride	µg/L	ND(13)

TABLE B.3

ANALYTICAL DATA SUMMARY
SURFACE WATER SAMPLE
NOVEMBER 2008 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Sample Location		*S&E Ditches Sediment*
Sample ID		*SED-6029-110408-01*
Sample Date		*11/4/2008*
Sample Type		
	Units	
Volatile Organic Compounds (cont.)		
Chlorobenzene	µg/L	ND(13)UJ
Chloroethane	µg/L	ND(13)
Chloroform (Trichloromethane)	µg/L	ND(13)UJ
Chloromethane (Methyl Chloride)	µg/L	ND(13)
cis-1,2-Dichloroethene	µg/L	ND(13)UJ
cis-1,3-Dichloropropene	µg/L	ND(13)UJ
Dibromochloromethane	µg/L	ND(13)UJ
Ethylbenzene	µg/L	ND(2.5)UJ
Methylene chloride	µg/L	ND(13)UJ
Styrene	µg/L	ND(13)UJ
Tetrachloroethene	µg/L	ND(13)
Toluene	µg/L	ND(2.5)UJ
trans-1,2-Dichloroethene	µg/L	ND(13)
trans-1,3-Dichloropropene	µg/L	ND(13)UJ
Trichloroethene	µg/L	ND(13)UJ
Vinyl chloride	µg/L	ND(13)
Xylene (total)	µg/L	ND(5.0)UJ
Wet		
Total Solids	%	41.6

Notes:
µg/L - micrograms per Liter
ND ( ) - Not present at or above the associated value
J - Estimated concentration
UJ - Estimated reporting limit
R - Rejected

TABLE B.5

ANALYTICAL DATA SUMMARY
TRIP BLANK
NOVEMBER 2008 GROUNDWATER MONITORING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Sample Location		***Trip Blank***
Sample ID		***TB-6029-110408***
Sample Date		***11/4/2008***
Sample Type		
	Units	
Semi-Volatile Organic Compounds		
bis(2-Ethylhexyl)phthalate	µg/L	--
Volatile Organic Compounds		
1,1,1-Trichloroethane	µg/L	ND(1.0)
1,1-Dichloroethane	µg/L	ND(1.0)
1,2-Dichloroethane	µg/L	ND(1.0)
1,2-Dichloroethene (total)	µg/L	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND(5.0)
Acetone	µg/L	ND(5.0)
Benzene	µg/L	ND(1.0)
Chloromethane (Methyl Chloride)	µg/L	ND(1.0)
cis-1,2-Dichloroethene	µg/L	ND(1.0)
Ethylbenzene	µg/L	ND(1.0)
Toluene	µg/L	ND(1.0)
trans-1,2-Dichloroethene	µg/L	ND(1.0)
Trichloroethene	µg/L	ND(1.0)
Vinyl chloride	µg/L	ND(1.0)
Xylene (total)	µg/L	ND(1.0)

Notes:
µg/L - micrograms per Liter
ND ( ) - Not present at or above the associated value

ATTACHMENT C

DATA QUALITY ASSESSMENT

CONESTOGA-ROVERS & ASSOCIATES

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631
Telephone: (773) 380-9933 Fax: (773) 380-6421
www.CRAworld.com

MEMORANDUM

TO: Steve Whillier

REF. NO.: 006029-50

FROM: Nancy Bergstrom/ko/34 S. Day for

DATE: January 7, 2009

C.C.: Steve Day
Eric Mannlein

RE: Data Quality Assessment and Validation
November 2008 Sampling Event
Summit National Superfund Site
Deerfield Township, Portage County, Ohio

The following summarizes the results of the data quality assessment and validation conducted for the samples collected on November 4, 2008 from the Summit National Superfund Site in Deerfield Township, Portage County, Ohio (Site). The samples identified in Table 1 were selectively analyzed for Site-specific indicator parameter list (SSIPL) and target compound list (TCL) volatile organic compounds (VOCs), SSIPL and TCL semivolatile organic compounds (SVOCs), TCL pesticides, and TCL polychlorinated biphenyls (PCBs) by Accutest Laboratories, Inc. of Dayton, New Jersey. The methods of analysis are presented in Table 2. The data quality evaluation criteria were established by the Site-specific quality assurance project plan (QAPP).[1]

Sample Receipt and Holding Time Periods

All samples were received by the laboratory intact, properly preserved, within the proper temperature range, and with the required chain-of-custody documentation. All samples were prepared and analyzed within the holding time periods specified in the QAPP.

Method Blank Sample Data

Method blank sample data were evaluated to verify that analytes detected in investigative samples were not attributable to laboratory conditions or procedures. Methylene chloride was detected in one VOC method blank sample, but not in the associated investigative sample. Data qualification is not required in this instance. Target analytes were not detected in the remaining method blank samples.

[1]Application of data quality evaluation criteria was consistent with the relevant criteria in "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999 and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA-540/R-94-013, February 1994.

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Surrogate Compounds Data

Method performance on individual samples was evaluated by the percent recovery data from surrogate compounds spiked into each sample prior to preparation and analysis. The surrogate compound percent recovery acceptance criteria were met for all samples.

Blank Spike Sample Analyses

Analytical accuracy was evaluated by the percent recovery data from blank spike sample analyses. The blank spike percent recovery data were acceptable for all analytes.

Matrix Spike/Matrix Spike Duplicate Sample Analyses

Accuracy and precision relative to the sample matrices were evaluated by percent recovery and relative percent difference (RPD) data from matrix spike/matrix spike duplicate (MS/MSD) sample analyses. The percent recovery data reported for several VOCs and one pesticide associated with MS/MSD sample SED-6029-110408-01 violated the acceptance the criteria. The qualified sample data are presented in Table 3. The remaining percent recovery and RPD data were acceptable for all project-related MS/MSD samples.

Sample Quantitation

Results reported at concentrations greater than their respective method detection limits but less than their respective reporting limits were flagged by the laboratory with the "J" qualifier. Results flagged as such are estimated concentrations, and the data validation "J" qualifier was applied to these results during the data validation process.

Field Quality Assurance/Quality Control

Field quality assurance measures included the analysis of equipment rinsate blank, field duplicate, and trip blank samples.

The effectiveness of field decontamination and cleanliness of field sampling equipment were evaluated by the data from the analysis of two equipment rinsate blank samples. Target analytes were not detected in the equipment rinsate blank samples, indicating the decontamination procedure was effective.

