September 19, 2008

Tax Parcel #2-065-022.

PREPARED BY AND RETURN TO: Manko, Gold, Katcher & Fox, LLP 401 City Ave., Suite 500 Bala Cynwyd, PA 19004 Attention: Jonathan H. Spergel, Esquire

GRANTOR: <u>Waterside Bensalem Development, Inc.</u> ("WBDI" or "Grantor") **PROPERTY ADDRESS:** <u>2375 State Street, Bensalem Township, Bucks County,</u> <u>Pennsylvania.</u>

ENVIRONMENTAL COVENANT

EC

2008 5

BCBOA.

Registry

MANT

11 9:43

This Environmental Covenant is executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501 - 6517("UECA"). This Environmental Covenant subjects the Property identified in Paragraph 1 to the activity and/or use limitations in this document. As indicated later in this document, this Environmental Covenant has been approved by the Pennsylvania Department of Environmental Protection ("Department").

1. **Property Affected.** The property affected ("Property") by this Environmental Covenant is located in Bensalem Township, Bucks County.

The postal street address of the Property is: 2375 State Road, Bensalem Township, Bucks County, Pennsylvania.

The County Parcel Identification No. of the Property is: TMP# 2-065-022. The latitude and longitude of the center of the Property affected by this Environmental Covenant is: 40.06942N and 74.941006W.

The Property has been known by the following name(s): Elf-Atochem, Atofina Cornwells Heights Plant, and "Parcel A".

A complete description of the Property is attached to this Environmental Covenant as Exhibit A. A map of the Property is attached to this Environmental Covenant as Exhibit B.

2. **Property Owner / GRANTOR.** The Redevelopment Authority of Bucks County ("RDA" or "Owner") is the current fee simple owner of the Property, although the RDA only holds title to the Property for the purposes of facilitating the use of certain public funds in connection with the remediation and redevelopment of the Property. Bensalem Redevelopment, L.P. ("BRLP") possesses an equitable interest in the Property pursuant to an option agreement ("Option Agreement") with the RDA to purchase the Property. Pursuant to the Option Agreement, BRLP is permitted to designate a third party to take fee title from the RDA. BRLP has designated WBDI to take fee title from the RDA. Therefore, WBDI is the "Grantor" for purposes of this Environmental Covenant. The mailing address(es) of the Owner is: One North Wilson Avenue, Suite 1, Bristol, PA 19007. The mailing address of WBDI is: 2310 Terwood Drive, Huntingdon Valley, PA 19006.

3. <u>Holder(s)</u> / GRANTEE. Each of the following is a "holder," as that term is defined in 27 Pa. C.S. § 6501, of this Environmental Covenant:

Waterside Bensalem Development, Inc. 2310 Terwood Drive, Huntingdon Valley, PA 19006

۲,

Bensalem Redevelopment, L.P. 2310 Terwood Drive, Huntingdon Valley, PA 19006

4. Description of Contamination & Remedy.

Extensive investigations of soil and groundwater have previously been conducted at the Property, both by prior owners of the Property as well as by BRLP. A detailed summary of environmental investigatory activities that have been performed at the Property is contained in the October 21, 2005 Remedial Action Work Plan ("RAWP"), November 23, 2004 Final Characterization Report ("FC"), and May 13 2004 Remedial Investigation/Risk Assessment Report ("RI"). These investigations identified the presence of various constituents in soil and groundwater in concentrations above the Pennsylvania Land Recycling and Environmental Remediation Standards Act, 35 P.S. 86026.101 et seq.("Act 2") residential statewide health standards ("SHSs"), including in certain soils: TCE, PCE, arsenic, lead, PCBs; and in groundwater: TCE, PCE, vinyl chloride, benzene, toluene, ethylbenzene, xylene, and certain metals. In addition, two former wastewater lagoons, which were backfilled in 1972, were also located on the Property, and investigatory activities in these former lagoons identified the presence of waste materials within the fill used to backfill the lagoons. A detailed summary of contaminants identified in soil, groundwater and the former lagoons at the Property can be found in the RAWP, FC and RI Reports listed above.

BRLP conducted extensive remediation, through excavation and off-site disposal, of soils at the Property with concentrations of contaminants in excess of the Act 2 residential SHSs. In addition, BRLP completely excavated and disposed of (offsite) any waste materials previously used to backfill the former lagoons at the Property. As a result, no identified contaminants remain in soils at the Property in concentrations above Act 2 residential SHSs. BRLP has also conducted extensive groundwater monitoring of the Property, which has identified primarily concentrations of PCE, and its breakdown products, and to a lesser degree metals that remain in groundwater at the Property in excess of the Act 2 residential SHSs. Although these constituents remain present in groundwater in concentrations above the Act 2 residential SHS, as described below, Grantor has demonstrated attainment, through the use of engineering and institutional controls, with the residential Site Specific Standard ("SSS") for these constituents in groundwater, indicating that future residential occupants of the Property will not be

exposed at all to these constituents in groundwater at the Property. Specifically, because groundwater is not utilized at the Property, and cannot be utilized in the future because of municipal ordinance, groundwater at the Property does not represent a complete exposure pathway via direct contact or ingestion, and the migration of impacted groundwater to surface waters has also been demonstrated to not negatively impact surface water quality of the receiving Delaware River. In addition, to ensure that potential vapor intrusion of impacted groundwater into future Property structures will not represent a complete exposure pathway to future building occupants, future structures at the Property will be built with vapor barriers and slab-on-grade foundations without basements (regardless of results received from the planned long-term vapor sampling).

7

Grantor has already submitted to the Department an Act 2 Final Report, prepared by Penn Environmental and Remediation dated September 4, 2008 ("Final Report"), demonstrating attainment with the Act 2 residential SHS for various hazardous substances previously identified in soil and groundwater at the Site, and the residential Site Specific Standard ("SSS") for constituents previously identified in groundwater at the Site. The Final Report has been approved by the Department, acknowledging that BRLP has demonstrated attainment with the residential SHS for various hazardous substances previously identified in soil and groundwater at the Site, and the residential SSS for constituents in groundwater at the Site. In addition, the U.S. Environmental Protection Agency ("EPA") also concurred with the Department's approval of the Final Report. In accordance with the Final Report, BRLP and/or WBDI shall comply with the terms of the Post-Remediation Care Plan contained in the Final Report. The Act 2 Final Report and other related reports, which describe the nature and extent of hazardous substances that were previously identified and remediated at the Site, as well as the nature and extent of constituents that remain in groundwater at the Site, are on file with and may be reviewed at PADEP's Southeast Regional Office, 2 East Main Street, Norristown, Pennsylvania 19401, Phone Number (484) 250-5900.

5. <u>Activity & Use Limitations</u>. The Property is subject to the following activity and use limitations, which the Owner and each subsequent owner of the Property shall abide by:

a. <u>Vapor Barriers/Slab-On-Grade Construction</u>. As part of the eventual development of the Property, WBDI will construct slab-on-grade buildings without basements and install vapor barriers as an engineering control to eliminate potential vapor intrusion from ground water into indoor air for buildings located at the Property, with the specific engineering plans for the vapor barriers to first be submitted to and approved by EPA prior to construction.

b. <u>Inspections.</u> In order to ensure the ongoing use, integrity and effectiveness of any engineering and institutional controls used at the Property, Owner (or the then-current owner(s) of the Property) through a third-party agent (with work completed under the certification of a Professional Geologist (P.G.), a Professional Engineer (P.E.), or equivalent), shall perform annual inspections of the Property and shall prepare an annual inspection report documenting the results of such inspection. The inspection shall include the following activities, all of which shall be documented in the written inspection report.

(i) Inspections of the visible portions of the building foundations and vapor barrier systems at the Property to identify the continued presence of such barriers, as well as any significant disturbance or damage to the barriers. The third party shall also note any change in any building footprints at the Property from prior inspections, and if any additional building footprints have been identified, request and review copies of as-built plans demonstrating that any necessary vapor barriers were installed at the Property.

(ii) A file review of the Bensalem Township municipal records for the Property to determine whether any construction permits relating to the Property were obtained for the prior year which could have related to construction activities in any way affecting existing vapor barriers at the Property, and if so, the inspector shall determine through interviews and other means whether such construction activities were performed, and if so, whether the construction activities impacted any vapor barriers utilized at the Property.

(iii) Confirmation that groundwater is not utilized at the Property, and that only water from the local public water system is utilized at the Property. As part of this inspection, the inspector will verify that Bensalem Township ordinance (Chapter 192, Article II, Section 192-6) requiring connection to the public water supply lines remains valid and in force. The inspector shall also communicate with the Bucks County Health Department (through file review or verbal conversations) to verify that no new well construction permits were issued for the Property or the immediate vicinity of the Property.

A written inspection report (the "Annual Inspection Report") shall be prepared annually, documenting the inspection activities identified above. In addition, the Annual Inspection Report shall include the results of any soil gas monitoring and groundwater monitoring performed at the Property in the previous year. The Annual Inspection Report shall also include a description of any maintenance or repair activities taken in the previous year performed at the Property to cure any potential violations of the activity and use limitations at the Property identified above.

(c) Maintenance and Repairs. Owner (or the then current owner(s) of the Property) shall expeditiously inspect any alleged violations of the activity and use limitations described in this Section 5, and expeditiously remedy any violations of any activity and use limitations described herein. A written report of any alleged violations, and all activities taken to cure any violations, shall be prepared, and shall be provided to the person performing the annual inspection described in Section 5(b) above, and shall be attached as an exhibit to the next Annual Inspection Report to be prepared in accordance with Section 5(b) of this Environmental Covenant. Copies of the annual inspections shall be provided to the Holders of the Environmental Covenant, and the then owner of the real property and/or common elements of the Site shall be required to maintain the written records of these annual inspections and any maintenance/repairs. A third party shall be responsible for performing annual inspections of the Site to assure compliance.

6. <u>Notice of Limitations in Future Conveyances</u>. Each instrument hereafter conveying any interest in the real property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of this Environmental Covenant.

7. <u>Compliance Reporting</u>. By the end of every January following the effective date of this Environmental Covenant, the Owner or the then-current owner(s) shall submit to the Department and any Holder listed in Paragraph 3, a copy of the Annual Inspection Report. The Owner or the then-current owner(s) shall submit, to the Department and any Holder listed in Paragraph 3, written documentation following transfer of the Property, concerning proposed changes in use of the Property, filing of applications for building permits for the Property or proposals for any site work affecting the contamination on the Property subject to this Environmental Covenant.

8. <u>Access by the Department</u>. In addition to any rights already possessed by the Department, this Environmental Covenant grants to the Department a right of access of the Property in connection with implementation or enforcement of this Environmental Covenant.

9. <u>Recordation & Proof & Notification</u>. Within 30 days after the date of the Department's approval, the Owner(s) shall file this Environmental Covenant with the Recorder of Deeds for Bucks County, and send a file-stamped copy of this Environmental Covenant to the Department within 60 days of recordation. Within that time period, the Owner(s) also shall send a file-stamped copy to each of the following: Bensalem Township and Bucks County; any Holder identified in this Environmental Covenant; each person holding a recorded interest in the Property; and each person then in possession of the Property.

10. **Termination or Modification.** This Environmental Covenant may only be terminated or modified in accordance with Section 9 of UECA, 27 Pa. C.S. § 6509. Consistent with UECA Section 9(a)(1), Owner or any subsequent owner or other party may, at any time, perform additional remedial work at the Property to allow for removal or modification of any or all of the foregoing activity and use limitations. Should such remedial work eliminate the need for one or more of the foregoing activity and use limitations to attain one or a combination of Act 2 remediation standards at the Property, Owner or any subsequent owner, with the prior written approval of the Department, may record with the Recorder of Deeds, as appropriate, either (i) an amendment to this Environmental Covenant removing or modifying the relevant activity and use limitations(s), or (ii) a termination of this Environmental Covenant. 11. **Department's address.** Communications with the Department regarding this Environmental Covenant shall be sent to:

Pennsylvania Department of Environmental Protection Southeast Regional Office 2 East Main Street Norristown, PA 19401 Attn: Environmental Cleanup Manager

12. <u>Act 2 §304(m) Acknowledgment</u>. Pursuant to Act 2 Section 304(m), 35 P.S. § 6026.304(m), and to the extent required for future conveyances of the Property, Exhibits C and D to this Environmental Covenant contain plans and tables depicting the surface area size, location, and description of the regulated substances for which Site Specific Standards have been attained.

ACKNOWLEDGMENTS by Owner(s) and any Holder(s), in the following form:

Date:

Redevelopment Authority of the County of Bucks By: Name: RODE Title: Syley in

Date:

Waterside Bensalem Development, Inc. By:

Name: Stephen Title: President

Bensalem Redevelopment, L.P. By: Bensalem Redevelopment, LLC

Its Managing Member

Title: Die LAND DEVELODMENT

Its General Partner By: Riverside E&D, LLC

or

trof

By-

Name:

Date:

Date:

[REPEAT AS NECESSARY]

, · · · ·	
COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF Bucks)) SS:
On this 22^{4} day of <u>Setenher</u> , 200 personally appeared Robert White who acknowled Director of the Redevelopment Authority of the Coname is subscribed to this Environmental Covena Authority of the County of Bucks, and acknowled purposes therein contained.	edged himself to be the Executive County of Bucks, and the person whose ant on behalf of the Redevelopment
COMMONWEALTH OF PENNSYLVANIA Notarial Seal Mildred I. Wagner, Notary Public Bristol Twp., Bucks County My Commission Expires Sept. 24, 2010	hereunto set my hand and official seal.
COMMONWEALTH OF PENNSYLVANIA	Notary Public
COUNTY OF Montgener))) SS:
On this <u>19th</u> day of <u>Systember</u> , 200 personally appeared Stephen P. McKenna who ac of Waterside Bensalem Development, Inc., and th this Environmental Covenant on behalf of Waters acknowledged that he executed same for the purp	cknowledged himself to be the President he person whose name is subscribed to side Bensalem Development, Inc., and
COMMONWEALTH OF PENNEYLVANIA NOTARIAL SEAL KAREN GERDY, Noiny Public Lower Moreland Twp., Mangamary County My Commission Expires March 23, 2012	hereunto set my hand and official seal. <u>face-gud</u> Notary Public
COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF Montgomeny)) SS:
On this <u>19</u> th day of <u>Sydenbur</u> , 20 personally appeared Joseph Casey who acknowled Manager of Riverside E&D, LLC, which is the N Redevelopment, LLC, which is the General Partr and the person whose name is subscribed to this Bensalem Redevelopment, L.P., and acknowledg purposes therein contained.	edged himself to be the Environmental Managing Member of Bensalem her of Bensalem Redevelopment, L.P., Environmental Covenant on behalf of
In witness whereof, I	hereunto set my hand and official seal.
	Kaun Quid
COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL KAREN GERDY, Notary Public Lower Moreland Twp., Montgomery County My Commission Expires March 28, 2012	Notary Public

• . . .

