

3. CEA Boundaries and VI Pathway Status: Year of tax map used: _____

Are there volatile contaminants in the CEA? Yes No
 Is there LNAPL currently found in the CEA? Yes No

For CEA revisions only:

- Check if CEA Boundary has changed (*See instructions*)
- Check if Block and Lot numbers have changed (*See instructions*)

List the block(s) and lot(s) included in the areal extent of the CEA and check the appropriate boxes:

Block	Lot(s)	Check if off-site	Check if VI pathway was evaluated *	Check if VI pathway status is indeterminate *
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check if attaching an Addendum to list additional Blocks/Lots and associated information. (*see instructions*)

* Follow instructions for parcels where the vapor intrusion (VI) pathway was evaluated and the status is indeterminate.

Direction of ground water flow: _____ (*If multiple water bearing zones exist within the CEA and/or there is no predominant flow direction, see instructions.*)

Vertical depth of CEA: _____ (ft bgs) **and** _____ (msl).

Horizontal extent of CEA: _____ Indicate units: acres or square feet

Name(s) of the affected Geologic Formation(s)/Unit(s) (*see instructions if multiple formations/units affected*):

Narrative description of proposed CEA boundaries:

4. Projected Term of CEA: (*Based on modeling/calculations in the fate and transport description*)

Proposed Duration in Years: _____ Anticipated Expiration Date: _____

or Indeterminate (*Review instructions before selecting "Indeterminate" for the CEA duration.*)

5. ATTACH AND/OR SUBMIT THE FOLLOWING: (*see instructions for additional information/requirements*)

Exhibit A: Site Location Maps – Based on USGS Quadrangle Map;

Exhibit B: CEA Map and Cross Section Figure – See N.J.A.C 7:26C- 7.3(c)1 and 2 and instructions regarding what is required to be included on the map and the cross-section figure.

Exhibit C: GIS Deliverables – CEA Boundary Extent Map. The CEA Boundary Extent Map shall be submitted via email to srpgis_cea@dep.nj.gov. (*See the instructions for detailed GIS deliverable requirements.*)

Identify format of CEA Boundary Extent Map being submitted: Shape File CAD File N/A

If there is a CEA map already on NJ-GeoWeb, does it need to be revised? Yes No N/A

SECTION C. CURRENT GROUND WATER USE DOCUMENTATION

1. Indicate the year of the most recent well search completed per N.J.A.C. 7:26E-1.14: _____
2. If this Fact Sheet form is for a revised CEA or an existing CEA with no changes, have new wells been installed since the CEA was established? Yes No N/A
3. Are there any pumping wells (e.g., potable, industrial, irrigation or recovery wells) within the foot print of the CEA? Yes No
If "Yes" list/attach list of the type and status of any pumping well(s) within CEA:

SECTION D. WELL RESTRICTION INFORMATION

Certain well restrictions relevant to potable ground water use, such as "Double Case Wells", "Sample Potable Wells", and "Evaluate Production Wells", are consistently set within the boundaries of all CEAs established by the NJDEP in Class I and II-A areas (see instructions).

1. Are there any other site-specific well restrictions relevant to potable ground water use that should be set within or near the boundaries of the proposed CEA? Yes No
If "Yes", describe below any such site-specific well restrictions proposed for this CEA:

SECTION E. PUBLIC NOTIFICATION REQUIREMENTS

1. Indicate which of the following entities have been notified pursuant to N.J.A.C. 7:26C-7.3(d) and the dates each notification was sent. (check all that apply)
 - Municipal and county clerk(s) Dated mailed: _____
 - Local, county or regional health department(s) Dated mailed: _____
 - Designated County Environmental Health Act agency (if applicable) Dated mailed: _____
 - County Planning Board Dated mailed: _____
 - Pinelands Commission (if applicable) Dated mailed: _____
 - Owners of real property overlying CEA foot print Dated mailed: _____

Information required to be submitted with CEA per ARCS 7:26C

1. Copies of required maps are attached as **Figure 1, 2, 3, 4 and 5** and include site location map, AOC map, CEA Boundary Extent map and two cross sections, respectively.

2. How horizontal and vertical extent predictions were performed.

Since the source of the most mobile compounds were removed 17 years ago and groundwater analytical data from monitoring wells indicates the plume is stable and in some locals shrinking, extent predictions were made using professional judgment that concluded:

- the plume will only decrease in size with time.
- The horizontal extent is equal to the current extent of the plume (253 ft in north to south direction and 273 ft in east to west direction).
- The vertical extent is estimated at 30 feet below grade, which is 10 feet below a clay layer detected at a depth of 20 feet below grade.