Overall precision of the sampling and analysis event was evaluated by the data from the analyses of field duplicate samples that were submitted blindly to the laboratory. Table 4 summarizes the results of, and RPDs calculated for, analytes detected in the investigative and field duplicate samples. The RPD data indicate overall precision was acceptable.

A trip blank sample was included in the shipping cooler containing investigative groundwater samples for VOC analysis to monitor for sample cross-contamination by VOCs during sample shipping and storage. VOCs were not detected in the trip blank sample.

Completeness

The objective for completeness, which is defined in the QAPP as the total number of usable sample results versus the total possible number of sample results, was required to be at least 95%. With the exception of

one pesticide result, all investigative sample results for the monitoring event were usable. Completeness was calculated to be 99.7%, which meets the completeness objective for the monitoring event.

Overall Assessment

Violation of MS/MSD percent recovery acceptance criteria resulted in the data for one pesticide being rejected. All remaining data were determined to be suitable for their intended purpose with the qualifications presented herein.

TABLE 1

SAMPLE IDENTIFICATION SUMMARY
NOVEMBER 2008 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Sample ID	*Location*
WG-6029-110408-001	MW-115
WG-6029-110408-002	MW-114
WG-6029-110408-003	MW-220
WG-6029-110408-004	MW-4
WG-6029-110408-005	MW-209
WG-6029-110408-006	MW-111
WG-6029-110408-007	MW-11
WG-6029-110408-008	MW-113
WG-6029-110408-009	MW-224
WG-6029-110408-010	MW-207
WG-6029-110408-011	MW-207
WG-6029-110408-012	MW-107
WG-6029-110408-013	MW-108
WG-6029-110408-014	MW-108
SED-6029-110408-01	Sediment S&E Ditches
RB-6029-110408-01	Rinse Blank
RB-6029-110408-02	Rinse Blank
TB-6029-110408-	Trip Blank

TABLE 2

SUMMARY OF ANALYTICAL METHODS
NOVEMBER 2008 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Parameter	*Analytical Method* [1]
Volatile Organic Compounds (VOCs)	SW-846 8260B
Semivolatile Organic Compounds (SVOCs)	SW-846 8270C
Pesticides	SW-846 8081A
Polychlorinated biphenyls (PCBs)	SW-846 8082

[1] Method reference:
SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA SW-846, 3rd Edition with Updates I through IIIB.

TABLE 3

SUMMARY OF SAMPLE DATA QUALIFIED FOR VIOLATION OF MATRIX SPIKE/MATRIX SPIKE DUPLICATE ACCEPTANCE CRITERIA NOVEMBER 2008 SAMPLING EVENT SUMMIT NATIONAL SUPERFUND SITE DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Sample ID	*Analyte*	*Qualifier* [1]
SED-6029-110408-01	Endrin aldehyde	R
	Ethylbenzene	UJ
	Styrene	UJ
	cis-1,3-Dichloropropene	UJ
	trans-1,3-Dichloropropene	UJ
	1,2-Dichloroethane	UJ
	4-Methyl-2-Pentanone	UJ
	Toluene	UJ
	Chlorobenzene	UJ
	Dibromochloromethane	UJ
	Xylenes (total)	UJ
	cis-1,2-Dichloroethene	UJ
	1,2-Dichloroethene (total)	UJ
	2-Hexanone	UJ
	Chloroform	UJ
	Benzene	UJ
	Methylene chloride	UJ
	Bromoform	UJ
	Bromodichloromethane	UJ
	1,1-Dichloroethane	UJ
	1,2-Dichloropropane	UJ
	2-Butanone	UJ
	1,1,2-Trichloroethane	UJ
	Trichloroethene	UJ
	1,1,2,2-Tetrachloroethane	UJ

[1] The sample results are qualified as:
R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 4

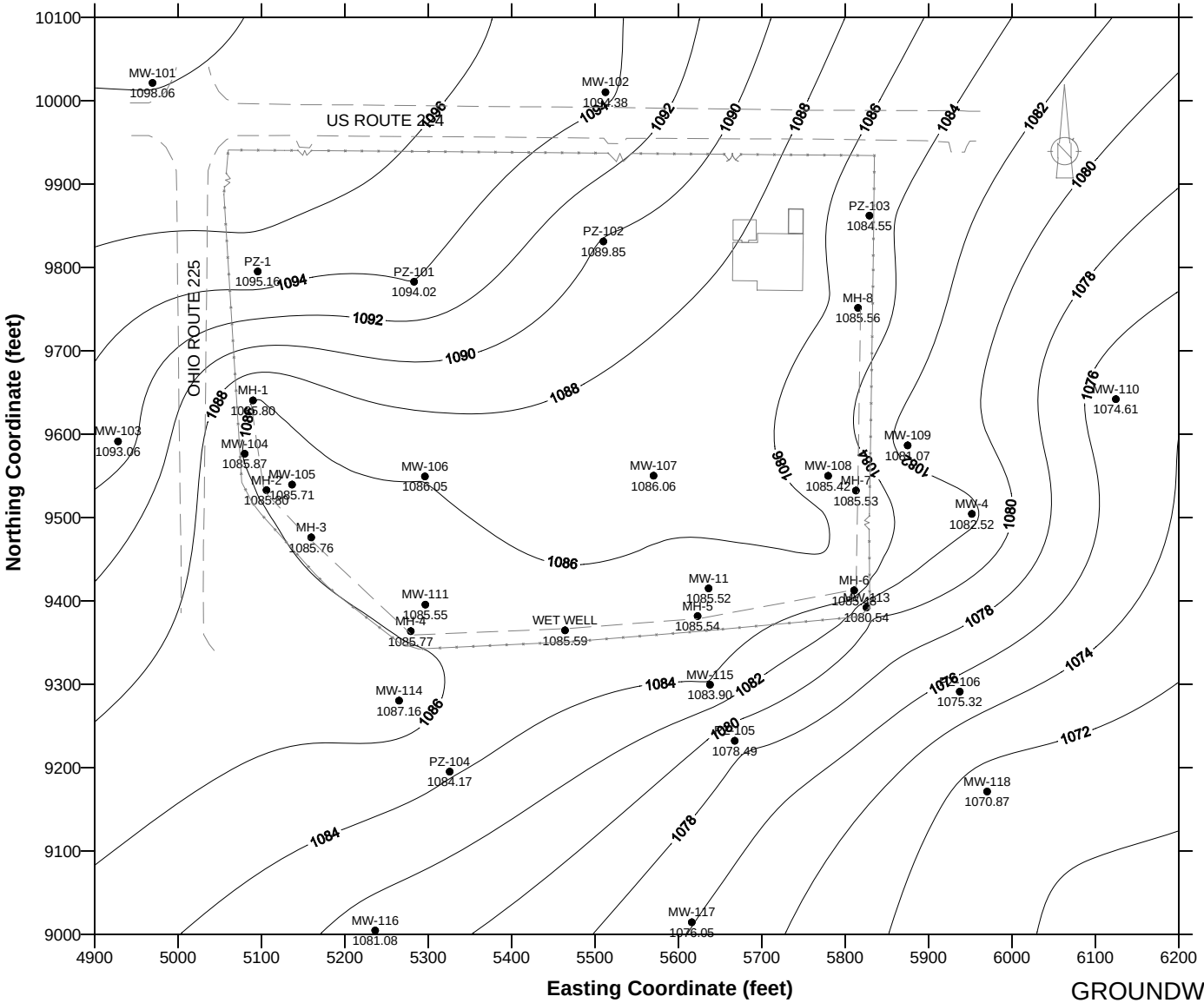
SUMMARY OF DETECTED ANALYTES
FIELD DUPLICATE SAMPLES
NOVEMBER 2008 SAMPLING EVENT
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP, PORTAGE COUNTY, OHIO