7

321180

.

.

. 1

-`

Property Owner: Waterside Bensalem Development Inc. Property Address: 2375 State Street Bensalem Township, Bucks County

> APPROVED, by Commonwealth of Pennsylvania, Department of Environmental Protection By:

Date:

Name: Stephan Sinding Title: Environmental Cleanup Program Manager PADEP - SERO

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF BUCKS

On this \underline{W} day of September, 2008, before me, the undersigned officer, personally appeared Stephan Sinding who acknowledged himself to be the person whose name is subscribed to this Environmental Covenant, and acknowledged that he executed same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal Vanetta Bouknight, Notary Public Norristown Boro, Montgomery County My Commission Expires Dec. 1, 2009 Member, Pennsylvania Association of Notaries

ETHISIT A Legal Description - 2375 State Rd.

ALL THAT CERTAIN tract or parcel of land with the buildings and improvements thereon erected, situate at Cornwells, in the Township of Bensalern, County of Bucks and State of Pennsylvania, bounded and described according to a plan prepared by Ezra Golub & Associates, Registered Professional Engineers and Registered Land Surveyors of Levittown, Pennsylvania dated December 22, 1999 as follows, to wit:

BEGINNING in the middle line of the State Road (fifty feet wide) and in line of land now or late of Schutte and Koerting; thence along the middle line of the said State Road North sixty-five degrees twenty-four minutes East one thousand and eighty-nine feet and forty-five one-hundredth of a foot to the line of land now or late of the Badenhausen Company; thence by the same crossing over a stone set at the distance of fifty-three feet Northward from the Northwest side of Delaware River South twenty-six degrees twenty-six minutes East one thousand and twenty-three feet and fifty-one one-hundredths of a foot to the Northwest side of the said Delaware River, thence by the same South fifty-nine degrees twenty minutes West five hundred and twenty-seven feet and fifty-nine one-hundredths of a foot to an angle; thence by the same South seventy-five degrees forty-five minutes West five hundred and six feet and ninety-four one-hundredths of a foot to a corner of land of the said Schutte and Koerting; and thence by the same North thirty degrees twenty minutes West nine hundred and ninety-two feet and seventy-four one hundredths of a foot to the place of beginning.

CONTAINING twenty-five acres and two hunched and seventy-one one-thousandths of an acre.

BEING Parcel No. 02-065-022.

BEING the same premises which Bensalem Redevelopment, L.P., a PA Limited Partnership by Deed dated September 27, 2005 and recorded September 29, 2005 in Bucks County in Land Record Book 4651 page 2270 granted and conveyed unto Redevelopment Authority of the County of Bucks, in fee.

	FOR EXHIBIT SPE	Party and the second second
ACCOUNT OF A DESCRIPTION OF A DESCRIPTIO	FLAN BOOK 366, 63	

EXHIBIT B

FOR	EXHIR	t sfe	, i i i i i i i i i i i i i i i i i i i	
PLAN	I BOOK	344	. p_(5
	esti katimenne <u>teretere</u> teret.	a ha hili harangan mata Davindi nakisin	وي بروها وله المارك و	

EXHIBIT C

FOR	EXHIBIT	SEE		The second s
PLAN		366	p 71	

EXHIBIT D

EXHIBIT A



REVIEW ENGINEE PROJECT ENGINE PROJECT ENGINE Engineeering BUCK BUCK		
S WIGHT S WIGHT BY S WIGHT S WIGHT S COUNTY, PENNSYLV S WIGHT S Soule S WIGHT S SOULE S SOULE S WIGHT S SOULE S SOULE S SOULE S WIGHT S SOULE S SOUL		
PA 19006 PA 19006 PA 19006 PA 19006 PA 19006 PA 19006 CRR CRR CRR CRR CRR CRR DTW		

.

,

EXHIBIT B



Copyright 2004
Ву

DECIMAL GRAPHIC SCALE

Penn Environmental & Remediation, Inc. ALL RIGHTS RESERVED. Neither all, nor any part of this document may be PENN E&R DRAWING NO. amended, reproduced, copied or used in any form or manner except pursuant to contract with or with the specific written permission of Penn Environmental & Remediation, Inc.

FIGURE NO.

HA4805-017

REV.



amended, reproduced, copied or used in any form or manner except pursuant to contract with or with the specific written permission of Penn Environmental & Remediation, Inc.

DECIMAL GRAPHIC SCALE

REV.

HA4805-018





ELD, PENNSYLVANIA,	19440	- 215.997.9000	Fax 215.822.85
,			

່ 11**-**May-04

HA4805-020

FIGURE NO.

REV.

PENN E&R DRAWING NO.

Copyright 2004

DECIMAL GRAPHIC SCALE

By Penn Environmental & Remediation, Inc. ALL RIGHTS RESERVED. Neither all, nor any part of this document may be amended, reproduced, copied or used in any form or manner except pursuant to contract with or with the specific written permission of Penn Environmental & Remediation, Inc.

ANALYTICAL PARAMETERS ^(I)		SA	EPA RBC TAP	PADEP RUA	PADEP RNUA						
	GG-1-10	GG-2-14!	GG-3-6'	GG-4-13'	GG-5-10'	GG-6-12'	GG-7-13' *	TRIP	WATER	MSC ⁽³⁾	MSC ⁽³⁾
Volatile Organic Compounds:		1111 2 901 100 901 2 1 2 4 - 15 - 10 10 90 90 91 94	a yana yang yang nang pang p				princes non a stronger again.	. (yanan miriyinye, an, yan m	ан, улон, та улунтан, алта мун улт		· Million (1997) - 1997 - 1997
Acetone	8 B	<120	<6	7 B	22 B	7 B ≮1	5 J B	5 J	5,500	3,700	37,000
Benzene	<1	<20	<1	<1	<1	<1	<1	<1	0.34	5	500
Bromomethane	<1	<20	<1	≪1	≪1	<1	<1	<1	8.5	10	1,000
Chlorobenzene	<1	<20	<1	0.4 J	<1	<1	0.4 J	<1	110	100	10,000
Chloroform	: ~1 :	<20	<u>0.4 J</u>	<1	2	<1	<1	<1	0.15	100	1,000
Dichloroethane, 1,1-	<1	8.J	<u>0.4 J</u> <1	0.8 J	<1	<1	0.8 J	<1	800	27 7	270
Dichloroethene, 1,1-	<1	<20	<1	<1	<1	<1	<1	<1	350		70
trans-1,2-Dichloroethene	<1	<20	<1 <1	<1	<1	<1	0.4 J	<1	120	100	1,000
cis-1,2-Dichloroethene	2	1300 D	0.7 J	53 D	<1	<1	77 D	<1	61	70	700
Dichloromethane, (Methylene Chloride)	<1	<20	<1	<1	<1	<1	<u>77 D</u> <1	2	4.1	5	500
Dichloropropane, 1,2-	<1	<20	<1	<1	<1	<1	<1	<1	0.16	5	50
Ethylbenzene	<1	<20	₹ ₹	<1	<1	<1	<1	<1	1,300	700	70,000
Methyl Chloride (Chloromethane)	<1	<20	<1	<1	<1 <6	<1	√ 1 √ 1	<1	190	3	300
Methyl Ethyl Ketone (2-Butanone)	<6	<120 R	<6	<1 <6	<6	<6	<6	<6	7,000	2,800	280,000
Methyl Isobutyl Ketone (4-methyl-2-pentanone)	<6	<120	<6	<6	<6	<6	<6	<6	6,300	190	19,000
Methy I-t-buty I Ether	<2	<40	<2	<2	<2	<2	<2	<2	2.6	20	20
Tetrachloroethene (PCE)	<2 2 0.4 J	2400 D	₩ ₩ ₩ ₩	14 6 14 <2	<u>0.4 J</u>	≈1	<2 13 6 14	<1	0.10	5	50
Trichloroethene (TCE)	<u>0.4 J</u>	300	<1	6	<1	<1	6	<1	0.026	5	50
Vinyl Chloride	0.5 J	420	<1	14	<1	<1 <2	14	<1	0.015	2	20
Xylenes-Total	<2	<40	<2	<2	<2	<2	<2	<2	210	10,000	180,000

Notes:

(1)	Samples were analyzed for Target Compund List (TCL) Volatile	Organic Com
	Only analytes with concentrations above their laboratory detection	
(2) -	All results are in micrograms per liter:	
(3) •	Pennsylvania Department of Environmental Protection, Land Re	cycling and En
	Residential Medium Specific Concentrations (November 2001).	
EPA -	Environmental Protection Agency	
RBC -	Risk Based Concentration (EPA Region III Oct. 8, 2004)	
PADEP -	Pennsylvania Department of Environmental Protection	
RUA -	Residential Used Aquifer	
RNUÁ -	Residential Non-Use Aquifer	
MSC -	Medium-Specific Concentration	
SMCL -	PADEP Secondary Contaminant Level	
<10 -	Compound was not detected above the detection limit shown	
<u>Underline</u> -	Compound was detected above its EPA RBC	
Bold -	Compound was detected above its PADEP MSC	
NA -	Not analyzed	
ND -	No analytes within this compound group were detected above the	eir respective. I
NSA -	No standard available	
J -	Estimated concentration below laboratory reporting limit	R -
В -	Analyte also present in the method blank	* -
D -	Result obtained from a different dilution than the other analytes.	