Data that supports this conclusion is highlighted below:

- Groundwater analytical data from down gradient monitoring wells MW 3 and MW 8 indicate the concentrations of benzene, MTBE and TBA have decreased to below the standard with time as highlighted below:

Contaminant	Concentration in 2009 (ug/l)	Concentration in 2019 (ug/l)
Benzene MW 3	1.7	<0.43
MTBE MW 3	2000	65.4
TBA MW 3	6300	64.3
Benzene MW 8	32	<0.43
MTBE MW 8	280	0.75 J
TBA MW 8	340	<5.8

Groundwater analytical data from 20 monitoring wells is summarized on individual well forms that show the concentrations in most wells have decreased over time (**Table 1**).

- Nine (9) monitoring wells have been installed along the periphery of the plume to evaluate horizontal extent and contaminant transport (MW 9 through MW 18 and MW 20). Groundwater samples from those well that were collected over time have indicated that the concentrations of benzene, MTBE and TBA in those wells were always below the GWQS, which indicates the plume is not expanding. It also indicates the plume started to shrink around 2009 when the concentrations in MW 8 (the most down gradient impacted well) began to decrease.
- Although only four sampling events were available since remedial efforts stopped in July 2003 and R-squared values were low, concentration versus time plots for all volatile organic

compounds that have had concentrations above the GWQS at one time (MW 1 through MW 8 & RW 1) do show a decreasing trend over time with the exception of the following:

- Benzene in MW 4 increased.
- BTEX, MTBE and TBA in RW 1 increased likely due to an elevated water table.

The concentration versus time series plots are attached.

- Trend analysis using the Mann Kendall Statistical Test indicates:

The concentrations of BTEX, MTBE and TBA is either stable or decreasing in most wells. A summary of the Mann Kendall analysis is presented below and snap shots of the Mann Kendall spreadsheets are attached.

Well ID	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA
MW 1	Stabile	Non-stabile	Stabile	Stabile	Decreasing	Decreasing
MW 2	Stabile	Decreasing	Stabile	Stabile	Stabile	Decreasing
MW 3	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Non-stabile
MW 4	Non-stabile	Decreasing	Decreasing	Non-stabile	Decreasing	Decreasing
MW 5	Stabile	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
MW 6	Decreasing	Non-stabile	Non-stabile	Non-stabile	Non-Stabile	Decreasing
MW 7	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
MW 8	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Non-stabile
RW 1	Non-stabile	Non-stabile	Non-stabile	Non-stabile	Non-stabile	Stabile

- Based on slug test performed at the site in four wells the hydraulic conductivity of the subsurface aquifer ranges from 3.34 ft/day at the up gradient northeast end of the site (which is characteristic of a fine sand) to an average of 0.12 ft/day in the down gradient south west end of the site (which is characteristic of silt, clay and mixtures of sand, silt and clay). The low hydraulic conductivity of the material at the southwest end of the site has limited the horizontal migration of the contaminants. The slug test data is summarized below and printout of the slug test analysis were presented to the NJDEP in a *Preliminary Site Investigation/Remedial Action Report*" dated May 1,2002.

Rising Head Permeability Test	
Location	ft/day
MW 1	3.339
MW 2	0.0599
MW 3	0.291
MW 4	0.007704
Geometric Mean	0.1455

- Based on borings installed at the site the subsurface material at the up gradient northeastern part of the site is composed of silty clays to a depth of 12 feet underlain by fine to medium sands with thin interbedded silty and sandy clays to a depth of 20 feet, which is underlain by a plastic clay of undetermined thickness. The material from the middle of the site to the southwest is mainly a silty clay to a depth of approximately 20 feet, which is also underlain by a plastic clay. The clayey nature of the material at the southwest end of the site has limited the

horizontal migration of contaminants in the subsurface and the clay layer at a depth of 20 feet below grade will limit the vertical extent of the impacts.

- **Figure 3 in Appendix Q** shows the proposed CEA boundary. The CEA boundary is based on two rounds of groundwater data collected in 2016 and 2019 from twenty (20) monitoring wells.
- **Figures 6 in Appendix Q** is a water table gradient map showing the inferred direction of groundwater flow on 5/21/19, which indicates the main direction of groundwater flow is towards the south and southeast, which is in line with the topographic gradient.

2. How the CEA duration was estimated.

The duration was estimated by performing regression analysis on groundwater data collected over time from individual wells to develop site specific degradation rates for the contaminants of concern. Then using that data in the formulas below:

Half life in days = $t_{1/2} = 0.693$ divided by degradation rate

$$\text{Duration of CEA} = \frac{-t_{1/2} [\ln C/Co]}{.693}$$

where :

$t_{1/2}$ is the half life in days

C: final concentration = ground water quality standard

Co: Initial concentration

Based on site specific degradation rates for the most mobile contaminants of concern the duration of the plume has been calculated to be above standards for 36.5 more years (which will be approximately 48 years after the source has been removed - year 2056). The regression analysis and duration calculations are summarized below and are attached.