Analyte	*Investigative Sample WG-6029-041508-005*	*Duplicate Sample WG-6029-041508-006*	*RPD* [1]
Benzene	45.7	45.7	0
1,1-Dichloroethane	165	164	0.6
1,2-Dichloroethane	89.1	90.2	1.2
cis-1,2-Dichloroethene	95.9	94.9	1.0
trans-1,2-Dichloroethene	3.2	3.3	3.1
1,2-Dichloroethene (total)	99.1	98.2	0.9
Toluene	0.36 J[2]	0.37 J	2.7
1,1,1-Trichloroethane	5.7	5.7	0
Trichloroethene	21.2	21.3	0.5
Vinyl chloride	41.5	41.4	0.2

[1] RPD - Relative Percent Difference
[2] J - Estimated concentration

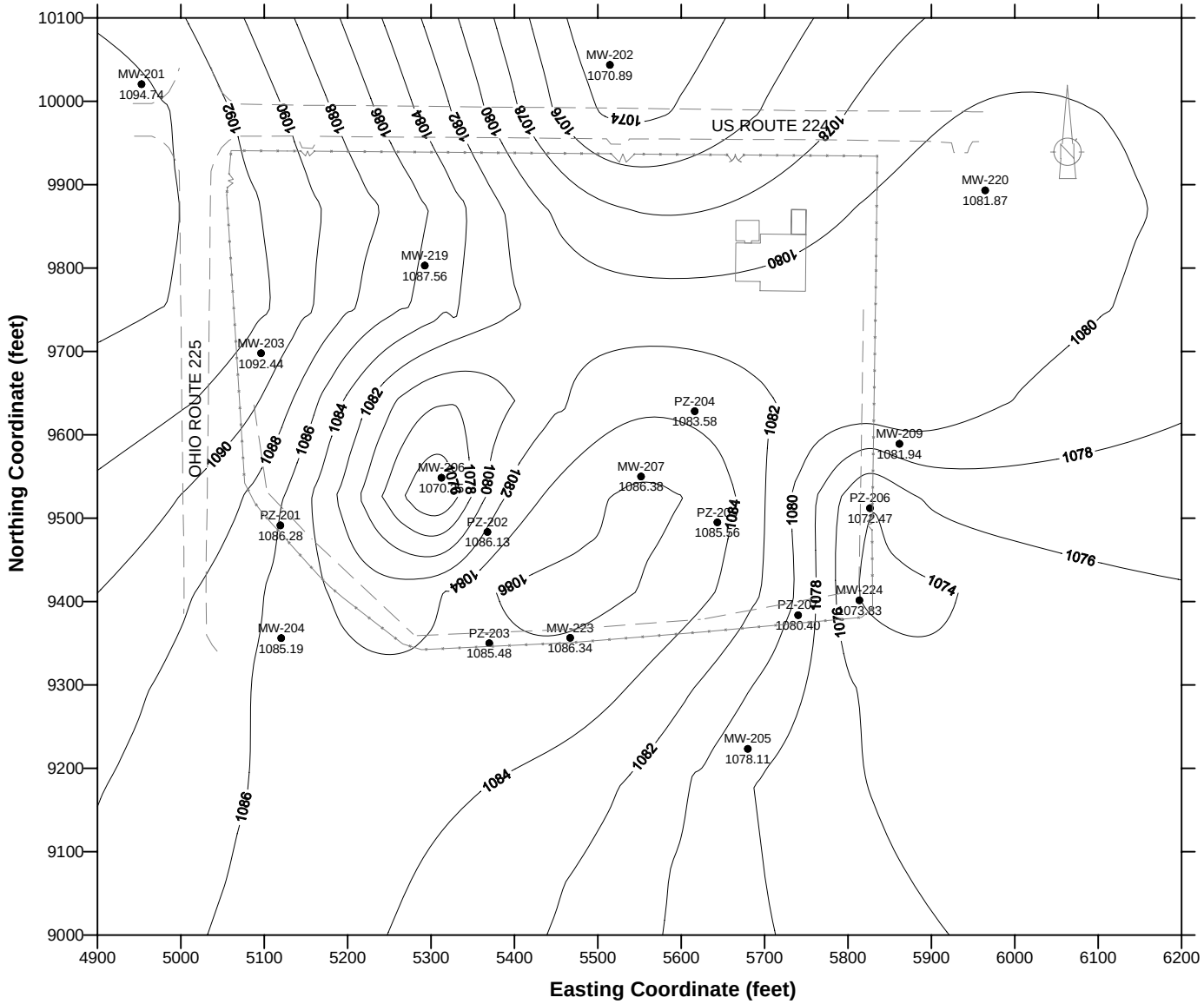
ATTACHMENT D

GROUNDWATER CONTOURS