TABLE 10

SUMMARY OF ANALYTICIAL RESULTS FOR GROUND WATER SAMPLES COLLECTED FROM THE PERMANENT ON-SITE MONITORING WELLS

SDG 7 MAY 2004

ANALYTICAL PARAMETERS ⁽⁾		SAMPLE DESIGNATION/ANALYTICAL RESULTS?							EPA RBC TAP	PADEP RUA	PADEP	PADEP		
AINII II. AL FARANE IERS'	MW-1D	MW-1S	MW-2D	MW-2S	MW-3	MW4	MW-4D	MW-5	MW-6	MW-7	WATER	MSCØ	MSC ⁽³⁾	
olatile Organic Compounds:	Sec. 1973	anda man an an a'	an a		- 4			< <u>1</u>		Contraction of the second s	0.34	3	1990-000- <u>1</u> 990 1997-00-1	NSA
Benzene Carbon Disulfide	<1 <1	4	<1 <1	<1 <1	<u>8</u> ≪5	<u>6 J</u> <10	<20 <20	0.8 J	<1 <1	<u> </u>	1,000	1,900	500 1,900	NSA
Chlorobenzene	<Î	<	<1	~1	્≺ઽ	<10	<20	<1	0.5 J	<	110	100	10,000	NSA
Dichloroethane, 1,1-	6	2	<1	2	2J	<10	<20	<1	<1		800	27	270	NSA
Dichloroethylene, 1,1-	4	4	<1	1	-5	<10	14 J	<1	<1	<u></u>	350	7	70	NSA
Dichloroëthylene, trars-1,2- Dichloroethylene,cis-1,2-	<1 21	05J 54E	<1 <1	i≪1 4	<5 5 J	7 J 500	,10 J 1,900 E	<1 <1	<1 <1	5.2.2	120 61	100	1,000	NSA NSA
Dichloromethane, (Methylene Chloride).	21 <1	⊃4 <u>E</u> <	<1 <1	4 <1	< <u>5</u>	<10	<20 <u>L900 E</u>	<1	<1	ि	4.1	S	500	NSA
Dichloropropane, 1,2-	- <i< td=""><td>4</td><td><1</td><td>s1</td><td>-5</td><td><10</td><td><20</td><td>-1</td><td><i< td=""><td>*5</td><td>0.16</td><td>5</td><td>50</td><td>NSA</td></i<></td></i<>	4	<1	s 1	-5	<10	<20	-1	<i< td=""><td>*5</td><td>0.16</td><td>5</td><td>50</td><td>NSA</td></i<>	*5	0.16	5	50	NSA
Methyl tert-Butyl Ether (MTBE)	<2	2	<2	<2	<10	<20	<40	<2	<2	<13	2.60	20	20	NS A
le trachloroe thylene (PCE.)	<u>10</u>	1	<u>0.6 J</u>	2	-5	<u>23</u> <u>71</u>	<u>620</u>	<1	<1	470 E	0.10	5	50	NSA
Trichloree thylene (TCE)	4		<1	<u>071</u>	<5	<u>71</u>	<u>330</u> 1.000	<1	<1 <1		0.026	5	50:	NSA
Vinyl Chlonde emiv olatile Organic Compounds :	ran 🦕 samen 🖉 🚣 addarsam Ta	, Saranin (2 🖣 physics 2)	and F1 . Junior			<u>410</u>			jerense 🛠 Herens.	nanan 52 (mara)	0.015	2	20	NSA.
Benzoic acid	~19	<19	<19	×19	i ~19	<19	÷19	<20	<19	:≈12	1.50,000	1.50,000	1,50,000	NSA
Bis-(2-Ethylhexyl)phthalate	<10	<i0< td=""><td><10</td><td><10</td><td><10</td><td>2 J</td><td>si0</td><td><10</td><td><9</td><td>31</td><td>4.8</td><td>6</td><td>290</td><td>NSA</td></i0<>	<10	<10	<10	2 J	si0	<10	<9	31	4.8	6	290	NSA
Sresol, p- (Methylphenol. 4)	<10	<10	<10	<10	<10	<9	<10	<10	<9	~9R.	180	180	510	NSA
Dichlorobenzene 1 2-	<10	<10	<10	<10	160 D	бJ	2J	<10	<9	-9	270	600	60,000	NSA
Dichlorobenzene, 1, 4(P-)	<10	<10	<10	<10 ⊴0.2	<u>20</u> <0.2	<9 L	<10 L	<10	<9	<9L	0.47	75	7,500	NSA
Naphthalene 10 ganic Compounds	40.2	. ≓02	.<0.2	SU.2	<02	.<0:2	=0.2	<0.2	<0.2	1991 - 1997 	6.5	100	30,000	NSA
Linguna Compounds	<200	790	<200	3,200	6,200	880	3,000	2,300	13,000	3,800	37,000	NS A	NSA	200
Antimony	<6		~6	<6	~6	≮6		~ 6	<6	≪5	15	6	6,000	NSA
Arsenic	<8	-3	<8	~8	12	<8		8.1	<8	4	0.045	50	50,000	NSA
Berium	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	2,600	2,000	2,000,000	NSA
Beryllium	<2	2	≮2	<2	5	<2	22	<2	<2	2.4	73	4	4,000	NSA
admium alcium	<4 28,000	<4 17,000	<4 19.000	<4 10,000	~4 7,500	<4 22,000	4 	<4 1,700	<4 5,600	4 62,000	18 NSA	5 NS A	5,000 NSA	NSA NSA
chromium ⁽⁰⁾	28,000 <10	<10	<10	<10	<10	<10	<10	<10	<10	iuz,000 ⊂10	55,000	100	100,000	NSA
Sobalt	<10	19	<10	13	<10	190	66	<10		-1-7 (=1)	730	730	730,000	NSA
Copper	<20	, 20	<20	<20	<20	<20	<20	<20	<20	-2)	1.500	1.000	1,000,000	NSA
ion	28,000	540	1,800	270	9,100	340	39,000	7,900	<100	<100	11,000	NS A	NSA	300
e ad.	<5	୍	<5	<5	ব	6.2	ধ্য	<5	<5	<5	NS.A	5	5,000	NSA
Vlágnesium	9,900	8,500	5,200	4,800	7,200	17,000	23,000	1,100	13,000	22,000	NS.A	NS A	NSA	NSA
Mangane se	<u>1,100</u>	<u>1,400</u> <05	660 ⊲0.5	<u>1,700</u> ≼0.5	<u>1,500</u> <0 <i>5</i>	<u>9,800</u> <0,5	<u>4,100</u> <0.5	<u>740</u> <0.5	<u>2,900</u> ⊲0.5	<u>2,400</u> <0.5	730 NS.A	NS A 2	NSA	50 NSA
Mercury Nickel	<0.5 <20	-us 2l	<0.5 <20	<20	36	-0.5 620	520	<20	40	<0 <i>9</i> <2)	730	100	2,000 100,000	NSA
Potassium	3,500	2,700	3,800	3,600	9,200	4,800	7,000	10,000	5,500	13,000	NSA	NS A	NSA	NSA
Selenium	<20	<20	<20	<20	<20	<20	<20	<20	<20	(<2)	180	50	50,000	NSA
Silver	<10	<10	<1O	<10	<10	<10	<10	<10	<10	< 1]	180	100	100,000	NSA
	16,000	69,000	8,800	86,000	400,000	570,000	120,000	230,000	32,000	\$4,000	NS.A	NS A	NSA	NSA
Thallium Janaclium	20 <10	<u>13</u> <10	<u>18</u> ≤10	< <u>12</u> <10	<u>16</u> <10	<u>14</u> <10	<u>13</u> 30	<u>22</u> <10	<u>44</u> <10	<u>15</u> =(1)	2.6 37	2 260	2,000 260,000	NSA NSA
Zinc	<20	<10 <20	<20	<20	<20	61	52	<20	-10 54	30	11,000	2,000	2,000,000	NSA
tenuation Parameters: (*)													and the second of the second second	
Alkalimi ty	23	100	53	98	130	970	81	230	50	88	1.00		-	
Cabon TOC	3	6.1	1.4	8.8	28	53	13	10	3.9	3.				1 H <u>H</u>
Niotide	52	31	11	17	26	140	69	11	3.7	42	1.1.1 <u>87.2.2.3</u> 3.	<u>2,</u> 4≄.	<u>بمنتم</u> ،	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
00 Itiane	0.93 ⊲0.13	2.38 <0.13	1.79 =0.13	1.18 ⊲0.13	1.04 <0.13	3.91 ⊲0.13	2.44 <0.13	0.7	4.54 ⊲0.13	3.89 <0.13		1040	17. T	
there	<0.13	<0.13	₹0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 <0.13	<0.13			(3.14)	192
ron -	29	0.58	7.5	0.43	9.4	0.39	27 J*	77	<0.1	<01	- <u>2755</u>)) - Esta	· <u>2116</u> ·	222
ron Ferric	11	<	7.5	(<i< td=""><td>9.4</td><td><1</td><td>13</td><td>77</td><td><i< td=""><td></td><td>(hin)</td><td>: : ::::::::::::::::::::::::::::::::::</td><td>್ಷ ಕ್ಷೇ</td><td></td></i<></td></i<>	9.4	<1	13	77	<i< td=""><td></td><td>(hin)</td><td>: : ::::::::::::::::::::::::::::::::::</td><td>್ಷ ಕ್ಷೇ</td><td></td></i<>		(hin)	: : ::::::::::::::::::::::::::::::::::	್ಷ ಕ್ಷೇ	
ron Ferrous	18	<	<1	<1	<1	<1	14	<1	<1	<]	er en er de Gran (* 19	· ·	id all	Million
vlethane Vitrogen NO3-N	0.13	<0.071	<0.071	≪0.071 ≪0.1	2.9D	1 D	0.48	<0.071	<0.071	<0.071		<u>198</u> 7	<u>186</u>	
Nitogen NO3-N	<0.1 5.96	<0.1 6.05	≪0.1 6.75	<0.1 6.18	<0.1 6.61	=0.1 6.69	0.2 5.87	<0.1 7.13	0.8 5.46	22 5.65	يندين. ريسين	2	(<u>845)</u> 	6,5 - 8,5
EDOX (mV)	-27	78	-48	70	-136	-41	-3	-185	210	184			2	
pecific Conductivity (mS/cm)	0.439	0.455	0.227	0.528	1.76	2.65	1.48	1.08	0.358	0.826		T. P.		
ulfate	43	40	18	52	87	73	220	190	23	26)	1211 (<u>1217)</u>	- 	<u>222</u>]	$\frac{d}{d} \frac{d}{d} \frac{d}{d}$
ulfide	<1	< 1	<1	~1	<1	<1	<1	<1	<1	(۲	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	<u>77</u> 7		
Cemperature (°C)	12.43	12.38	13.35	11.71	12.74	11.84	1695	13.08	14.52	17.22	2 1 1 1 2	<u>22</u> 22]	. توجيعت	1. (<u>1975)</u>
Turbidity	26	25.9	81.9	Ö	9.9	84.8	196	8.9	21.1	4		s Saaraa ee e baaraa	testeen a n n eessees	1

Samples were analyzed for Target Compand List (TCL) Volatile Organic Compounds (VOCs), TCL Semivolatile Organic Compounds (SVOCs),

Natural Attenuation ranameters, and Target Analyte List (TAL) Meals. Only analytes with concentrations above their laboratory detection limits are presented.

All results are in micrograms per liter (µg/l), except for the attenuation parameters, which are in millignins per liter (mg/l). Pennsylvaria Department of Environmental Protection, Land Recycling and Environmental Remediation Standards Act, Medium Specific Concentrations (November 2001), Attenuation data collècted from Jeld meausrements include DO, pF, REDOX, Specific Conductivity, Temperature and Turbidity.

Aftenuation data collected from held meausrements include DO, pr., REDOX, Specific Conductivity, comparature and Turbidity. Analysis was completed for total chromium. Results are compared to the most prevalent isomer, chromium III DUP-MW-BD is duplicate of MW-9. FB-1 was submitted for analysis with MW-13. FB-2 was submitted for analysis with MW-2D, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, and DUP-MW-BD. TB-1 was submitted for analysis with MW-10, MW-15, and MW-25. TB-2 was submitted for analysis with MW-2D, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, FB-2, and DUP-MW-BD. TB-3 was submitted for analysis with MW-13, FB-1, and UST-MW-1. TB-4 was submitted for analysis with MW-3 and MW-5. Environmental Protoction Accessor.

HB-4 was submitted for analysis with for -5 and forw-5. Environmental Protection Agency Risk Based Concentration (EPA Region III Oct. 8, 2004) Pennsylvaria Department of Environmental Protection Residential Used Aquifer

Residential Non-Use Aquifer

Notes:

EPA -RBC -PADEP -RUA -RNUA -MSC -

 SMCL PADEP Secondary Contaminant Level

 <10 -</td>
 Compound was not detected above the detection limit shore

 Beld Compound was detected above its PADEP_MSC

 Underline Compound was detected above its EPA RBC or SMCL

 NA Not analyzed

 NSA No standard available
 PADEP Secondary Contaminant Level Compound was not detected above the detection limit shown Compound was detected above is PADEP. MSC

Residential Non-Use Aquirer NSA - No standard available Medium-Specific Concentration Result is estimated. Usually this qualifier indicates the reported concentration is above the laboratory is porting limit. Estimated Value L - Biased low: J* - estimated value (by the validator).

TABLE 9

SUMMARY OF ANALYTICIAL RESULTS FOR GRAB GROUND WATER SAMPLES COLLECTED

IN OCTOBER 2004

FINAL CHARACTERIZATION EVENT

npounds (VOCs),

presented.

Environmental Remediation Standards Act,

e laboratory detection limits.

Rejected value. Result may not be reliable. Duplicate of GG-4-13'

TABLE 10 (Continued)