MW ID	Duration for benzene to reach GWQS from 5/22/19 (years)	Duration of MTBE to reach GWQS from 5/22/19 (years)	Duration of TBA to reach GWQS from 5/22/19 (years)
MW 1	36.53	Will likely reach standard in next few years	May have reached the standard
MW 2	15.13	Reached standard in last 2 samples	Will likely reach standard in next few years
MW 3	Reached standard in last 2 samples	Reached standard in last sample	Reached standard in the last sample
MW 4	Not determined because concentrations increased in last sample	Reached standard in last 2 samples	Reached standard in last 2 samples
MW 5	Reached standard in the	Never was above the	Reached standard in

	last sample	standard	last 3 samples
MW 6	9.73	Reached standard in last 2 samples	Reached standard in last 2 samples
MW 7	16.83	Reached standard in last sample	Reached standard in the last sample
MW 8	Reached standard in last 2 samples	Reached standard in last 2 samples	Reached standard in last 2 samples
RW 1	Not determined because concentrations increased in last sample	Not determined because concentrations increased in last sample	Not determined because concentrations increased in last sample

Since the longest time to reach the GWQS calculated to be at MW 1 and that duration is greater than 30 years additional remediation may be conducted at MW 1 to reduce the cleanup time.

3. That the vapor intrusion pathway was included in the fate and transport description, if applicable.

The compounds that had concentrations above the Ground Water Quality Screening Levels for Vapor Intrusion (GQSLVI) include benzene, ethylbenzene, xylenes and naphthalene. The inferred distribution of those compounds are shown on **Figures 60, 61, 63 and 71 in the RIR** (generated from the last sampling event) indicate the onsite building and convenience store located adjacent to the site are within the 30 foot trigger distance for benzene and ethylbenzene and that the onsite building is also within the 30 foot trigger distance for xylenes and naphthalene. Since the facility uses the contaminants of concern in its operations collecting VI samples at the onsite building was not conducted. The VI pathway will need to be addressed in a deed notice to ensure public health will be protected in the future if the land use or facility operations change. To evaluate the VI pathway at the adjacent property On-Site contacted the LSRP on record for the 1674 RT 130 site (which has a PCE problem) and secured summary tables and sample location figures of sub-slab soil gas samples collected at the convenience store. That data indicated the only compounds above the standards were PCE and TCE and that the concentration of gasoline related compounds were below the sub-slab soil gas screening levels. In light of that information the LSRP for the NBG site concluded the VI pathway has been evaluated and is not a concern at the adjacent property. The sub-slab soil gas data secured from the adjacent site is presented in **Appendix J of the RIR**.

4. That a site specific evaluation was conducted regarding how changes in property use or conditions above the CEA area could affect the fate and transport of the groundwater contamination or of vapors emanating from the plume.

If the land use changes to residential the VI pathway will need to be reevaluated and preconstruction activities should include a vapor barrier within the footprint of the proposed building structures. In addition, if the unpaved area within the CEA are paved that could result in a decrease of infiltrating water which in turn will increase the soil gas air space (i.e., dry out the soil), which in turn can increase the vapor phase transport to groundwater by vapor phase diffusion and advection. Therefore, if areas are paved where the soil concentrations are greater than the default impact to groundwater screening levels 4 to 8 quarters of groundwater data will need to be performed to demonstrate the concentrations in groundwater are still decreasing.