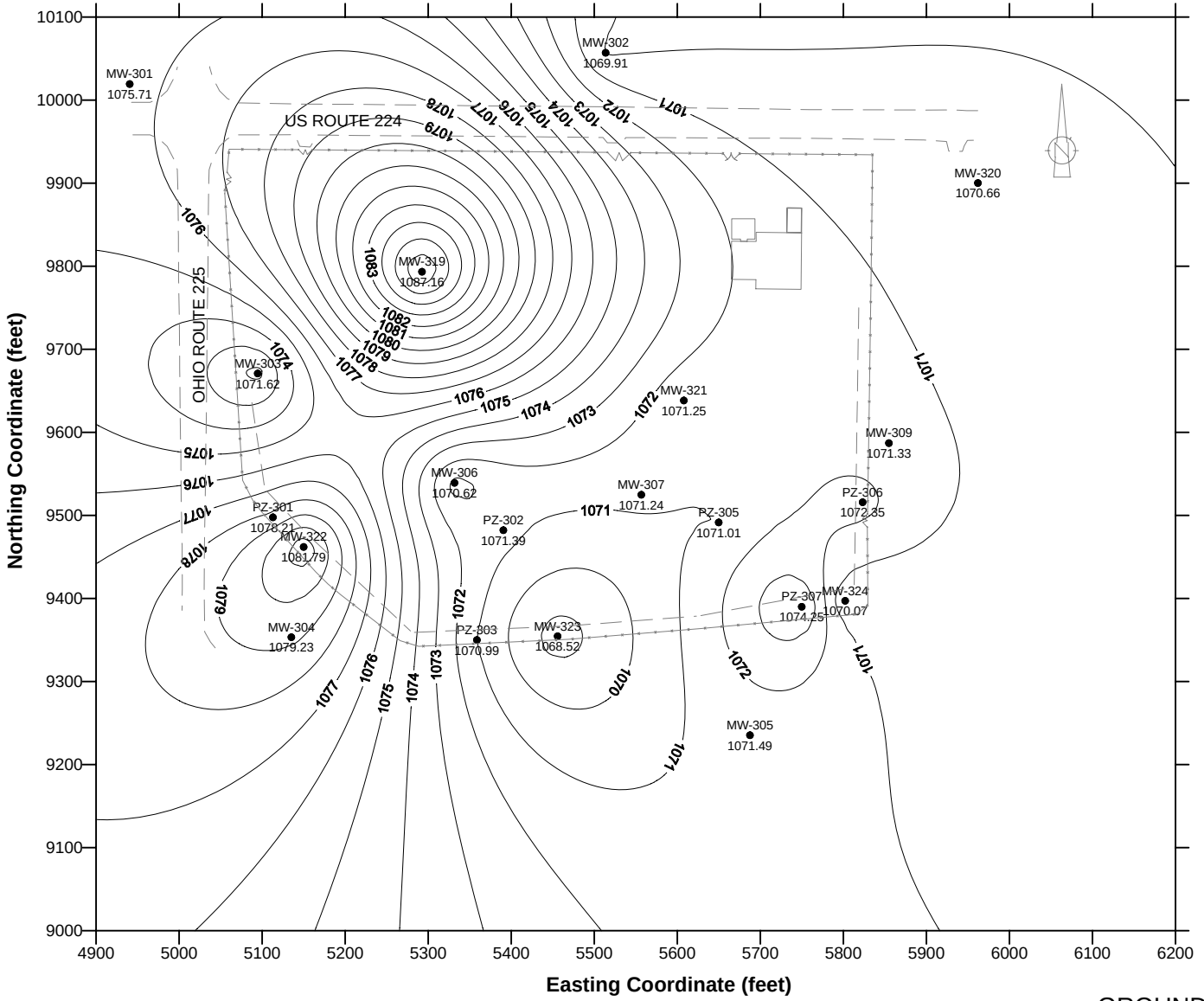
GROUNDWATER CONTOURS
WATER TABLE UNIT -- NOVEMBER 4, 2008
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) NOVEMBER 4, 2008 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\wtu\WATER TABLE UNIT 2008-11-04.srf)



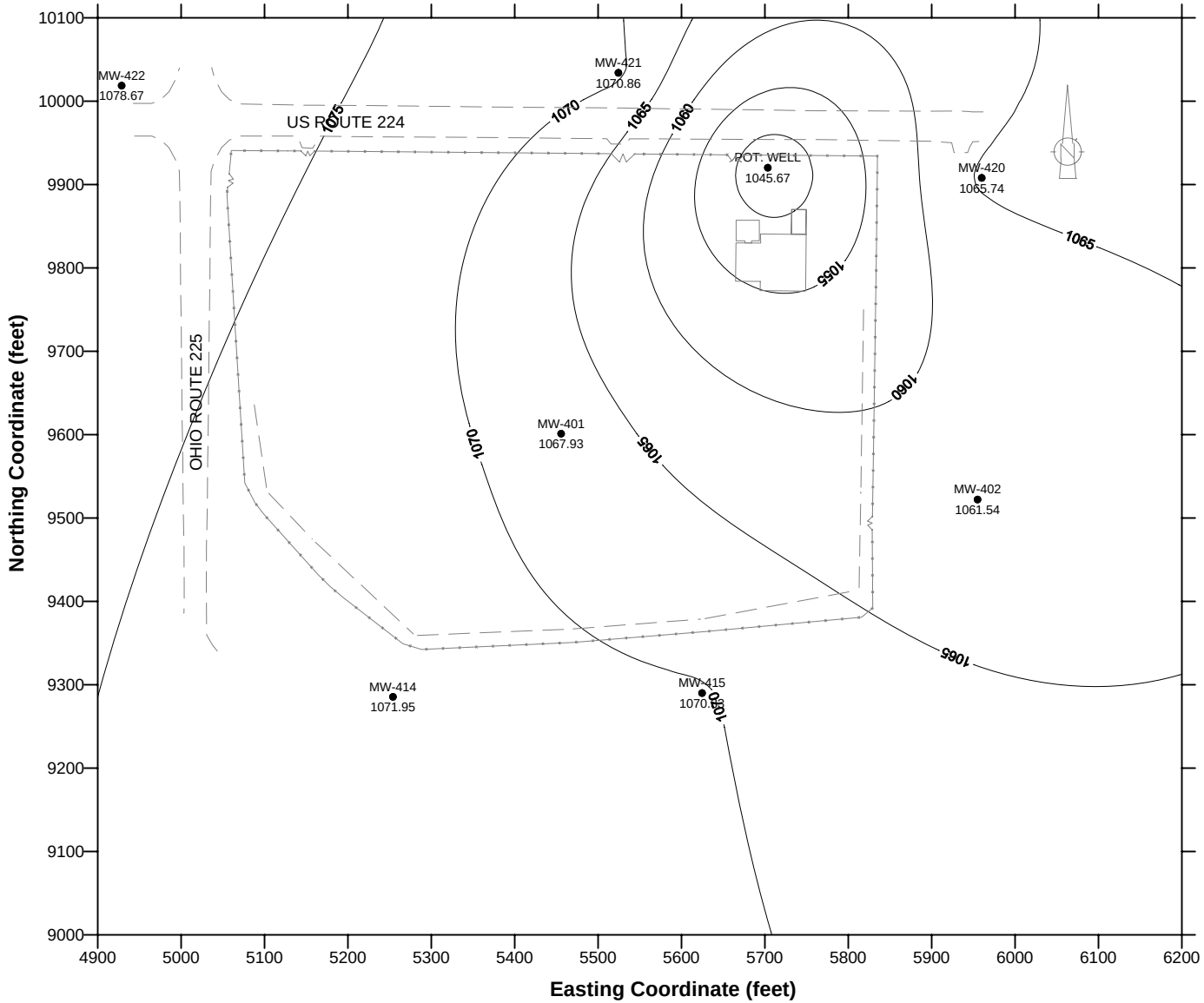
GROUNDWATER CONTOURS
UPPER INTERMEDIATE UNIT -- NOVEMBER 4, 2008
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) NOVEMBER 4, 2008 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\uiu\UPPER INTERMEDIATE UNIT - 2008-11-04.srf)