SUMMARY OF ANALYTICIAL RESULTSFOR GROUND WATER SAMPLES COLLECTED FROM THE PERMANENT ON SITE MONITORING WELLS

SDG7 MAY 2004

· · · · · · · · · · · · · · · · · · ·	- Anne Carrier		1		SAMPLE	DESIGNA		LYTICAL RE	SOLISY	\$		1		EPA RBC	PADEP	PADEP
ANALYTICAL PARAMETERS ²⁾	MW-9	DUP-MW- BD	MW-10	MW-IID.	MW-12D	MW-13	UST-MW- 1	FB-1***	FB-2**	B-1 ***	TB-2 ***	TB3***	TB:4 ***	TAP WATER	RUA MSC ⁽²⁾	RNUA MSC ⁽²⁾
Iolatile Organic Compounds:	n e Processione	- 77615 					n. Järenssense tall								iya daya ya tar. Dan sa	16050-86903
Benzene	i	<1	<1	~2	<u>0.5 J</u>	41	<i< td=""><td>_</td><td>*1</td><td>~1</td><td><<u>i</u></td><td>~1</td><td><1</td><td>0.34</td><td>5</td><td>.500</td></i<>	_	*1	~1	< <u>i</u>	~1	<1	0.34	5	.500
Carbon Disulfide	- ²¹	્યં	<	<2	0.4 J	~1	<1	4	<1	<î	<1	<1	<1	1,000	1,900	1,900
Chlorobenzene	~1	<1	<1	<2	ંનાં	: <1	<1	<1	< 1	~1	<1	<1	<1	110	100	10,000
Dichloroe thane, 1.1-		2	<1	<2	2	<1	l -i	1	<i< td=""><td>=1</td><td><1 ·</td><td>1</td><td><i td="" ∎<=""><td>800</td><td>27</td><td>270</td></i></td></i<>	= 1	<1 ·	1	<i td="" ∎<=""><td>800</td><td>27</td><td>270</td></i>	800	27	270
Dichlore thylene, 1,1-	<u>م</u>	<1	<1	1 J	4 1	<1	<1	ব	21 21	ei	<1	<1	_ ≩i	350	7	70
										<1		<1	P I	120	100	
Dichlorce thylene, trans-1,2-	<1	<1	<1	<2	11	<1	<1	~1	<1			9.5.1				1,000
Dichloroe thylene, cis_1,2-	1	2	<u>د ا</u>	<u>79</u>	9	0.4J	4 1	₹1	<1	<1	<1	< 1	<1	61	70	700
Dichloromethane, (Methylene Chloride)	<1	<1	<1	<2	170 D	V1 V1	<1	<1	<1	~1	4	<1	<1	4.1	5	200 20 20 20 20 20 20
Dichloropiopane, 1,2-	<1	.< 1	<1	<2.	0.5J <2	<1	<1	<1	<1	~1	<1	<1	<1	0.16	5 20 5	-50
Methyl tert-Butyl Ether (MTBE)	~2	<2	22 47 ≤1	<u>5 J</u>	<2	\sim	31 <1	<2	<2	<2	<2	-2	<2	2.60	20	20
Tetrachlorce thylene (PCE)	~1	<1	47	<2	1	<1	<1	<1	<1	<1	<1	st -	<1	0.10	5	50
Trichloroethylene (TCE)	- - 1	<1	<1	<2	2	<1	<1	<1	< <u>1</u>	<1	<1	-<1	<1	0.026	5	50
Vinyl Chloride	<u> </u>	1	<î	10	- 1	<1	l ana ∈i ann	=1			<ī.	<1	< i	0.01-5	2 and 2	20
emivolatile Organic Compounds:	in ground e rapping	a jaanaa gana ahadaadaa . Ta ta ta	international page 1997	in tandatal yang bigatakata.	na ana ana 🛓 🕹 ana ana ang	and the second	a ann an a	n nandatan a ng antang	in anne X €∎thanna T	Sharin Constanting	Condition of States	Contractor - Charlenge	a la companya da companya da serie da s		and an	an talah talah talah talah sa
	1.1.1		10	4 (4.4)								1				
Benzoic acid	<19	<19	<19	141	<19 L	<19	<20	<19	<19	NA	NA	NA	NA	1 <i>5</i> 0,000	1 <i>5</i> 0,000	150,000
Bis (2-Ethylhexyl)phthalate	<9	<9	<10	<10	4 J	<9	<10	<10	<9	NA	NA	NA	NA	4.8	6	290
Cresol, p. (Methyl thenol, 4-)	≪9	<9 <9	<10	46	<10	-9	<10	<10	<9	NA	NA	NA	NA	180	180	510
Dichlorobenzere. 1.2-	€9.	<9	2 J	<10	<10 L	<9	<10	<10	÷9	NA.	NA	NA	NA	270	600	60,000
Dichlorobenzere; 1,4-(P-)	≈9	< <u>9</u>	<10	<10	<10L	-9	<10	<10	<9 <0.2	NA	NA	NA	NA	0.47	75	7,500
Naphthalene	<0.2	=0.2	<0.2	⊲0.2	-0.2 L	<0.2	⊲0.2	-0.2	<0.2	NA	NA	NA	NA	6.5	100	30,000
not ganic Compounds:			2027 -0.2		0.40.			0.4	0.4			1111				
	C. Sectors	Contraction of the	- ARA	and and a second	l danggart l	33.57 ····	1004000	wasa i	्यक्ष	1	04414	24422	a internet	183855	i see	
Aluminum	<200	<200	2,900	<200	1,300	370	<200	<200	<200	NA	NA	NA	NA	37,000	NSA	NSA
Antimony	<6	<6	చ్చ	<6	<6		<6	-46	<6	NA	NA	NA	NA	15	6	6,000
Arsenic	<u>19</u>	<u>18</u>	<3	≪8	<8	-3	<8	-3	-8	NA	NA	NA	NA	0.045	50	50,000
Barium	<u>19</u> <200	< <u>18</u> <200	<200	270	<200	<200	<200	<200	<200	NA	NA	NA	NA	2,600	2,000	2,000,000
Beryllium	<2	<2	2	<2	4.8	<2	<2	<2	<2	NA	NA	NA	NA	73	4	4,000
Cadmium	<4	<4	-4	<4	<4	-4	<4	-4	<4	NA	NA	NA	NA	18	5	5,000
Calcium	43,000	42,000	18,000	96,000	200,000	22,000	57,000	<1000	<1,000	NA	NA	NA	NA	NSA	NSA	NSA .
									オート ふが おうまん		P 197 10 102					
Chomiun ⁽³⁾	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	55,000	100	100,000
Cobalt	<10	<10	14	<10	270	26	<10	<10	<10	NA	NA	NA	NA	730	730	730,000
Copper	<20	<20	<20	<20	<20	<20	<20	<20	<20	NA	NA	NA	NA	1,500	1,000	1,000,000
Iron	3,500	3,400	19,000	31,000	92,000	<100	<100	<100	<100	NA	NA	NA	NA	11,000	NSA	NSA
Lead	<5	<5	<5	<5	<5	-S	~5	<5	<5	NA	NA	NA	NA	NSA	5	5,000
Ivagnesium	10.000	10,000	6,500	32,000	97.000		14,000	<1000	<1,000	NA	NA	NA	NA	NSA	NSA	3,000
						14,000		~1000				IVA				NSA
Manganese	520	510	7,490	4.100	<u>15,000</u>	<u>1.000</u>	< 15	<15	<15	NA	NA	NA	NA	730	NSA	NSA
Merc ury	<0.5	<0 <i>.</i> 5	<c.5< td=""><td><0.5</td><td>=0.5</td><td><0<i>5</i></td><td>≈0.5</td><td>₹0.5</td><td><0.5</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>NS A</td><td>2</td><td>2,000</td></c.5<>	<0.5	=0.5	<0 <i>5</i>	≈ 0.5	₹0.5	<0.5	NA	NA	NA	NA	NS A	2	2,000
Nickel	<20	<20	<20	27	180	51	31	<20	<20	NA	NA	NA	NA	730	100	100,000
Potassium	3,300	3,300	13,000	14,000	15,000	2,000	4,900	<1000	<1,000	NA	NA	ŇA	NA	NS A	NSA	NSA '
Selenium	<20	<2 0	<20	<20	< 20	<20	<20	<20	<20	NA	NA	NA	NA	180	50	50,000
Silver	<10	<10	<10	<10	≓10	<10	<10	<10	<10	NA	NA	NA	NA	180	100	100,000
Sodium	19,000	19,000	26,000	60,000	140,000	23,000	19,000	<1000	<1,000	NA	NA	NA	NA	NSA	NSA	NSA.
Thallium	<10	19,000	<u>17</u>			13			<10	NA	NA	NA	NA	2.6	2	2,000
Vandum		-10	1.0	<u>16</u>	23	<u>13</u>	<u>14</u>	<10								2,000
	<10	<10	<10	<10	≪10	<10	<10	<10	<10	NA	NA	NA	NA	37	260	260,000
Zinc	43	40	<20	<20	530	<20	66	<20	<20	NÁ MÁ	NA	NA	NA	11,000	2,000	2,000,000
Internation Parameters; (1)				1						:					i i	
Alkalinity	130	130	37	320	55 5,7	375	150	<2	<2	NA	NA	NA	NA			
Carbon TOC	4.9	4.8	2,7	240	5.7	75 4.1	11	₹0,5	0.6	NA	NA	NA	NA			
Chloride	5.7	10	3.7			- T.J	4.4 15							1000		
	2.7	13		<i>5</i> 0	22	26	100		₹1	NA	NA	NA	NA			
DO	3.67	3.67	0.97	0.9	1.34	4.87	4.88	NA	NĂ	NA	NA	NA	NÀ	- <u></u>	(* , * *)	
Ethane	<0.13	⊲0.13	<0.13	=0.13	<0.13	<0.13	=0.13	=0.13	<0.13	NA	NA	NA	NA	1727 1723		1000 1000 1000 1000
Ethene	<0.13	₹0.13	< 0.13	<0.13	<0.13	<0.13	<0.13	=0.13	<0.13	MA	NA	NA	NA	<u>12 ab</u> r	1.127245	<u>1975</u>
	3.7	4.1	19	35	93	0.18	0.18	-0.1	<0.1	NA	NA	NA	NA	, <u>1914</u> ,	· <u>,284</u> 7	
		19	7	18	ว์วี	<1	<1	<1	-či	NA	NA	NA	NA	$\left(\frac{1+\frac{1}{2}}{2},\frac{1}{2}\right)$	بنباج	
ion	្រាំ	18	12	17	16	< <u>1</u>	<1	< i	<1	NA	NA	NA	NA			
ron Ion Ferric	1.5	3.3.5				<0.071	-0.071		<0.071	NA	NA	NA	NA		12	
irón Irón Fenic Irón Fenous	2.2	2.2		0.4	20.071		- SU.U.I.	<0.071	1	INA. 1	- IVA	APR 1	IN A L		· · · · · ·	
Iron Iron Fenic Iron Fenous Wethane	2.2 0.12	0.14	<0.071	0.4	<0.071	~0.071		1.1.1			171	1+1				
iron Iron Ferric Iron Ferrous Wethene Nitrogen NO3-N	2.2 0.12 <0.1	0.14 =0.1	<0.071 <0.1	0.2	0.2	<0.1	<0.1	<0.1	⊲0.1	NA	NÅ	NA	NA	12265	(224)	<u>1412</u>
iron Iron Ferric Iron Ferrous Wethene Nimogen NO3-N 5H	2.2 0.12 <0.1 6.3	0.14 =0.1 6.3	≺0.071 <0.1 5,75	0.2 6.78		<0.1 5.39		-0.1 NA		NA NA	NA NA	NA NA				
Iron Iron Ferric Iron Ferrous Methane Ninogen NO3-N GH REDOX (mV)	2.2 0.12 <0.1 6.3	0.14 =0.1 6.3	≺0.071 <0.1 5,75	0.2 6.78	0.2	<0.1 5.39	<0.1	<0.1 NA	⊲0.1	NA NA	NA NA	NA	NA	1999 .***	(222) (4 44 (- <u>1.23</u>
Iron Iron Ferric Iron Ferrous Methane Ninogen NO3-N GH REDOX (mV)	2 2 0.12 <0.1 6.3 -86	0.14 =0.1 6.3 -86	<0.071 <0.1 5.75 35	0.2 6.78 -141	0.2 5.82 0	<0.1 5.39 152	<0.1 6.18 91	=0.1 NA NA	=0.1 NA NA	NÁ NÁ NA	na Na Na	NA NA NA	NA NA NA	1999 .***	(222) (4 44 (<u>:::::</u> : ::::::::::::::::::::::::::::::
Iron Iron Ferric Iron Ferrous Nithogen NO3-N cH REDQX (mV) Specific Conductivity (mS/cm)	2.2 0.12 <0.1 6.3 -86 0.464	0.14 =0.1 6.3 =86 0.464	<0.071 <0.1 5.75 35 0.415	0.2 6.78 -141 1.1	0.2 5.82 0 2.45	<0.1 5.39 152 10.364	<0.1 6.18 91 0.507	-0.1 NA NA NA	<0.1 NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	NA NA NA NA	- <u>2007</u> 	1250) 14 (1217)	1073) 1000 1000 1000 1000 1000 1000 1000 10
Iron Iron Fenic Iron Fenous Wethane Nitrogen NO3-N cH REDOX (mV) Specific Concluctivity (mS/cm) Sulfate	2.2 0.12 <0.1 6.3 -86 0.464 27	0.14 =0.1 5.3 -86 0.464 26	<0.071 <0.1 5.75 35 .0.415 90	0.2 6.78 -141 -1.1 <5	0.2 5.82 0 2.45 1,300	<0.1 5.39 152 10.364 41	<0.1 6.18 91 0.507 38	≪0.1 NA NA NA <5	<0.1 NA NA NA <5	NÁ NÁ NÁ NA	NA NA NA NA	NA NA NA NA	NA NA NA NA NA	-110; -+1 		- <u>5233</u> - 111-1
Iron Iron Ferric Iron Ferrous Nitrogen NO3-N cH REDOX (mV) Specific Conductivity (mS/cm) Sulfate Sulfate	2.2 0.12 <0.1 6.3 -86 0.464 27 <1	0.14 =0.1 6.3 -86 0.464 26 <1	<0.071 <0.1 5.75 35 0.415 90 <1	0.2 6.78 141 1.1 v5 v1	0.2 5 .82 0 2.45 1,300 <1	<0.1 5.39 152 10.364 41 <1	<0.1 6.18 91 0.507 38 <1	40.1 NA NA NA <5 <1	<0.1 NA NA NA <5 <1	NÁ NÁ NA NA NA	NA NA NA NA NA	NA NA NA NA NA	NA NA NA NA NA	- <u>2007</u> 	1250) 14 (1217)	1073) 1000 1000 1000 1000 1000 1000 1000 10
Iron Iron Ferric Iron Ferric Iron Ferrous Wethane Nifrogen NO3-N pH REDOX (mV) Specific Conductivity (mS/cm) Sulfate Sulfate Sulfate Temperatums (°C) Turbidity	2.2 0.12 <0.1 6.3 -86 0.464 27	0.14 =0.1 5.3 -86 0.464 26	<0.071 <0.1 5.75 35 .0.415 90	0.2 6.78 -141 -1.1 <5	0.2 5.82 0 2.45 1,300	<0.1 5.39 152 10.364 41	<0.1 6.18 91 0.507 38	≪0.1 NA NA NA <5	<0.1 NA NA NA <5	NÁ NÁ NÁ NA	NA NA NA NA	NA NA NA NA	NA NA NA NA NA	-110; -+1 		- <u>5233</u> - 111-1

Notes: (1) Samples were analyzed for Target Compared List (TCL) Volatile Organic Compounds (VOCs), TCL Semivolatile Organic Compounds (SVOCs), Natural Attentiation parameters, and Targe: Analyte List (TAL) Metals. Only analytes with concentrations above their laboratory detection limits are presented. All results are in micrograms per liter (ugA), except for the attenuation parameters, which are in milligrams per liter (mg/l).

Pennsylvania Department of Environmental Protection, Land Recycling and Environmental Remediation Standards Act, Medium Specific Concentrations (November 2001). Aftermation data collected from field measurements include DO, pH, REDOX, Specific Conductivity, Temperatue and Turbidity.