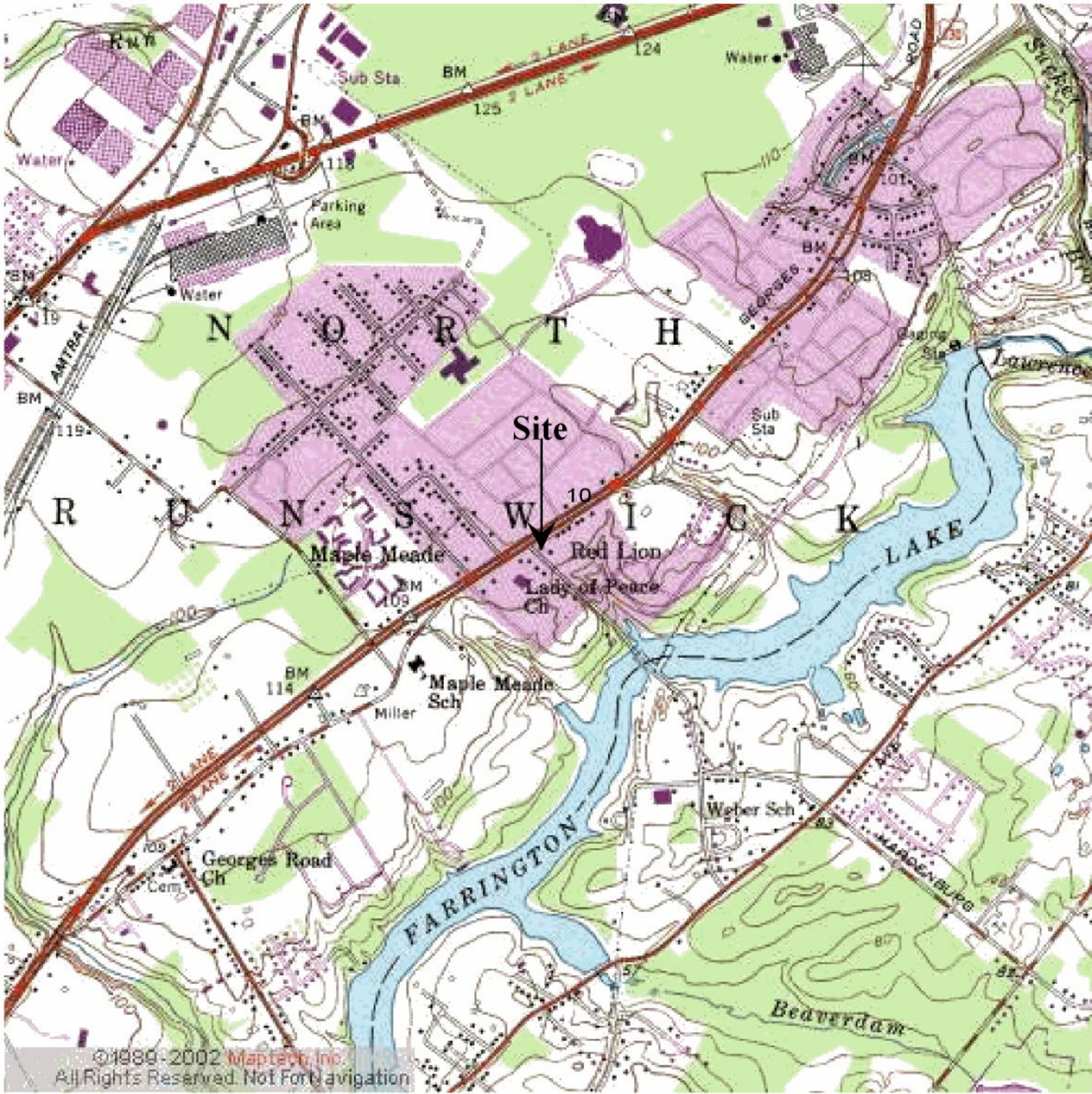
Also if paved areas are disturbed infiltration of rainwater would increase, which in turn could result in more contaminants leaching from the soil to the groundwater resulting in increased concentrations in groundwater. Therefore paved areas should be maintained to minimize increased infiltration.

5. An estimate of how far the plume will travel before it decreases to the ground water quality standards.

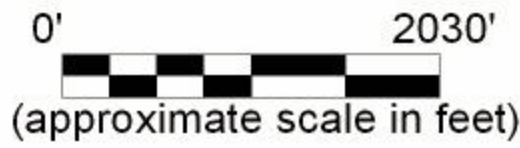
Since the site data indicates the plume is stable and shrinking it has been concluded based on professional judgment that the plume will not travel further than its current extent.

6. An estimate of how long the CEA will need to remain in place.

Based on the analysis described above in item # 2 the CEA will need to remain in place for 36.5 years from 5/21/19 which is until 2056. If further remediation is conducted then the duration will need to be re-evaluated.