GROUNDWATER CONTOURS
LOWER INTERMEDIATE UNIT -- NOVEMBER 4, 2008
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) NOVEMBER 4, 2008 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\liu\LOWER INTERMEDIATE UNIT - 2008-11-04.srf)



GROUNDWATER CONTOURS
UPPER SHARON UNIT -- NOVEMBER 4, 2008
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

6029 (WILL059) NOVEMBER 4, 2008 (PHX) REV.0 (i:\pho\6029\6029-50\surfer\contours\usu\UPPER SHARRON UNIT - 2008-11-04.srf)

TABLE D.1

GROUNDWATER LEVEL DATA SUMMARY
AUGUST 2005 TO NOVEMBER 2008
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Well	*Reference Elevation*	*Depth To Water 22-Aug-05*	*Calculated Groundwater Elevation 22-Aug-05*	*Depth To Water 27-Sep-05*	*Calculated Groundwater Elevation 27-Sep-05*	*Depth To Water 27-Oct-05*	*Calculated Groundwater Elevation 27-Oct-05*	*Depth To Water 28-Nov-05*	*Calculated Groundwater Elevation 28-Nov-05*	*Depth To Water 20-Feb-06*	*Calculated Groundwater Elevation 20-Feb-06*	*Depth To Water 30-May-06*	*Calculated Groundwater Elevation 30-May-06*	*Depth To Water 14-Aug-06*	*Calculated Groundwater Elevation 14-Aug-06*	*Depth To Water 20-Dec-06*	*Calculated Groundwater Elevation 20-Dec-06*	*Depth To Water 25-May-07*	*Calculated Groundwater Elevation 25-May-07*	*Depth To Water 12-Nov-07*	*Calculated Groundwater Elevation 12-Nov-07*	*Depth To Water 15-Apr-08*	*Calculated Groundwater Elevation 15-Apr-08*	*Depth To Water 4-Nov-08*	*Calculated Groundwater Elevation 4-Nov-08*
Water Table Unit Wells																									
MW-4	1,091.09	8.66	1082.43	8.48	1082.61	7.55	1083.54	6.94	1084.15	6.24	1084.85	6.62	1084.47	7.55	1083.54	6.55	1084.54	7.36	1083.73	8.47	1082.62	6.31	1084.78	8.57	1082.52
MW-11	1,095.93	12.72	1083.21	10.44	1085.49	9.33	1086.60	9.92	1086.01	9.49	1086.44	9.57	1086.36	10.1	1085.83	9.43	1086.50	9.87	1086.06	10.29	1085.64	9.08	1086.85	10.41	1085.52
MW-101	1,107.57	8.97	1098.60	4.07	1103.50	8.55	1099.02	8.51	1099.06	7.75	1099.82	7.85	1099.72	8.61	1098.96	7.81	1099.76	8.51	1099.06	9.04	1098.53	7.43	1100.14	9.51	1098.06
MW-102	1,100.17	5.52	1094.65	5.61	1094.56	5.13	1095.04	4.72	1095.45	4.04	1096.13	4.04	1096.13	4.58	1095.59	4.02	1096.15	4.71	1095.46	5.36	1094.81	3.70	1096.47	5.79	1094.38
MW-103	1,096.22	3.57	1092.65	2.90	1093.32	2.11	1094.11	2.35	1093.87	2.31	1093.91	2.52	1093.70	3.38	1092.84	2.40	1093.82	2.89	1093.33	2.94	1093.28	2.00	1094.22	3.16	1093.06
MW-104	1,099.81	16.10	1083.71	13.94	1085.87	16.48	1083.33	13.38	1086.43	12.82	1086.99	12.91	1086.90	13.51	1086.30	12.44	1087.37	13.23	1086.58	13.69	1086.12	12.21	1087.60	13.94	1085.87
MW-105	1,101.32	17.68	1083.64	15.62	1085.70	14.47	1086.85	14.98	1086.34	14.40	1086.92	14.30	1087.02	15.08	1086.24	14.29	1087.03	14.89	1086.43	15.34	1085.98	13.92	1087.40	15.61	1085.71
MW-106	1,102.88	18.45	1084.43	17.17	1085.71	15.97	1086.91	16.04	1086.84	15.28	1087.60	15.37	1087.51	16.06	1086.82	15.36	1087.52	15.91	1086.97	16.51	1086.37	14.81	1088.07	16.83	1086.05
MW-107	1,098.27	12.86	1085.41	12.40	1085.87	11.27	1087.00	10.94	1087.33	9.96	1088.31	10.06	1088.21	10.64	1087.63	9.98	1088.29	10.91	1087.36	11.63	1086.64	9.64	1088.63	12.21	1086.06
MW-108	1,091.96	8.78	1083.18	8.66	1083.30	5.50	1086.46	5.98	1085.98	5.90	1086.06	5.85	1086.11	6.23	1085.73	5.83	1086.13	6.30	1085.66	6.42	1085.54	5.48	1086.48	6.54	1085.42
MW-109	1,087.42	5.14	1082.28	5.20	1082.22	4.18	1083.24	3.92	1083.50	3.24	1084.18	3.54	1083.88	4.42	1083.00	3.54	1083.88	4.34	1083.08	5.69	1081.73	3.09	1084.33	6.35	1081.07
MW-110	1,086.87	11.22	1075.65	11.74	1075.13	11.44	1075.43	10.75	1076.12	6.68	1080.19	7.13	1079.74	10.28	1076.59	7.03	1079.84	8.37	1078.50	11.51	1075.36	5.66	1081.21	12.26	1074.61
MW-111	1,099.67	16.41	1083.26	14.21	1085.46	13.08	1086.59	13.57	1086.10	13.10	1086.57	13.18	1086.49	13.75	1085.92	13.16	1086.51	13.52	1086.15	13.91	1085.76	12.72	1086.95	14.12	1085.55
MW-113	1,088.46	8.00	1080.46	7.26	1081.20	5.17	1083.29	6.61	1081.85	5.42	1083.04	5.88	1082.58	7.22	1081.24	5.53	1082.93	6.39	1082.07	7.66	1080.80	4.02	1084.44	7.92	1080.54
MW-114	1,097.27	10.76	1086.51	9.76	1087.51	8.84	1088.43	9.24	1088.03	8.93	1088.34	8.84	1088.43	9.94	1087.33	8.82	1088.45	9.39	1087.88	9.63	1087.64	8.28	1088.99	10.11	1087.16
MW-115	1,101.83	18.84	1082.99	17.90	1083.93	17.25	1084.58	17.55	1084.28	17.16	1084.67	17.20	1084.63	17.70	1084.13	17.12	1084.71	17.36	1084.47	17.80	1084.03	16.60	1085.23	17.93	1083.90
MW-116	1,105.54	23.91	1081.63	24.14	1081.40	24.26	1081.28	23.58	1081.96	23.13	1082.41	23.02	1082.52	22.96	1082.58	22.98	1082.56	23.26	1082.28	23.88	1081.66	21.92	1083.62	24.46	1081.08
MW-117	1,123.97	48.36	1075.61	47.53	1076.44	42.44	1081.53	44.25	1079.72	41.95	1082.02	42.74	1081.23	45.32	1078.65	41.81	1082.16	42.94	1081.03	46.16	1077.81	40.29	1083.68	47.92	1076.05
MW-118	1,098.38	25.61	1072.77	26.33	1072.05	24.92	1073.46	25.05	1073.33	23.96	1074.42	23.47	1074.91	25.06	1073.32	23.44	1074.94	24.11	1074.27	26.21	1072.17	23.13	1075.25	27.51	1070.87