Atternation data collected from field measurements include DO, pH, REDOX, Specific Conductivity, Temperature and Turbidity. Analysis was completed for total chromium. Results are compared to the most prevalent isomer, chromium III DUP-MW-BD is duplicate of MW-9: FB-1 was submitted for analysis with MW-13. FB-2 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, and DUP-MW-BD. TB-1 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, and DUP-MW-BD. TB-2 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, FB-2, and DUP-MW-BD. TB-3 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, FB-2, and DUP-MW-BD. TB-3 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, FB-2, and DUP-MW-BD. TB-3 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, FB-2, and DUP-MW-BD. TB-3 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, FB-2, and DUP-MW-BD. TB-3 was submitted for analysis with MW-20, MW-4, MW-4D, MW-7, MW-9, MW-11D, MW-12D, FB-2, and DUP-MW-BD. TB-4 was submitted for analysis with MW-20, MW-5, Environmental Protection Agency Risk Based Concentration (EPA Region III Oct. 8, 2004) Pennsylvania Department of Environmental Protection Residential Non-Use Aquifer Residential Non-Use Aquifer Medium-Specific Concentration PADEP Secondary Contaminant Level Compound was not detected above the detection limit shown Compound was detected above the detection limit shown Compound was detected above the detection limit shown

RUA -RNUA -MSC -SMCL -<10 -Boll -

(3)-

(†)-

(3)

*_ ૠૠં_ુ **** _

EPA -RBC -PADEP -

Compound was detected above its PADEP MSC Compound was detected above its EPA REC or SMCL

<u>Underline</u> -NA -NSA -Not analyzed. No standard avai lable



COST EFFECTIV 2755 BEI

359 NORTH GATE I

THIS DRAWING IS COPY ENVIRONMENTAL & REME USE BY THE RECEIVER

ENVIRO Road, H 213) 997	100, WARRENDALE, PA 15086	МТН СНКО ВУ		BRLP/Wa e Road, Bens	terside Site	9	∕ , ₽А. ₀.:
		REV. DWG FILE HA5220 DESIGNED BY JW DRAWN BY		_{DESCRIPTION} Exh Environment Water Analyt			
			an איז	معد محمد مع مع محمد مع محمد و مع مع محمد مع مع محمد مع مع مع محمد مع محمد مع محمد مع محمد مع محمد مع محمد مع م 	2010-10-10-10-10-10-10-10-10-10-10-10-10-		
		7 5 4					
6.5 + 8.5		, , , , , , , , , , , , , , , , , , , ,					
NSA NSA NSA							
NSA NSA NSA NSA NSA NSA							
NSA NSA 300 NSA NSA 50							
NSA NSA NSA NSA NSA NSA							
NSA NSA NSA NSA NSA 200							
NSA NSA NSA NSA NSA							
NSA NSA NSA NSA NSA NSA							
NSA NSA NSA NSA							
PADEP							
		·					
							,

TABLE 10 (continued)

SUMMARY OF ANALYTICIAL RESULTS FOR GROUND WATER SAMPLES COLLECTED FROM THE TEMPORARY ON-SITE MONITORING WELLS

SDG 7 MAY 2004

		, ,	AMPLE DE	SIGNAT ION	ANAL YTICA	L RESULTS ⁰)		EPA RBC TAP	PADEP RUA	PADEP RNUA	PADEP
ANALYTICAL PARAMETERS ⁰⁾	TW-1	T W-2	T W-3	T W-5	TW-6	TW-7	TW-8	T W-9	WATER	MSC ⁽²⁾	MSC ⁽²⁾	SMCL
Valatile Organitic Congrounds: Acctone Benzene Carbon Disulfide Chlorobenzene Chlorobenzene Chlorobenzene Dichloroethane, 1,1- Dichloroethylene, 1,1- Dichloroethylene, trans.1,2- Dichloroethylene, trans.1,2- Dichloroethylene, is.1,2- Dichloropropane, 1,2- Ethylbenzene Methyl Ethyl Ketone (2-B utanone) Methyl Ether, Urt BE Tarablene (DCE)	17 <1 0.7 J <1 0.9 J <1 <1 <1 <1 8 2 <1 0.9 J 1.1 <2	2 JB 2 J 2 J 2 2 J 2 2 J 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	<pre><30.R <5 <5 4 J <5 2 J <5 2 J <5 2 J 450 E <5 <5 <5 <5 <30 <10 250</pre>	×6 √ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	<6 <1 <1 <1 <1 <1 <1 0.4 J 6 100 E <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	<pre><6 <1 4 22 <1 <1</pre>	×ô ×1 ×1 ×1 ×1 ×1 ×1 ×1 ×1 ×1 ×1	<pre><6 <1 <1</pre>	5,500 0.34 1,000 110 0.15 800 350 120 61 4.1 0.16 1,300 7,000 2.6 0.10	3,700 5 1,900 100 27 7 100 70 5 5 700 2,800 2,800 2,800 5	37,000 500 1,000 10,000 1,000 270 70 1,000 700 500 50 70,000 280,000 20 50	NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA
Tetra chloroethylene (PCE) Toluene Trichloroethylene (TCE) Vinyl Chloride Xylenes (Total)	4 3 22 ≺1 2.5	<2 <2 <2 <2 <2 <2	<u>250</u> <5 <u>140</u> 60 <5	<1 0.7 J <1 <1 0.9 J	8 <1 11 	2 <1 0 0.6 J	4 V V V	×1 ×1 ×1 ×1	0.10 750 0.026 0.015 210	1,000 5 2 10,000	50 100,000 50 20 180,000	NSA NSA NSA NSA NSA
Semivolatile Organic Congrounds: Acenaphthene Anthracene Benzoic acid Benzyl alcohol Bis (2-Ethylhexyl)phthalate Dichlorobenzene,1,2- Fluoranthene Naphthalene Phenanthrene Pyrene	2:2 0.23 7 J 6 J <10 <10 0.5 <u>8.6</u> 1.2 0.4	<0.2 <0.2 <22 <11 <11 5 J <0.2 1.9 <0.2 <0.2 <0.2	<0.2 <0.2 <19 <10 <10 4 J <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <21 <10 <10 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <10 <10 <10 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <19 <10 <10 <10 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <19 <10 3 J <10 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <20 <10 <10 <10 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	370 1,800 150,000 11,000 4.8 270 1,500 6.5 NSA 180	2,200 66 150,000 11,000 6 600 260 100 1,100 1,100	3,800 66 150,000 11,000 290 60,000 260 30,000 1,100 130	NSA NSA NSA NSA NSA NSA NSA NSA NSA
Aluminum Antimony Arsenic Banum Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Selenium Selenium Silver Sodium Thallium Vanadium Zinc	1,600 <6 110 <200 <2 <4 4,000 <10 <10 <20 2,100 7,9 1,100 20 2,00 2,00 2,00 2,00 2,00 2,00	6,000 <6 11 <200 <2 <4 33,000 15 31 30 <u>32,000</u> 6.9 6,200 <u>9,700</u> <0.5 21 6,300 <0.5 21 6,300 <20 <10 59,000 <u>12</u> 33 470	2,400 <6 <8 <200 <2 <4 19,000 <10 99 110 <100 <5 8,700 1,200 <0.5 220 4,800 <20 <10 94,000 <u>14</u> <10 70	1,000 <6 <200 <2 <4 13,000 <10 <10 <20 340 <5 6,000 790 <0.5 <20 2,300 <20 <10 32,000 16 <20	830 <6 <8 <200 <2 <4 4,200 <10 11 <20 180 <5 2,200 1,400 <5 2,200 1,400 <0.5 60 1,200 <20 <10 280,000 <10 <10 <10 <10 <20	30,000 <6 <8 <200 7 <4 210,000 <10 110 <20 96,000 <5 38,000 7,900 <0.5 140 7,900 <10 120,000 <20 <10 120,000 <u>36</u> <10 1,400	26,000 <6 <8 <200 4.3 <4 49,000 <10 42 52 470 <52 20,000 2,800 <0.5 64 2,300 <10 13,000 20 <10 13,000	<200 <6 <8 <200 <2 <4 100,000 <10 23 <20 280 <5 27,000 2,600 <0.5 <20 4,600 <20 <10 11,000 23 <10 23	37,000 15 0.045 2,600 73 18 NSA 55,000 730 1500 11,000 NSA 730 NSA 730 NSA 730 NSA 730 NSA 180 180 180 180 180 180 180 180 180 180	NSA 5 2,000 4 5 NSA 100 730 1,000 NSA 5 NSA 2 100 NSA 50 100 NSA 2 100 NSA 2 200 2,000	NSA 6,000 50,000 2,000,000 4,000 5,000 NSA 100,000 NSA 5,000 NSA 2,000 100,000 NSA 50,000 100,000 NSA 2,000 260,000 2,000,000	200 NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA
Alkalinity Carbon TOC Chloride DO Ethane Ethane Iron Iron Ferric Iron Ferric Iron Ferric Iron Ferrics Methane Nitrogen NO3-N oH REDOX (mV) Specific Conductivity (mS/cm) Sulfate Sulfate Sulfate Temperature (°C) Turbidity	460 12 35 8.28 40.13 25 25 41 40.1 9.61 -174 1.28 32 41 15.76 451	160 17 4,7 2.92 <0.13 <0.13 19 19 <1 <0.071 <0.1 6.25 -85 0.538 33 <1 20.53 999	180 12 20 8.69 <0.13 <0.13 <0.13 14 14 <1 <0.071 0.2 6.28 183 0.669 47 <1 15.34 999	54 6.3 15 8.63 <0.13 <0.13 11 11 <1 <0.071 <0.1 5.72 147 0.202 18 <1 16.1 500	310 16 46 1.77 <0.13 <0.13 190 <1 <0.071 <0.1 7.1 -51 1.37 150 <1 13.31 487	<2 5.8 7.3 1.48 <0.13 <0.13 98 80 18 <0.071 <0.1 3.95 2.85 2.43 1.300 <1 13.08 0	<2 1.4 17 4.48 <0.13 <0.51 <1 <0.071 0.7 3.47 462 0.786 320 <1 14.99 13.7	36 3.5 2.1 1.28 <0.13 0.24 <1 <1 <0.1 5.76 147 0.829 400 <1 13.81 0	1777 487 487 487 487 477 477 477 477 477		1000 (700) (201) (201) (201) (201) (201) (201) (201) (201) (201) (201) (201) (201) (201) (201) (201) (201)	 2022 2022 2022

Notes:

Samples were analyzed for Target Compund List (TCL) Volatile Organic Compounds (VOCs), TCL Semivolatile Organic Compounds (SVOCs), Natural Attenuation parameters, and Target Analyte List (TAL) Metals. Only analytes with concentrations

above their laboratory detection limits are presented.

(2)-All results are in micrograms per liter (µg/l), except for the attenuation parameters, which are in milligrams per liter (mg/l).

(3)-Pennsylvania Department of Environmental Protection, Land Recycling and Environmental Remediation Standards Act, (4) Analysis was completed for total chromium. Results are compared to the most prevalent isomer, chromium III

(5)-Attenuation data collected from field meausrements include DO, pH, REDOX, Specific Conductivity, Temperature and Turbidity.

Medium Specific Concentrations (November 2001).

..**₩**1≦-

FB-1 was submitted for analysis with TW-1. FB-2 was submitted for analysis with TW-3, TW-10, and TW-12. TB-1 was submitted for analysis with TW-5, TW-6, TW-7, TW-9, and TW-11. **

TB -2 was submitted for analysis with TW -3, TW -10, TW -12, and FB -2.

TB -3 was submitted for analysis with TW-1 and FB-1.

TB-4 was submitted for analysis with TW-8.

Environmental Protection Agency Risk Based Concentration (EPA Region 111 Oct. 8, 2004) EPA -

RBC-PADEP -Pennsylvania Department of Environmental Protection

RUA -Residential Used Aquifer Residential Non-Use A quifer RNUA -

MSC -Medium-Specific Concentration

SMCL -PADEP Secondary Contaminant Level <10 -Compound was not detected above the detection limit shown

Compound was detected above its PADEP MSC
 Bold Compound was detected above its PADEP MSC
 NA

 <u>Underline</u> Compound was detected above its EPA RBC or SMCL
 NSA

NA -

Analyte also present in the method blank Not analyzed

Rejected value. Result may not be reliable.

Result is estimated. Usually this qualifier indicates the reported concentration is above the lab. reporting limit.

No standard available

Estimated Value

6.00						
 ΤA	BL	E1	0.6	con	dnu	ed

SUMMARY OF ANALYTICIAL RESULTS FOR GROUND WATER SAMPLES COLLECTED FROM THE TEMPORARY ON-SITE MONITORING WELLS SDG 7 MAY 2004