North Brunswick Quadrangle

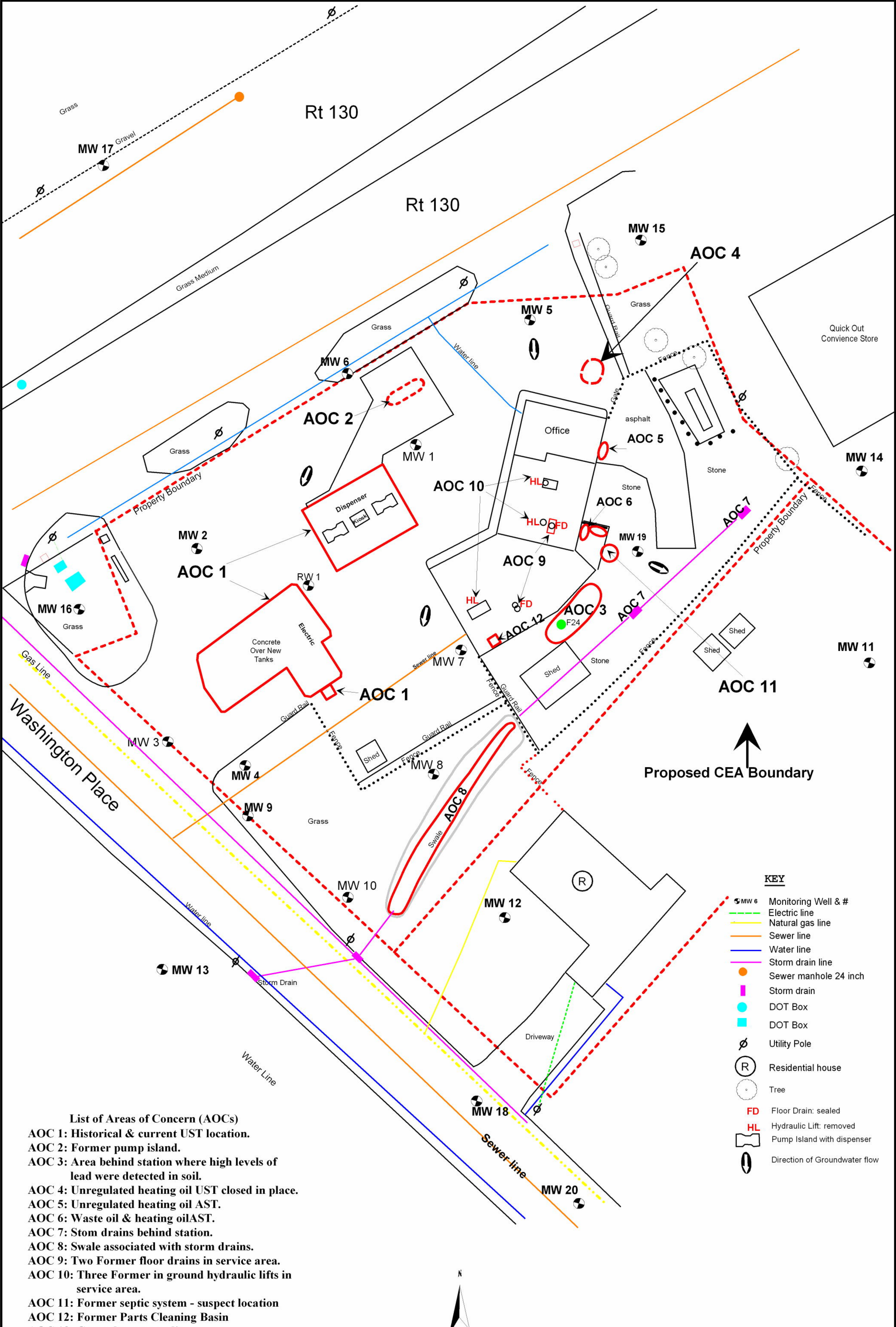


Contour Interval: 10 feet
 Photo Revised: 1981

 ON-SITE ENVIRONMENTAL 119 SHEPHERDS WAY • COATESVILLE, PA 19320 PHONE: (610) 384-2719 • FAX: (610) 384-2709	
Drawing # File : Topo 10	Date 8/12/16

Figure 1 Site Location

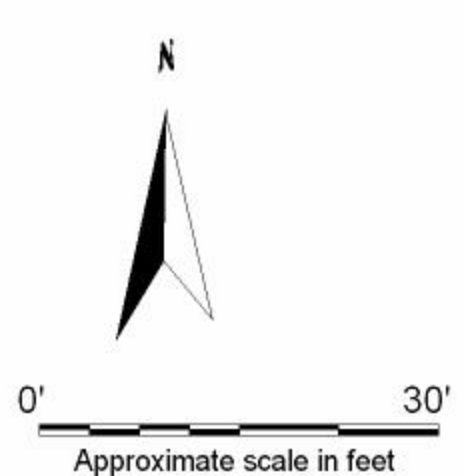
North Bruswick Gulf
 1696 Georges Road Rt 130
 North Brunswick, New Jersey