PZ-1	1,104.43	9.00	1095.43	9.11	1095.32	8.63	1095.80	8.28	1096.15	7.52	1096.91	7.63	1096.80	8.09	1096.34	7.60	1096.83	8.32	1096.11	8.88	1095.55	6.91	1097.52	9.27	1095.16
PZ-101	1,108.53	14.46	1094.07	14.52	1094.01	14.01	1094.52	13.62	1094.91	12.74	1095.79	12.85	1095.68	13.37	1095.16	12.77	1095.76	13.46	1095.07	14.13	1094.40	12.35	1096.18	14.51	1094.02
PZ-102	1,100.21	10.27	1089.94	12.33	1087.88	9.62	1090.59	9.18	1091.03	8.35	1091.86	8.27	1091.94	8.83	1091.38	8.29	1091.92	9.02	1091.19	9.92	1090.29	7.92	1092.29	10.36	1089.85
PZ-103	1,093.98	7.88	1086.10	8.13	1085.85	7.29	1086.69	6.62	1087.36	6.00	1087.98	6.40	1087.58	7.14	1086.84	6.34	1087.64	7.16	1086.82	8.75	1085.23	6.35	1087.63	9.43	1084.55
PZ-104	1,097.54	13.00	1084.54	12.93	1084.61	11.10	1086.44	11.50	1086.04	10.57	1086.97	10.55	1086.99	11.81	1085.73	10.43	1087.11	11.62	1085.92	12.43	1085.11	10.03	1087.51	13.37	1084.17
PZ-105	1,101.60	21.68	1079.92	22.11	1079.49	19.87	1081.73	20.26	1081.34	18.51	1083.09	18.88	1082.72	20.91	1080.69	18.90	1082.70	19.38	1082.22	21.65	1079.95	17.22	1084.38	23.11	1078.49
PZ-106	1,102.23	25.65	1076.58	26.88	1075.35	26.25	1075.98	25.03	1077.20	23.01	1079.22	22.78	1079.45	23.86	1078.37	22.69	1079.54	23.04	1079.19	25.41	1076.82	21.48	1080.75	26.91	1075.32
Upper Intermediate Unit Wells																									
MW-201	1,107.52	12.71	1094.81	12.98	1094.54	12.53	1094.99	12.38	1095.14	11.81	1095.71	12.22	1095.30	12.54	1094.98	12.17	1095.35	12.64	1094.88	12.52	1095.00	10.72	1096.80	12.78	1094.74
MW-202	1,099.50	27.64	1071.86	27.73	1071.77	27.39	1072.11	28.49	1071.01	26.07	1073.43	25.22	1074.28	28.10	1071.40	25.19	1074.31	27.50	1072.00	26.91	1072.59	23.00	1076.50	28.61	1070.89
MW-203	1,103.35	10.76	1092.59	10.85	1092.50	10.23	1093.12	10.32	1093.03	9.59	1093.76	9.72	1093.63	10.22	1093.13	9.66	1093.69	10.79	1092.56	10.68	1092.67	8.73	1094.62	10.91	1092.44
MW-204	1,098.01	12.33	1085.68	11.90	1086.11	12.00	1086.01	11.94	1086.07	10.70	1087.31	11.01	1087.00	11.71	1086.30	10.94	1087.07	12.19	1085.82	12.12	1085.89	9.45	1088.56	12.82	1085.19
MW-205	1,100.90	21.22	1079.68	21.67	1079.23	19.42	1081.48	19.77	1081.13	18.08	1082.82	18.35	1082.55	20.42	1080.48	18.03	1082.87	18.84	1082.06	21.22	1079.68	16.68	1084.22	22.79	1078.11
MW-206	1,103.22	32.33	1070.89	30.60	1072.62	31.52	1071.70	30.66	1072.56	28.52	1074.70	28.72	1074.50	35.22	1068.00	28.68	1074.54	31.71	1071.51	31.09	1072.13	25.32	1077.90	32.97	1070.25
MW-207	1,098.51	13.12	1085.39	12.43	1086.08	11.38	1087.13	11.19	1087.32	10.33	1088.18	10.35	1088.16	10.92	1087.59	10.31	1088.20	11.09	1087.42	11.74	1086.77	9.86	1088.65	12.13	1086.38
MW-209	1,087.66	6.16	1081.50	8.85	1078.81	5.65	1082.01	5.78	1081.88	4.50	1083.16	5.36	1082.30	5.59	1082.07	5.12	1082.54	6.73	1080.93	5.40	1082.26	4.25	1083.41	5.72	1081.94
MW-219	1,108.24	21.60	1086.64	19.84	1088.40	19.83	1088.41	20.44	1087.80	19.34	1088.90	19.10	1089.14	20.58	1087.66	19.08	1089.16	21.62	1086.62	20.31	1087.93	18.23	1090.01	20.68	1087.56
MW-220	1,090.92	8.73	1082.19	8.38	1082.54	7.96	1082.96	7.88	1083.04	7.19	1083.73	7.83	1083.09	8.16	1082.76	7.44	1083.48	8.04	1082.88	8.54	1082.38	7.51	1083.41	9.05	1081.87
MW-223	1,098.37	15.16	1083.21	12.72	1085.65	11.45	1086.92	12.29	1086.08	11.55	1086.82	12.07	1086.30	12.21	1086.16	11.99	1086.38	11.46	1086.91	11.82	1086.55	10.68	1087.69	12.03	1086.34
MW-224	1,089.41	14.30	1075.11	14.78	1074.63	12.93	1076.48	13.48	1075.93	11.46	1077.95	12.14	1077.27	13.42	1075.99	12.02	1077.39	13.07	1076.34	14.30	1075.11	10.34	1079.07	15.58	1073.83
PZ-201	1,099.74	15.17	1084.57	15.76	1083.98	12.57	1087.17	12.83	1086.91	12.20	1087.54	12.28	1087.46	12.94	1086.80	12.31	1087.43	12.76	1086.98	13.18	1086.56	11.70	1088.04	13.46	1086.28
PZ-202	1,101.56	16.76	1084.80	15.80	1085.76	14.62	1086.94	14.57	1086.99	13.70	1087.86	13.78	1087.78	14.42	1087.14	13.71	1087.85	14.44	1087.12	15.05	1086.51	13.27	1088.29	15.43	1086.13
PZ-203	1,098.31	14.92	1083.39	12.88	1085.43	11.26	1087.05	12.24	1086.07	11.74	1086.57	11.92	1086.39	12.46	1085.85	11.92	1086.39	12.13	1086.18	12.56	1085.75	11.27	1087.04	12.83	1085.48
PZ-204	1,095.41	12.82	1082.59	11.79	1083.62	11.28	1084.13	11.30	1084.11	9.90	1085.51	9.83	1085.58	10.81	1084.60	9.77	1085.64	11.57	1083.84	11.31	1084.10	9.00	1086.41	11.83	1083.58
PZ-205	1,096.63	13.00	1083.63	11.40	1085.23	9.87	1086.76	10.33	1086.30	9.97	1086.66	10.58	1086.05	10.60	1086.03	10.28	1086.35	10.57	1086.06	10.91	1085.72	9.64	1086.99	11.07	1085.56
PZ-206	1,088.05	14.16	1073.89	14.83	1073.22	12.95	1075.10	13.41	1074.64	11.44	1076.61	12.04	1076.01	13.40	1074.65	11.93	1076.12	13.10	1074.95	14.37	1073.68	10.33	1077.72	15.58	1072.47
PZ-207	1,091.36	11.17	1080.19	10.63	1080.73	8.44	1082.92	9.76	1081.60	8.36	1083.00	8.85	1082.51	10.44	1080.92	8.44	1082.92	9.02	1082.34	10.50	1080.86	6.97	1084.39	10.96	1080.40