			SAMPL	E DESIGNA	TION/ANALY	TICAL RESU	LTS ²⁾			EPA RBC	PADEP	PADEP	PADEP
ANAL YTICAL PARAMETERS ^{O)}	TW-10	TW-11	TW-12	FB-1*	FB-2*	TB-1**	TB-2**	TB-3**	TB-4**	TAP WATER	RUA MSC ⁽⁹⁾	RNUA MSC ⁽²⁾	SMCL
Volatile Organic Compounds: Actione Benzene Carbon Disulfide Chlorobenzene Chloroform Dichloroethylene, 1,1- Dichloroethylene, 1,1- Dichloroethylene, 1,1- Dichloroethylene, 1,2- Dichloromethane, (Methylene Chloride) Dichloropropane, 1,2- Ethylbenzene Methyl Ethyl Ketone (2-Butanone) Methyl teth-Butyl Ether (MTBE) Tetra chloroethylene (PCE) Toluene Trichloroethylene (TCE) Vinyl Chloride Xylenes (Tolal)	<15 R <2 <2 <2 <2 <2 <2 <2 <2 <2 <2	Ŷ ŢŢŢŢŢŢŢŢŢŢŢŢ ŶŶŶŢŢŢŢ	<pre><6 <1 <1 <1 <1 <1 2 <1 1 2 <1 2 <</pre>		6 1 1 1 1 1 1 1 1 1 1	<6	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			5;500 0,34 1,000 110 0,15 800 350 120 61 4,1 0,16 1,300 7,000 2,6 0,10 750 0,026 0,015 210	3,700 5 1,900 100 27 7 100 70 5 5 700 2,800 20 5 1,000 5 10,000	37,000 500 1,000 1,000 1,000 270 70 1,000 70,000 50 70,000 280,000 20 50 100,000 50 100,000	NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA
Semivolatile Organic Compounds: Acenaphthene Anthracene Benzoic acid Benzyi alcohol Bis (2-Ethylhexyl)phthalate Dichlorobenzene,1,2- Fluoranthene Naphthalene Phenanthrene Pyrene	<0.2.J* <0.2.J* <19J* <9.J* <9.J* <9.J* <0.2.J* <0.2.J* <0.2.J* <0.2.J*	<0.2 <0.2 <10 <10 <10 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <19 <10 <10 <10 <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <19 <10 <10 <10 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<0.2 <0.2 <19 <9 <9 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2 <0.2	NA NA NA NA NA NA NA	NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA	na Na Na Na Na Na Na	370 1,800 150,000 11,000 4,8 270 1,500 6,5 NSA 180	2,200 66 150,000 11,000 6 600 260 100 1,00 130	3,800 66 150,000 11,000 290 60,000 260 30,000 1,100 130	NSA NSA NSA NSA NSA NSA NSA NSA
Inorganic Compounds: Aluminum Antimony Arsenic Banum Beryllium Cadmium Calcium Chromium (4) Cobalt Copper Iron Lead Magnesium Manganese Mércury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc	1,500 <6 <8 <200 <2 <4 24,000 <10 <10 <10 <20 <100 <5 4,200 240 <0.5 <20 4,500 220 <10 7,800 210 <10 <10 <20 <10 <20 <10 <21 <4 20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <10 <20 <20 <10 <20 <20 <10 <20 <20 <20 <20 <20 <20 <20 <20 <20 <2	5,700 <6 <200 <2 <4 i3,000 <10 25 <20 5,500 5,500 5,500 5,500 5,500 <5 4,200 1,900 20 <10 49,000 16 <10 83	<200 <6 <8 <200 <2 <4 15,000 <10 <10 <20 3,900 <5 5,200 1,000 <0.5 <20 3,100 <10 <10 <10 <10 <10 <10 <20 3,100	<200 <6 <8 <200 <2 <4 <1000 <10 <10 <5 <1000 <15 <0.5 <20 <1000 <10 <10 <10 <10 <10 <10 <10 <10	<2000 <6 <8 <2000 <21 <4 <1,000 <100 <100 <5 <1,000 <15 <0.5 <20 <1,000 <15 <0.5 <20 <1,000 <10 <10 <10 <10 <10 <10 <10 <10 <10	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA NA NA NA NA NA N	37,000 15 0,045 2,600 73 18 NSA 55,000 730 1,500 11,000 NSA 730 NSA 730 NSA 730 NSA 180 180 180 180 180 180 180 180 180 180	NSA 6 50 2,000 4 5 NSA 100 730 1,000 NSA 5 NSA 2 100 NSA 2 100 NSA 50 100 NSA 2 200 2,000	NSA 6,000 50,000 2,000,000 4,000 5,000 NSA 100,000 730,000 730,000 730,000 730,000 730,000 730,000 730,000 NSA 5,000 100,000 NSA 50,000 100,000 NSA 2,000 260,000 2,000,000	200 NSA NSA NSA NSA NSA NSA NSA S0 NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA
Attenuation Parameters: ⁽⁵⁾ Alkalinity Carbon TOC Chloridë DO Ethane Ethene Iron Iron Ferric Iron Ferric Iron Ferric Iron Ferrics Methane Nitrogen NO3-N pH REDOX (mV) Specific Conductivity (mS/cm). Sulfate Sulfate Temperature (°C) Turbidity	40 3.6 J* 3.6 8.53 <0.13 <0.13 45 45 <1 <0.071 <0.1 5.68 174 0.254 54 <1 13.63 368	35 9.1 5.2 5.87 <0.13 6.1 5.3 3.8 <0.071 <0.1 5.63 34 0.42 120 <1 13.45 0	78 4.4 7.3 5.63 <0.13 30 28 2.4 <0.071 <0.1 6.09 45 0.338 23 <1 14.48 999	√2 <0.5 √1 NA NA <0.13 <0.1 ×1 ×1 NA NA NA NA NA NA NA NA NA	<2 0.6 <1 NA NA <0.13 <0.1 <1 <1 NA <0.1 NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA NA NA NA NA NA			212 222 225 245 245 245 245 245 245 245 24	6.5 - 8.5

Samples were analyzed for Target Compund List (TCL) Volatile Organic Compounds (VOCs), TCL Semivolatile Organic Compounds (SVOCs), Natural Attenuation parameters, and Target Analyte List (TAL) Metals. Only analytes with concentrations

NA -

NSA -

J -

J* -

R -

above their laboratory detection limits are presented. All results are in micrograms per liter (µg/1), except for the attenuation parameters, which are in milligrams per liter (mg/1).

Pennsylvania Department of Environmental Protection, Land Recycling and Environmental Remediation Standards Act,

Analysis was completed for total chromium Results are compared to the most prevalent isomer, chromium III Attenuation data collected from field meausrements include DO, pH, REDOX, Specific Conductivity, Temperature and Turbidity Medium Specific Concentrations (November 2001)

FB-1 was submitted for analysis with TW-1. FB-2 was submitted for analysis with TW-3, TW-10, and TW-12.

TB-1 was submitted for analysis with TW-5, TW-6, TW-7, TW-9, and TW-11.

TB -2 was submitted for analysis with TW-3, TW-10, TW-12, and FB -2. TB -3 was submitted for analysis with TW-1 and FB -1. TB-4 was submitted for analysis with TW-8. Environmental Protection Agency Risk Based Concentration (EPA Region III Oct. 8, 2004) Pennsylvania Department of Environmental Protection

Compound was not detected above the detection limit shown

Residential Used Aquifer Residential Non-Use Aquifer

<u>Notes:</u> (1)

(2) -

(3) -

(1)

(5)-

÷≩:____

++ ₊

EPA -RBC -PADEP -

RUA -

RNUA -

MSC -SMCL •

<10 -

Medium-Specific Concentration PADEP Secondary Contaminant Level Not analyzed No standard available

Estimated Value

Rejected value. Result may not be reliable... Estimated Value (by validator) Bold - Compound was detected above its PADEP MSC

Underline - Compound was detected above its EPA RBC or SMCL

ANALYTICAL PARAMETERS ⁽¹⁾				, <u>.</u>	•	SAI	MPLE DE	SIGNATIO	N/ANAL)	TICAL R	ESULTS ^C	2)					EPA RBC	PADEP RUA	PADEP RNUA	PADE
	TW-1	TW-1*	TW-2	TW-3	TW-3*	TW-5	TW-6	TW-7	TW-8	TW-8A**	TW-9	TW-9A***	TW-10	TW-11	T W-12	TW-12+	WATER	MSC ⁽³⁾	MSC ⁽⁹⁾	SMCL
<i>'olatile Organic Compounds:</i> A cetane	<30	NA	18 J	<30	INA	2 J.	<30	<6	<6	<6	<6		<6		56					
Benzene	<5	NA	<u>6</u>	< <u>3</u> 0	NA	<1	<5	<u>0.5 J</u>	<1	~0 <1	~0 <1	<6 <1	<0 <1	<6 <1		NA NA	5,500 0.34	3,700	37,000 500	NSA NSA
Chlorobenzene	<5	NA	270 D	21	NĂ	<1	25	<1	ব	ব	े	यं	×1	₹1	<1	NA	110	100	10,000	NSA
Dichloroethane, 1,1-	<5	ND	< 5	ব্য	1.1	0.4 J	<5	3	<1	<1	<1	<1	<i l<="" td=""><td><i< td=""><td><1</td><td>ND</td><td>800</td><td>27</td><td>270</td><td>NSA</td></i<></td></i>	<i< td=""><td><1</td><td>ND</td><td>800</td><td>27</td><td>270</td><td>NSA</td></i<>	<1	ND	800	27	270	NSA
Dichloroethylene, trans-1,2-	<5	ND	<5	<5	2.1	<1	8	8	<1	<1	S 1	<1	<1	<1	<1	ND	120	100	1.000	NSA
Dichloroethylene,cis-1,2-	28	31.7	4 J	150	147	4	<u>140</u>	39	<1	<1	<1	<1	<1	<1	<1	ND	61	70	700	NSA
Dichloromethane, (Methylene Chloride)	<5	<u>18.3</u>	~ 5	2 J	<u>104</u>	0,41	2 J	0.6 J	09 J	1 J	<1	<1	<1	≺ 1	0.5 J	NA,	4.1	5	500	NSA
E thylbenzene	<5	NA	15	<5	NA	<1	<5	0.5 J	<1	<1	<1	<1	<1	<1	<1	NA	1,300	700	70,000	NSA
Tetrachloroethylene (PCE)	<u>16</u> <5	<u>132</u>	<5	110 <5	<u>65.9</u>	< <u>1</u>	<u>14</u>	2	<u>6</u>	õ	<1	<1	<u>200 D</u>	<1	< 1	ND	0.10	5	50	NSA
T. oluene		ND	< 5	<5	95	<1	\$>	0.4 J	<1	<1	<1	<1	<1	<1	<1	NA	750	1,000	100,000	NSA
Trichloroethylene (TCE)	10	NA	<u>4 J</u>	<u>62</u> NA	NA	<u>0.4 J</u>	<u>19</u>	<u>11</u>	<1	<1	<1	<1	1	21	×1	ND	0.026	5	50	NSA
Trichloropropane, 1,2,3-	NA	<u>3 J</u>	NA		<u>5.7</u>	NA	NA	NĂ	NA	NÁ	NA	NA	NA.	NA	NA	ND	0.005	40	4,000	NSA
V inyl Chloride	<5 <5	NA NA	<5 140	2	NA	<1	<u>4 J</u>	2	<1	<1	<1	<1	<1	₹1	<1	ND	0.015	2002 2002	20	NSA
Xylenes(Total) emivolatils Organic Compounds:	<u></u>	ทก		<٢	NA	<1	<5		<1	<1	<1	<1	<1	<i.< td=""><td><u><1</u></td><td>NA:</td><td>210</td><td>10,000</td><td>180,000</td><td>NSA</td></i.<>	<u><1</u>	NA:	210	10,000	180,000	NSA
Benzoic acid	11 J	NA	<19	<19	NA	<19	11	<19	<19	<20	<19	<19	<19	്ഷക്യ	1. (194 8 - 1	1998 S	100.000	160.000	1.60.000	1.44
Benzyl alcohol	2 J	NA	<10	<9	NA	<9	<10	<10	<9	<10	<19	<10	<19 <9	<19 <9	<19 <9	NA NA	150,000 11,000	150,000 11,000	1 <i>5</i> 0,000 11,000	NSA NSA
Bis (2-Ethylhexyl)phthalate	Ŝj	3 JB	<10	<9	2 JB	<9	31	<10	Ŷ	~10 <10	્રે	<10	<9	<9	<9	1 JB	4.8	6	290	NSA
Dichlorobenzene,1,2-	<10	ND	30	31	52	<9	1j	<10	<9	<10	<9	<10	<9	<9	<9	ND	270	600	60,000	NSA
Dichlorobenzene,1,4-(P-)	<10	ND	<u>2</u> Ĵ	<9 L	11	<9	<10	<10	<9	<10	<9	<10	<9	<9	<9	ND	0.47	75	7,500	NSA
Dichlorophenol, 2, 4	<10	1.1	<10	<9	ND	<9	<10	<10	<9	<10	<9	<10	<9	<9	<9	ND	110	20	20	NSA
Dimethylphenol,2,4-	<10	ND	14	<9	ND	<9	<10	<10	<0	<10	<9	<10	<9	<9	<9	ND	730	730	730,000	NSA
Fluorene	<0.2	NA	<0.2	<0.2	NA	<0.2	<0.2	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	NA	240	1,500	1,900	NSA
Methylnaphthalene, 2-	<10	NA	<10	<9	NA	<9	<10	1.J.	<9	<10	<9	<10	<9	<9	<9	NA	24	730	730	NSA
N aphihalene	<0.2	ND	0.72	<0.2	ND	<0.2	<0.2	0.86	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	ND	6.5	100	30,000	NSA
Phenanthrene	<0.2	NA	<0.2	<0.2	NA	<0.2	<0.2	0.47	<0.2	<0.2	<0.2	<0.2	<0,2	<0.2	<0.2	NA.	NSA	1,100	1,100	NSA
CBs:		NA										÷	a aya			3.424				
Aroclar - 1260	NA	-NA	NA	2.8	<u>1.6</u>	<0,29	ŅΑ	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.033		1.1	NSA
io <i>rganic Compounds:</i> Aluminum	460	470	<200	1,300	1,250	480	480	31,000	48,000	46,000	<200	<200	1,500	7,300	<200	<90	27.000	NICO	TTC: A	200
Antimony	3. 3.2 PT 75. 1	56	<6	1,000 <6	<20	<6	400 <6	<6	<6	<u>-40,000</u> <6	<6	<6	1,500 <6	7,500 <6	<0	<90 <20	37,000 15	NSA	NSA 6,000	200 NSA
Arsenic	<u>59</u> <\$	<u>4</u> J	<8	~	<15	<8	<*	<8	<8	%	्र	<8	<8	<\$	× 8	5 <u>5</u>	0.045	50	50,000	NSA
Barium	<200	15	<200	<200	30.9	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	29,7	2,600	2,000	2,000,000	NSA
Beryllium	<2	<2	<2	<2	0.6 J	<2	<2	ġ	6	7	<2	<2	<2	<2	<2	<2	73	4	4,000	NSA
Cadmium	<4	3.1	<4	<4	1 J	<4	<4	~ 4	<4	. <4	<4	<4	<4	<4	<4	<2.5	18	5	5,000	NSA
Salcium.	18,000	17,500	32,000	21,000	19,600	19,000	6,200	210,000	64,000	65,000	37,000	35,000	30,000	13,000	21,000	19,400	NSA	NSA	NSA.	NSA
Chromium ⁽⁴⁾	<10	3 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	55,000	100	100,000	NSA
Cobalt	<10	7 J	<10	1 10	100	11	14	92	83	84	<10	<10	<10	22	<10	<15	730	730	730,000	NSA
Copper	21	24	<20	87	97	<20	<20	<20	43	42	< 20	<20	<20	< 20	<20	<10	1,500	1,000	1,000,000	NSA
fon	2,500	3,310	4,100	170	170	150	140	100,000	2,700	2,800	<100	<1.00	<100	3,000	330	460	11,000	NSA	NSA	300
	6	бJ	<5	<5	<10	<5	<5	<5	<5	<5	<5	<\$	<ડ-	<5	<5	<10	NSA	5	5,000	NSA
Magnesium	5,600	5,570	б,400	10,000	9,450	9,300	3,400	39,000	34,000	34,000	7,900	7,700	3,100	4,700	7,200	6,730	NSĂ	NSA	NSA	NSA
Vlangane se	200	222	610	<u>1,500</u>	<u>1,520</u>	<u>1,800</u>	<u>2,300</u>	<u>5,600</u>	<u>5,700</u>	<u>5,700</u>	67	67	420	2,800 <0.5	71	90.5	730	NSA	NSA	50
Mercury	<0.5	0.02 J	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	<0,5	<0 <i>5</i>	<0.5	2 3>	<0.5		<0.5	<0.1	NSA	2 . Če	2,000	NSA
Nickel Potassium	41	39 K 000	<20	230	216	<20 2 400	85 0 100	140	120	120	<20	<20	<20	39	<20	<10.	730	100	100,000	NSA
rotassium Sociium	5,900	6,090 122,000	4,300	4,800 •n n.n.	4,810	3,400	2,100	6,700	2,900	2,8001	1,300	1,200	4,800	7,700	2,100	2,000	NSA	NSA	NSA	NSA
Zinc	130,000 160	133,000 222	46,000 67	80,000 39	83,600 42	43,000 <20	280,000. <20	120,000 1,400	14,000 700	13,000 710	1,600 <20	1,500 <20	9,500 52	53,000 200	·5;400 23	4,830 25	NSA 11,000	NSA	NSA 2.000.000	NSA
H:	10.06	NA	6.65	6.88	NA	6.08	8.14	4,44	3.72	3.72	6.7	6.7	- 52 6.72	5.64	23 6.89	25 NA		2,000	2,000,000	5,000 6.5 - 8
						. 0.00 i	0.14			: J.L.L.	្រា	N N N N N N N N N N N N N N N N N N N	13 日元作業 生	ះចណាណ ដែ	i n 89 - I	I NA	275	33 000 33		1 n h . X