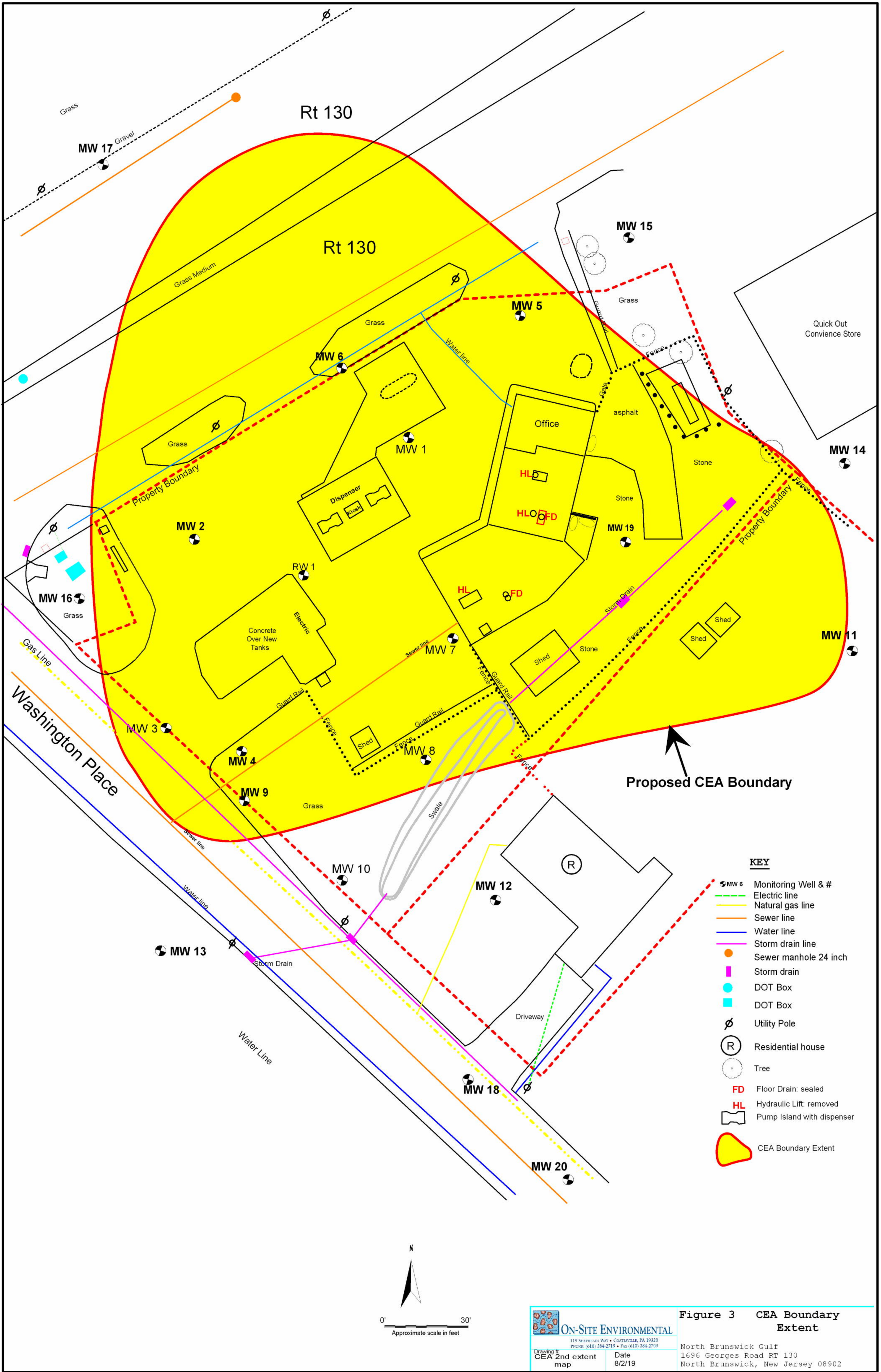
KEY

	Monitoring Well & #
	Electric line
	Natural gas line
	Sewer line
	Water line
	Storm drain line
	Sewer manhole 24 inch
	Storm drain
	DOT Box
	DOT Box
	Utility Pole
	Residential house
	Tree
	Floor Drain: sealed
	Hydraulic Lift: removed
	Pump Island with dispenser
	Direction of Groundwater flow

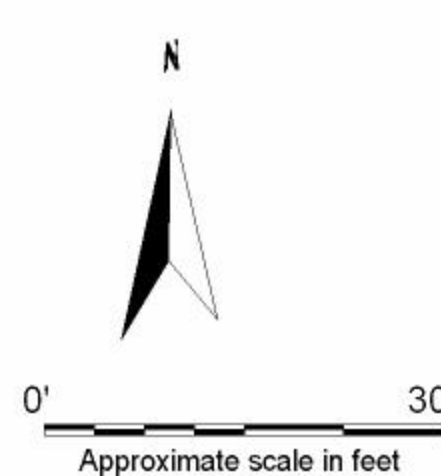
List of Areas of Concern (AOCs)
AOC 1: Historical & current UST location.
AOC 2: Former pump island.
AOC 3: Area behind station where high levels of lead were detected in soil.
AOC 4: Unregulated heating oil UST closed in place.
AOC 5: Unregulated heating oil AST.
AOC 6: Waste oil & heating oil AST.
AOC 7: Storm drains behind station.
AOC 8: Swale associated with storm drains.
AOC 9: Two Former floor drains in service area.
AOC 10: Three Former in ground hydraulic lifts in service area.
AOC 11: Former septic system - suspect location
AOC 12: Former Parts Cleaning Basin
AOC 13: Ground water media.