TABLE D.1

GROUNDWATER LEVEL DATA SUMMARY
AUGUST 2005 TO NOVEMBER 2008
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD, OHIO

Well	*Reference Elevation*	*Depth To Water 22-Aug-05*	*Calculated Groundwater Elevation 22-Aug-05*	*Depth To Water 27-Sep-05*	*Calculated Groundwater Elevation 27-Sep-05*	*Depth To Water 27-Oct-05*	*Calculated Groundwater Elevation 27-Oct-05*	*Depth To Water 28-Nov-05*	*Calculated Groundwater Elevation 28-Nov-05*	*Depth To Water 20-Feb-06*	*Calculated Groundwater Elevation 20-Feb-06*	*Depth To Water 30-May-06*	*Calculated Groundwater Elevation 30-May-06*	*Depth To Water 14-Aug-06*	*Calculated Groundwater Elevation 14-Aug-06*	*Depth To Water 20-Dec-06*	*Calculated Groundwater Elevation 20-Dec-06*	*Depth To Water 25-May-07*	*Calculated Groundwater Elevation 25-May-07*	*Depth To Water 12-Nov-07*	*Calculated Groundwater Elevation 12-Nov-07*	*Depth To Water 15-Apr-08*	*Calculated Groundwater Elevation 15-Apr-08*	*Depth To Water 4-Nov-08*	*Calculated Groundwater Elevation 4-Nov-08*
Lower Intermediate Unit Wells																									
MW-301	1,107.91	31.50	1076.41	19.76	1088.15	30.77	1077.14	32.22	1075.69	29.60	1078.31	29.68	1078.23	31.57	1076.34	29.60	1078.31	31.06	1076.85	30.78	1077.13	27.25	1080.66	32.20	1075.71
MW-302	1,100.39	29.57	1070.82	24.02	1076.37	28.72	1071.67	28.96	1071.43	26.92	1073.47	26.37	1074.02	29.20	1071.19	26.35	1074.04	29.12	1071.27	28.27	1072.12	24.17	1076.22	30.48	1069.91
MW-303	1,103.15	29.72	1073.43	30.02	1073.13	29.52	1073.63	29.68	1073.47	27.83	1075.32	27.20	1075.95	29.46	1073.69	27.60	1075.55	30.03	1073.12	29.05	1074.10	24.94	1078.21	31.53	1071.62
MW-304	1,097.73	17.45	1080.28	17.01	1080.72	16.98	1080.75	16.92	1080.81	15.52	1082.21	15.77	1081.96	16.77	1080.96	15.58	1082.15	17.93	1079.80	17.32	1080.41	13.39	1084.34	18.50	1079.23
MW-305	1,101.22	31.05	1070.17	23.83	1077.39	31.38	1069.84	31.58	1069.64	26.76	1074.46	29.77	1071.45	28.73	1072.49	29.70	1071.52	28.12	1073.10	28.06	1073.16	27.32	1073.90	29.73	1071.49
MW-306	1,103.14	30.93	1072.21	33.70	1069.44	31.52	1071.62	31.40	1071.74	33.43	1069.71	31.64	1071.50	30.03	1073.11	31.61	1071.53	31.51	1071.63	30.46	1072.68	26.08	1077.06	32.52	1070.62
MW-307	1,098.83	26.31	1072.52	26.48	1072.35	27.88	1070.95	28.00	1070.83	24.37	1074.46	25.23	1073.60	26.08	1072.75	25.06	1073.77	26.28	1072.55	25.62	1073.21	21.71	1077.12	27.59	1071.24
MW-309	1,087.81	15.94	1071.87	15.48	1072.33	16.91	1070.90	17.20	1070.61	13.36	1074.45	14.62	1073.19	15.05	1072.76	14.22	1073.59	15.15	1072.66	14.61	1073.20	11.27	1076.54	16.48	1071.33
MW-319	1,108.07	22.40	1085.67	19.92	1088.15	20.61	1087.46	20.79	1087.28	19.77	1088.30	19.59	1088.48	20.50	1087.57	19.93	1088.14	22.09	1085.98	20.68	1087.39	18.43	1089.64	20.91	1087.16
MW-320	1,091.14	20.52	1070.62	20.09	1071.05	20.47	1070.67	20.27	1070.87	19.49	1071.65	19.63	1071.51	19.80	1071.34	19.60	1071.54	20.69	1070.45	20.48	1070.66	18.38	1072.76	20.48	1070.66
MW-321	1,095.32	22.58	1072.74	22.95	1072.37	23.42	1071.90	23.71	1071.61	21.30	1074.02	20.96	1074.36	22.48	1072.84	20.93	1074.39	22.75	1072.57	22.00	1073.32	17.94	1077.38	24.07	1071.25