Polychlorinated Biphenyls (PCBs), Target Analyte List (TAL) Metals, and pH. Only analytes with concentrations above their laboratory detection limits are presented. All results are in micrograms per liter. Pennsylvania Department of Environmental Protection, Land Recycling and Environmental Remediation Standards Act, Residential Medium Specific Concentrations (November 2001). Analysis was completed for total chromium. Results are compared to the subst prevalent isomer, Chromium III. EPA split samples TW-8A is a duplicate of TW-8 *** TW-9A is a duplicate of TW-9 EPA -Environmental Protection Agency RBC -Risk Based Concentration EPA Region III Oct. 8, 2004 PADEP - Pennsylvania Department of Environmental Protection RUA -Residential Used Aquifer RNUA - Residential Non-Use Aquifer Medium-Specific Concentration MSC -SMCL - PADEP Secondary Contaminant Level Compound was not detected above the detection limit shown <10 -Underline Compound was detected above its EPA RBC Compound was detected above its PADEP MSC or SMCL Bold -NA -N ot analyzed ND -No analytes within this compound group were detected above their respective laboratory detection limits. NSA -No standard available E stim aled concentration below laboratory reporting limit D - Result was obtained from a different dilution than other analytes. С. н. С. н. Analyte also present in the method blank L Biased low by the data validator.



TABLE 29

SUMMARY OF ACT 2 PLUS ANALYTICIAL RESULTS FOR GROUND WATER SAMPLES COLLECTED FROM THE TEMPORARY OVERBURDEN WELLS

SDG 6 INITIAL EVENT

	4			
			1) 1111 - 7, 11 - 9, 12 - 9, 12 - 12 - 9, 12 - 12 - 12 - 12 - 12 - 12 - 12 - 12	
			ur Juliant fai jaurite j	
	REV.	DESCRIPTION	DATE	B
	DWG FILE HA5220	Exhibit D		
(AR) Penn E&R	DESIGNED BY	Uniform Environmental Covenant	Act (UEC	CA)
Environmental & Remediation, Inc.	DRAWN BY MTH	Ground Water Analytical Results	Summar	у
ST EFFECTIVE ENVIRONMENTAL SOLUTIONS	CHKO BY	BRLP/Waterside Site		
2756 BERGEY ROAD, HATFIELD, PA 18440	DATE OCT. 3, 2008	2375 State Road, Bensalem, Bucks	County,	P
(215) 997~9000	GRAPHIC SCALE	FIGURE NO.	SHEET NO.	
59 NORTH GATE DRIVE, SUITE 400, WARRENDALE, PA 15086 (724) 934–3530		AS SHOWN	2 OF	3

TABLE 30

SUMMARY OF ACT 2 PLUS ANALYTICIAL RESULTS FOR GROUND WATER SAMPLES COLLECTED

										nga na mang na kapa sa k			-									
ANALYTICAL PARAMETERS ⁰⁾							SAL	1PLE DES	IGNATIO	ON/ANAI	YTICAL	RESUL T	5 0		•				EPA RBC TAP	PADEP. RUA	PADEP RNUA	PADEI
ANALI IICAL FARAMETERS	MW-1S	MW-1D	MW-25	MW-2D	MW-3	MW-4	MW-4D	MW-4D*	MW-5	MW-6	MW-7	1/IW-9	MW-10	MW-10*	MW-11-D	MW-12D	MW-13**	UST- MW-1	WATER	MSC®	MSC ⁰⁹	SMCL
Volatile Organic Compounds:	1993	a i		8 m.		n al	4 <u>26</u> 3		105.044	64.4	11. MA	aa.:						24			-	4444
Benzene Bromomethane		×1 ×1	<1 <1	<1 <1	<u>10</u> <5	<u>8 J</u> <20	<20 <20	NA NA	<1 <1	<1 <1	N N N	≺1 ≺1	<1 <1	NA NA	<2 <2	0.6J 0.5J	<1 <1	<1 <1	0,34 8,5	5 10	500 1,000	NSA NSA
Chlorobenzene	0.4 J	0.2 J	<1	41	2 J	<20	<20	NA	<1	<1	<1	4 1	٤Í	NA	<2	2	<1	<1	110	100	10,000	NSA
Chl oroform	<1	<1	<1	<1	<5	<20	<20	NA	<1	<]	<1	<1	<1	NA	<u>1</u>]	<1	<1	<1	0.15	100	1,000	NSA
Dichloroethane, 1,1-	3	∭	4	0.7 J	2 J	<20	<20	ND	<1	<1	×1	₹1	*1	ND	<2	2	<1	<1	800	27	270	NSA
Dichloroethylene, 1,1-	0.91	<1 0.2 J	् दा	<1 <1	≤5	<20	50 10 J	NA 16 J	<1 <1	<1	×1.	<1 <1	<1 ≺1	NA ND	<2 <2	ເ<1⊴	i≪1 i≈1	<1 <1	350 120	100	70 1,000	NSA NSA
Dichloroethylene, trans-1,2- Dichloroethylene,cis-1,2-	0.7 J <u>62 D</u>	14	-1	0.7 J	1 J 6	8 J <20	1,800 D	16 J 1,720	<] <]	<1 <1	<1 <1	0.6 J	<1 <1	ND	<u>75</u>	20	<1 <1	<	61	70	700	NSA
Dichloromethane, (Methylene Chloride)	<1	<1	<1	<1	<5	<20	<20	NA	<1	<1	<1	<1	0.5 J	NA	2 JB*	290 D	<1	<1	4.1	5	500	NSA
Dichloropropane, 1.2-	<1	<1	<1	<1	<5	<20	<20	NA	0.3 J	< <u>1</u>	<1	<1	< <u>1</u>	NA	<2	<1	<1	<1	0.16	5	50	NSA
Ethylbenzene	<1	<1	<1	્રે	<5	<20	<20	NA	<1	<1	<1	<1	<1	NA	<2	0.9 J	~1	<1	1,300	700	70,000	NSA
Methyl Chloride (Chloromethane)		1	<1	×1	×5	<20	< 20	NA	<1	: *1	*1	° ≈1 ,	~1	NA.	2 J	<1	i ≺1 .	<1 30 € 1	190	3	300	NSA
Methyl Ethyl Ketone (2-Butanone)	<6	<6	<6	<6	<30	<120 <120	<120	NA NA	<6	<6	< 6	<6	≮6 ≺6	NA	<15	2J	<6 <6	< 6	7,000	2,800 190	280,000 19,000	NSA NSA
Methyl Isobutyl Ketone (4-metyl-2-pentanone) Methyl tert-Butyl Ether (MTBE)	<6 <2	<6 <2	<6 <2	<6 <2	<30 <10	<40	<120 <40	NA NA	<6 <2	<6 <2	<6 <2	<6 <2	~0 ~2	NA NA	<15 2	0.7 J 0.5 J	<2	<6 <2	6,300 2.6	20	20	NSA
Tetrachloroethylene (PCE)	<	10	2	<1	<5	<20	<u>680</u>	721	<1	<1	440 D	<1	<u>40</u>	35	8	4	<1	<]	0.10	5	50	NSA
Trichloroethylene (TCE)	3	4	2	<1	<5	<20	380	405	₹Ì	<1	<1	<1	0.4 J	ND	6	3	<1	<1	0.026	5	50	NSA.
Trichloropropane, 1,2,3-	NA.	NA	NA.	NA	NA	NA	NA.	<u>58 J</u>	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	0.005	40	4,000	NSA
Vinyl Chloride		<u>0.8 J</u>	2	*1	<u>2J</u>	<20	<u>850</u> <20	718 NA	<1	<1	×1	ি ≪ 1 ১৪ ফ	≈1	ND	<u>11</u> <2	5	<1	~1	0.015	2	20	NSA
Xylenes (Total)	<u><1</u>	<u></u> \$1	<1	s1	<5	<20	<u></u> <20	NA.	<1	<1	<u>s</u> 1	<1	NA	<2	7	<1	<1	210	10,000	180,000	NSA
Semivolatile Organic Compounds: Benzoic acid	<19	S19	<20	<20	<23	<24	<19 L	NA	≈19	<19	<25	<20	<20	NA	65	2J	<19	<19	150,000	150,000	150,000	NSA
Benzylalcohol	<10	<10	<10	<10	<11	<10	<9L	NA.	<10	<10	<10	<10	<10	NA	12 J	<9	<9	<9	11,000	11,000	11,000	NSA
Bis-(2-Ethylhexyl)phthalate	≤10	<10	3JB*	<10	<u>5JB*</u>	<10	<9 L	<u>37 B</u>	2 J	<10	3JB*	<u>7</u> .j	<10	1 JB	<14	2 J	<9	<9	4.8	6	290	NSA
Chloro-3-methylphenol,4-	< 10	<10	<10	<10 R	<11	< 10	1J	2 J	<10	<10	<10	<10	<10	ND	<14	<9	<9	<9	NSA	180	180	NSA
Cresol,p- (Methylphenol, 4-)	<10	<10.	<10	<10 R	<11	<10	6 J	12 Y	<10	<10	<10	<10	~1 0	ND	<14	<9	<9	<9	. 180	180	510	NSA
Dichlorobenzene,1,2-	<10	<10	<10	<10	220 D	6 J	3 J	7. 3 J	<10	<10	<10	<10	2J ≪10	4 J	<14	<9	<9	<9 <9	270 730	600 730	60,000 730,000	NSA NSA
Dimethylphenol,2,4 Di-n-butylphthalate	<10 <10	<10 <10	<10 <10	<10 R <10	<11 <11	<10 <10	2 J <9 L	NA	<10 <10	<10 <10	<10 R <10	<10 <10	<10	ND NA	<14 <14	<9 1 J	<9	29	3,700	3,700	400,000	NSA
Fluorene	<0.2	< 0.2	<0.2	<0.2	<0.2	<0.2	<0.2L	NA	<0.2	<0.2	<0.2	< 0.2	<0.2	NA	<0.3	0.25	<0.2	<0.2	240	1,500	1,900	NSA
Naphthalene	<0.2	<0,2	<0,2	<0.2	<0.2	<0.2	0.4 L	11	≺0.2	<0.2	<0.2	<0.2	<0,2	ND	<0,3	0.57	<0,2	<0.2	6.5	100	30,000	NSÁ
Phenol.	<10	<10	<10	<10 R	<1 1	₹10	<9		<10	≮10	<10 R	<10	<10	ND	<1 4	<9	<9	<9	11,000	4,000	400,000	NSA
Chlorophenol,2-	<10	< 10	<10	<10 R	1]	< 10	\$	1 J	*19	<10	<10 R	<10	~1 0	ND	<14	4 9	<9	<9 <9	30	40	40	NSA
Cresol, o- (Methylphenol, 2-)	<10 <10	<10 <10	<10 <10	510	<11 <11	<10 <10	<9 <9 L	1.7	<10	<10 <10	<10 <10	<10 <10	<10 <10	为 知	<14 <14	<9 <9 L	<9 <9	<9	1,800 0.0096	180 0.13	180,000 0.55	NSA NSA
Bis(2-Chloroethyl) ether Phenanthrene	<0,2	<0.2	<0.2	<10 <0.2	<0.2	<0.2	<0.2L	<u>4 J</u> NA	<10 <0.2	<0.2	<0.2	<0.2	<0.2	NA	<0,3	0.3	<0.2	<0.2	NSA	1,100	1,100	NSA
PCBs:												6 3 4 5 4 5 4 5 4	- PERSON	017172-179) (*) (7							2742174767 2744474767
	NA	NA.	NA	NA	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		ारकः	्राहरण्ड,	NSA
Inorganic Compounds:	and a stand and									and good a		1		1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	pr #** = #**		No	· · · · · · · · · · · · · · · · · · ·				11 - 11 - 1 1 - 11 - 11 - 11 - 11 - 11
Aluminum	1,500	<200	3,000	<200	7,000	800	4,500	4,520	1,200	15,000	4,600	<200	3,500	3,390	420	<200	440	<200	37,000	NSA.	NSA	200
Antimony	<6	<6	<6	<6	<6	<6	<6 ~2000	<20	<6	<5	<6	്ക	<6	<20	.<6 ≥200	<6	<6	<6	15	2,000	6,000	NSA NGA
Barium Beryllium	<200 <2	<200 <2	≺200 ≺2	<200 <2	<200 5	<200 <2	<200 31	99.1 31.8	<200; <2	<200 <2	<200 <2	<200 <2	<200 <2	41.3 2.2	<200 <2	<200 <2	<200 <2	<200 <2	2,600 73	2,000	2,000,000	NSA NSA
Calcium	14,000	26,000	11,000	17,000	6,800	25,000	110,000	106,000	1,200	5,400	70,000	27,000	18,000	17,200	45,000	240,000	16,000	52,000	NSA	NSA	NSA	NSA
Chromium ⁽⁺⁾	<10	<10	<10	<10	<10	<10	<10	3J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	55,000	100	100,000	NSA
Çobalt	20	<10	17	<10	<10		68	67	<10	<10	<10	<10	15	10 J	63	120	19	<10	730	730	730,000	NSA
Copper	<20	<20	<20	<20	<20	160 22	<20	<10	<20	<20	<20	<20	<20	<10	<20	<20	<20	<20	1,500	1,000	1,000,000	NSA
Iron	280	26,000	350	7,300	8,800	230	<u>110,000</u>	112,000	5,000	<100	<100 L	200	<u>15,000</u>	<u>15,100</u>	3,000	140,000	<100	<100	11,000	NSA	NSA	300
Lead	<5		<5 5 600	<5	<5	6	<5	<10	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	NSA	5	5,000	NSA
Magnesium	7,500	9,900	5,500	5,400 490	7,100	19,000	47,000	44,000	<1,000 500	12,000	19,000	8,000 170	6,900 <u>7,900</u>	6,770 <u>8,170</u>	17,000 <u>2,100</u>	92,000 <u>8,300</u>	11,000 730	18,000 <15	NSA 730	NSA NSA	NSA NSA	NSA 50
Manganese Nickel	1,500 24	<u>1,000</u> <20	2,000 29	490 <20	<u>1,500</u> 37	<u>13,000</u> 540	<u>7,300</u> 550	<u>7,640</u> 528	<20	<u>2,700</u> 42	<u>1,300</u> <20	<20	<20	<u>0,170</u> 5 J	<u>2,100</u> 60	120	34	<20	730	100	100,000	NSA
Potassium	2,500	3,500	3,600	3,400	10,000	8,600	11,000	10,600	8,400	5,700	10,000	1,900	12,000	11,500	14,000	20,000	1,800	3,000	NSA	NSA.	NSA	NSA
Selenium	<20	<20	<20	<20	<20	<20	<20	6 J	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	180	50	50,000	NSA
Sodium	87,000	17,000	89,000	8,400	390,000	530,000	120,000	137,000	220,000	37,000	59,000	6,300	22,000	24,100	55,000	140,000	25,000	9,500	NSA	NSA	NSA	NSA
Thallium	<10	<10	<10	<10	<10	<10	<10	<u>20 J</u>	<10	<10	<10	<10	<10	<u>10 J</u>	<10	<10	<10	<10	2.6	2	2,000	NSA
Vanadium	<10	≪10	<10	<10	<10	<10	<u>170</u> 26	<u>170</u>	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	37	260	260,000	NSA
Zinc	<20	60	<20	<20	<20	75		32	<20	59	35	36	21	24	43	280	<20	25	11,000	2,000	2,000,000	5,000
9 H :	6.1	5.5	6.3	6.7	6.9	6.9	5.87	NA	7,2	5.8	5.9	6.2	6.14	NA	7.18	6.28	5.98	6.71	<u> </u>	2 <u>77-3</u> 3		6.5 - 8.