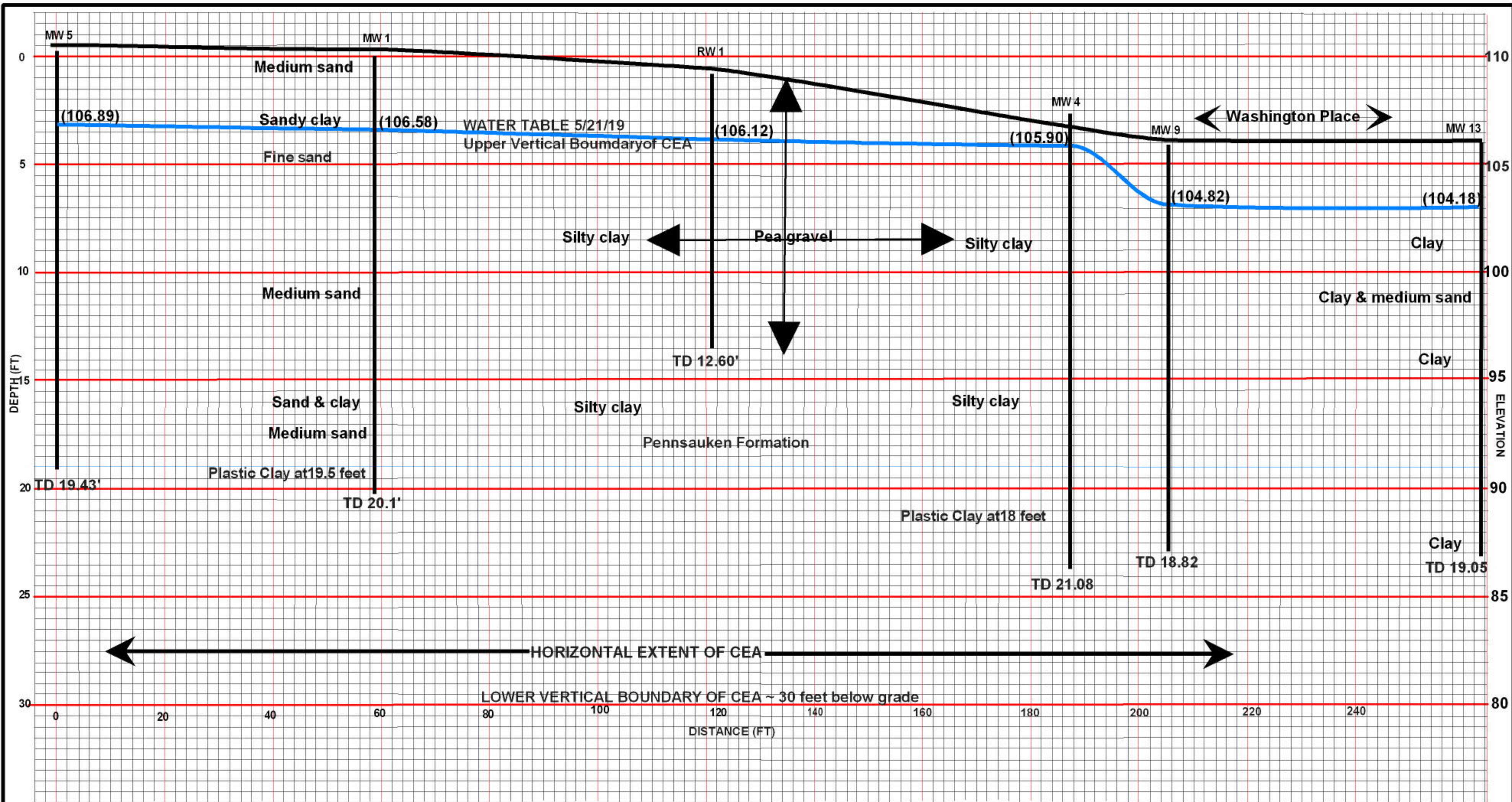
 ON-SITE ENVIRONMENTAL 119 SHEPHERDS WAY • COATESVILLE, PA 19320 PHONE: (610) 384-2719 • FAX: (610) 384-2709	Figure 2 AOC Locations North Brunswick Gulf 1696 Georges Road RT 130 North Brunswick, New Jersey 08902	
	Drawing # GW AOCs	Date 2/13/19




- KEY**
- MW # Monitoring Well & #
 - Electric line
 - Natural gas line
 - Sewer line
 - Water line
 - Storm drain line
 - Sewer manhole 24 inch
 - Storm drain
 - DOT Box
 - DOT Box
 - Utility Pole
 - Residential house
 - Tree
 - Floor Drain: sealed
 - Hydraulic Lift: removed
 - Pump Island with dispenser
 - CEA Boundary Extent