MW-322	1,098.88	20.45	1078.43	16.43	1082.45	15.32	1083.56	17.20	1081.68	15.78	1083.10	16.04	1082.84	16.20	1082.68	15.97	1082.91	16.61	1082.27	16.22	1082.66	12.58	1086.30	17.09	1081.79
MW-323	1,097.51	27.06	1070.45	26.25	1071.26	26.98	1070.53	25.88	1071.63	24.47	1073.04	24.08	1073.43	25.70	1071.81	23.97	1073.54	27.42	1070.09	26.25	1071.26	20.77	1076.74	28.99	1068.52
MW-324	1,089.39	18.18	1071.21	17.60	1071.79	17.72	1071.67	17.15	1072.24	16.07	1073.32	16.35	1073.04	17.17	1072.22	16.29	1073.10	18.03	1071.36	18.21	1071.18	14.79	1074.60	19.32	1070.07
PZ-301	1,100.07	20.81	1079.26	19.41	1080.66	19.84	1080.23	19.77	1080.30	18.51	1081.56	18.40	1081.67	19.91	1080.16	18.69	1081.38	21.12	1078.95	20.63	1079.44	16.59	1083.48	21.86	1078.21
PZ-302	1,101.25	28.48	1072.77	28.83	1072.42	30.80	1070.45	30.68	1070.57	26.64	1074.61	28.21	1073.04	28.32	1072.93	28.07	1073.18	28.51	1072.74	27.91	1073.34	24.00	1077.25	29.86	1071.39
PZ-303	1,098.39	26.46	1071.93	20.61	1077.78	26.62	1071.77	26.03	1072.36	23.81	1074.58	23.73	1074.66	25.53	1072.86	23.66	1074.73	25.88	1072.51	25.23	1073.16	21.03	1077.36	27.40	1070.99
PZ-305	1,096.49	24.00	1072.49	24.47	1072.02	24.58	1071.91	24.32	1072.17	22.06	1074.43	21.94	1074.55	23.75	1072.74	21.90	1074.59	24.22	1072.27	23.37	1073.12	19.28	1077.21	25.48	1071.01
PZ-306	1,088.35	16.32	1072.03	16.12	1072.23	16.26	1072.09	17.28	1071.07	14.58	1073.77	14.57	1073.78	14.93	1073.42	14.50	1073.85	17.07	1071.28	16.27	1072.08	12.91	1075.44	16.00	1072.35
PZ-307	1,091.40	17.47	1073.93	17.37	1074.03	17.58	1073.82	28.00	1063.40	14.89	1076.51	15.22	1076.18	15.62	1075.78	15.08	1076.32	18.28	1073.12	17.31	1074.09	12.40	1079.00	17.15	1074.25
Upper Sharon Unit Wells																									
MW-401	1,099.75	35.30	1064.45	34.59	1065.16	35.40	1064.35	34.59	1065.16	33.40	1066.35	33.38	1066.37	33.00	1066.75	33.32	1066.43	33.39	1066.36	32.72	1067.03	30.63	1069.12	31.82	1067.93
MW-402	1,089.90	31.88	1058.02	34.05	1055.85	33.61	1056.29	33.18	1056.72	31.70	1058.20	31.17	1058.73	30.32	1059.58	31.14	1058.76	29.22	1060.68	29.21	1060.69	28.32	1061.58	28.36	1061.54
MW-414	1,096.99	24.96	1072.03	24.46	1072.53	25.17	1071.82	24.82	1072.17	23.82	1073.17	24.15	1072.84	24.18	1072.81	24.11	1072.88	25.10	1071.89	24.76	1072.23	22.56	1074.43	25.04	1071.95
MW-415	1,102.25	31.17	1071.08	30.20	1072.05	31.84	1070.41	30.97	1071.28	28.07	1074.18	29.55	1072.70	29.46	1072.79	29.38	1072.87	30.83	1071.42	29.98	1072.27	26.64	1075.61	31.92	1070.33
MW-420	1,091.66	29.21	1062.45	29.15	1062.51	29.27	1062.39	28.96	1062.70	27.44	1064.22	26.74	1064.92	26.63	1065.03	26.88	1064.78	26.46	1065.20	26.36	1065.30	34.96	1056.70	25.92	1065.74
MW-421	1,099.93	29.11	1070.82	29.41	1070.52	29.05	1070.88	28.79	1071.14	28.00	1071.93	28.20	1071.73	28.36	1071.57	27.96	1071.97	29.25	1070.68	29.02	1070.91	27.01	1072.92	29.07	1070.86
MW-422	1,107.38	24.22	1083.16	24.19	1083.19	24.41	1082.97	24.74	1082.64	24.15	1083.23	25.63	1081.75	25.92	1081.46	25.27	1082.11	30.58	1076.80	28.53	1078.85	23.81	1083.57	28.71	1078.67
POT. WELL	1,099.34	62.26	1037.08	70.48	1028.86	68.24	1031.10	60.52	1038.82	60.46	1038.88	57.53	1041.81	57.04	1042.30	54.96	1044.38	54.48	1044.86	54.37	1044.97	54.77	1044.57	53.67	1045.67