Notes: (1) Samples were analyzed for Target Compund List (TCL) Volatile Organic Compounds (VOCs), TCL Semivolatile Organic Compounds (SVOCs), Polychlorinated Biphenyls (PCBs), Target Analyte List (TAL) Metals, and pH. Only analytes with concentrations above their laboratory detection limits are presented.

(2)-	All results are in micrograms per liter
G)-	Pennsylvania Department of Environmental Protection, Land Recycling and Environmental Remediation Standards Act,
	Residential Medium Specific Concentrations (November 2001)
¢)-	Analysis was completed for total chromium. Results are compared to the most prevalent isomer, Chromium III.
* _ ** -	EPA split samples
**	Background Samples
EPA -	Environmental Protection Agency
RBC -	Risk Based Concentration EPA Region III Oct. 8, 2004
PADEP -	Pennsylvania Department of Environmental Protection
RUA -	Residential Used Aquifer
RNUA -	Residential Non-Use Aquifer
MSC -	Medium-Specific Concentration
SMCL -	PADEP Secondary Contaminant Level
<10 -	Compound was not detected above the detection limit shown
<u>Underline</u> -	Compound was detected above its EPA RBC
Bold -	Compound was detected above its PADEP MSC, or SMCL
NA -	Not analyzed
ND -	No analytes within this compound group were detected above their respective laboratory detection limits.
NSA -	No standard available
Ĵ =	Estimated concentration below laboratory reporting limit
B -	Analyte also present in the method blank
Y -	Probably 3-methylphenol or a mixture of 3- and 4-methylphenol

FROM THE MONITORING WELLS

SDG 5 INITIAL EVENT

ANALYTICAL PARAME Volatile Organic Compounds: Acetone Benzene Carbon Disulfide Chlorobenzene Chloroform Dichloroethane, 1,1-Dichloroethylene, 1,1-Dichloroethylene, cis-1,2-Dichloromethane, (Methylene Chlo Dichloropropane, 1,2-Ethylbenzene Tetrachloroethylene (PCE) Toluene Trichloro ethylene (TCE) Vinyl Chloride Xylenes (Total) Semivolatile Organic Compounds: Benzo(a) anthrac ene Bis(2-Chloroethyl) ether Bis-(2-Ethylhexyl)phthalate Chrysene Dichlorobenzene,1,2-Dichlorobenzene,1,3-Dichlorobenzene,1,4-(P-) Dimethylphenol,2,4-Fluoranthene Naphthal ene Nitrophenol,2-Nitrophenol,4-Phenanthrene Pyrene Trichlorobenzene,1,2,4-PCBs: Aroelor - 1260 Inorganic Compounds: Aluminum Calcium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Sodium Zinc pH:

Notes:	
	Samples were analyze
	Compounds (SVOCs)
	concentrations above t
2) -	All results are in micro
3) -	Pennsylvani a Departr
	Residential Medium S
4) -	Originally reported by
PA -	Environmental Protect
BC-	Risk Based Concentration
ADEP -	Pennsylvania Departm
RUA -	Residential Used Aqui
NUA -	Residential Non-Use
ASC -	Medium-Specific Con
MCL -	PADEP Secondary C
:10 -	Compound was not de
Jnderline -	Compound was detect
3old -	Compound was detect
1A -	Not analyzed
ISA -	No standard available



COST EFFECTIV 2755 BER

359 NORTH GATE I

TABLE 31

SUMMARY OF ACT 2 PLUS ANALYTICIAL RESULTS FOR GRAB GROUND WATER SAMPLES JANUARY 2004

rers	DESIGN	SAMPLE ATION/ANAI RESULTS ⁽²⁾		EPA RBC TAP	PADEP	PADEP	PADEP SMCL
	GG1	GG-2	GG-3	WATER	RUA MSC ⁽³⁾	MSC ⁽⁹⁾	SMCE
	11	3 J	19	5,500	3,700	37,00 0	NSA
	<1	<1		0.34	5	500	NSA
	0.4 J	<1	<2	1000	1,900	1,900	NSA
		<1	<u>€</u> <2. 3 <2	110	100	10,000	NSA
	<1 <u>1</u> <1	<1 <1	<2	0.15	100	1,000	NSA
	<1	<1	51	800	27	270	NSA
	<1	<1	1 J	350	7	70	NSA
	<1	0.5 J	3	61	70	700	NSA
ide)	<1		2 J	4.1	5	500	NSA
nan tiyata k	<1 <1	<1 <1		0.16	5	50	NSA
	<1	<1	2 J 65	1,300	700	70,000	NSA
	<1	<u>0.4 J</u>	<u>2 J</u>	0.10	5	50	NSA
	<1	<1	0.8 J	750	1,000	100,000	NSA
	<1	<1	<u>2</u>	0.026	5	50	NSA
	<1	<1	<u>0.8 J</u>	0.015	2	20	NSA
nananan sama sama sa	<1	d.	66	210	10,000	180,000	NSA
	e and the define the		direction and	and a star of the	1.00 March 1		and an and a second
	<u>0.21</u>	<0.2	<0.2	0.092	0.9	11	NSA
	<10	<10	<u>7 J</u>	0.0096	0.13	0.55	NSA
	<10	2 Ј	<10	4.8	б	290	NSA
	0.24	<0.2	<0.2	9.2	1.9	1.9	NSA
	<10	<10	<u>470 D</u>	270	600	60,000	NSA
	<10	<10	7 J	18	600	600	NSA
	<10 <10	<10 <10	<u>33</u> 21	0.47 730	75 730	7,500	NSA NSA
	10 min 20, 70 min 4	<0.2	<0.2		260	730,000 260	NSA
	0.33 0 <i>.9</i>	<0.2	1.2	1,500 6.5	100		
	<10	<10	1.2 2 J	NSA	29 0	30,000 820	NSA NSA
	<25	<24	4 J	NSA	60	60	NSA
	<0.2	<0.2	0.32	NSA	1,100	1,100	NSA
	0.56	<0.2	<0.2	180	130	130	NSA
	<10	<10	2 J	7.2	70	70	NSA
			n new arts a		·		نية 4 ^م در بن ين
	<u>0:5</u>	NA	NA	0.033	1.1	1,1	NSA
	<200	<200	15,000	37,000	NSA	NSA	200
	25,000	14,000	20,000	NSA	NSA	NSA	NSA
	<10	<10	45	730	730	730,000	NSA
	<20	<20	38	1,500	1,000	1,000,000	NSA
	<100	<100	36,000	11,000	NSA	NSA	300
	<5	<5	10	NSA	5	5,000	NSA
	5,300	3,900	15,000	NSA	NSA	NSA	NSA
	150	960	<u>6,100</u>	730	NSA	NSA	50
	<0.5	<0.5 ⁽⁴⁾	2.6	NSA	2	2,000	NSA
	<20	<20	73	730	100	100,000	NSA
	7,000	6,900	34,000	NSA	NSA	NSA	NSA
	23,000	150,000	94, 0 00	NSA	NSA	NSA	NSA
	<20	<20	2,000	11,000	2,000	2,000,000	5,000
ganga ggyathan na mganagan	8.1	7.3	8.1	n saaraan harana	Samananan Kalenderananan (In the second second second second	noonna/ing Cugo aguing

zed for Target Compund List (TCL) Volatile Organic Compounds (VOCs), TCL Semivolatile Organic s), Polychlorinated Biphenyls (PCBs), Target Analyte List (TAL) Metals, and pH. Only analytes with e their laboratory detection limits are presented.

icrograms per liter.

rtment of Environmental Protection, Land Recycling and Environmental Remediation Standards Act, Specific Concentrations (November 2001).

Ą.

by lab as 1.5 micrograms per liter, but was corrected to <0.5 in report # F-32-1-11612

J -

D -

tection Agency ation EPA Region III Oct. 8, 2004 artment of Environmental Protection

quifer

Aquifer

ncentration

Contaminant Level

detected above the detection limit shown

cted above its EPA RBC

ected above its PADEP MSC, or SMCL

estimated value. Result was obtained from a different dilution than other analytes.

				1 1	
	2				
	°[
	REV.	DESCRIPTION		DATE	BY
	DWG FILE HA5220	Exhi	oit D		
Penn E&R	DESIGNED BY	Uniform Environmenta	Covenant /	Act (UEC	A)
vironmental & Remediation, Inc.	DRAWN BY	Ground Water Analyti	cal Results	Summary	,
VE ENVIRONMENTAL SOLUTIONS	CHRO BY	BRLP/Wat	erside Site		
RGEY ROAD, HAIFIELD, PA 19440	DATE OCT. 3, 2008	2375 State Road, Bens	alem, Bucks	County,	PA.
(215) 997-9000	GRAPHIC SCALE	A meri (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	FIGURE NO.	SHEET NO .:	
DRIVE, SUITE 400, WARRENDALE, PA 15086 (724) 934–3530		AS SHOWN		3 OF	3
RIGHTED THIS DRAWING IS A TRADE SECRET AND O	ALY ENTRUSTED TO TH	E RECEIVER FOR HIS PERSONAL USE. WITHOUT	THE SIGNED WRITTEN	CONSENT OF PE	NN

THIS DRAWING IS COPY RIGHTED THIS DRAWING IS A TRADE SECRET AND ONLY ENTRUSTED TO THE RECEIVER FOR HIS PERSONAL USE. WITHOUT THE SIGNED WRITTEN CONSENT OF PENN ENVIRONMENTAL & REMEDIATION, INC., IT MUST NOT BE COPIED NOR MADE AVAILABLE TO THIRD PARTIES, INCLUDING COMPETITORS, NOR MADE ACCESSIBLE TO SUCH PARTIES. ANY ILLEGAL USE BY THE RECEIVER OR THIRD PARTIES FOR WHICH HE IS RESPONSIBLE CAN CONSTITUTE A CAUSE FOR LEGAL ACTION. THIS DRAWING MUST BE RETURNED ON REQUEST OF THE COMPANY.