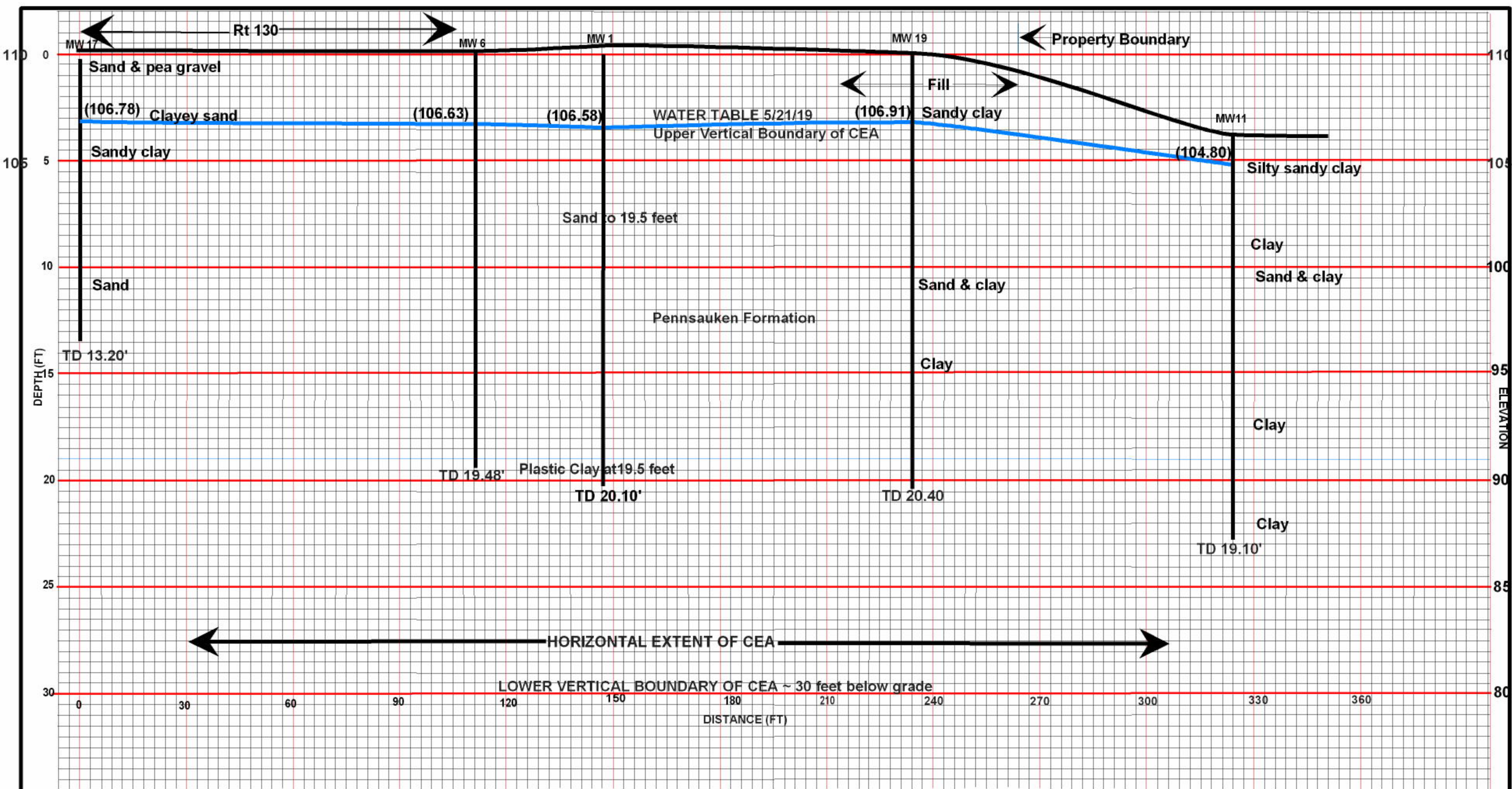


<p>ON-SITE ENVIRONMENTAL 119 SHEPHERDS WAY • COATESVILLE, PA 19320 PHONE: (610) 384-2719 • FAX: (610) 384-2709</p>	<p>Figure 3 CEA Boundary Extent</p>
	<p>North Brunswick Gulf 1696 Georges Road RT 130 North Brunswick, New Jersey 08902</p>
<p>Drawing # CEA 2nd extent map</p>	<p>Date 8/2/19</p>



Horizontal Scale: 1 inch = 26 ft
 Vertical Scale: 1 inch = 6.5 ft
 Vertical Exaggeration = 4

 ON-SITE ENVIRONMENTAL 119 SHEPHERDS WAY • COATESVILLE, PA 19320 PHONE: (610) 384-2719 • FAX: (610) 384-2709	Figure 4 Cross Section	
	Drawing #: File : XSECT 5 to 13	Date: 8/1/2019



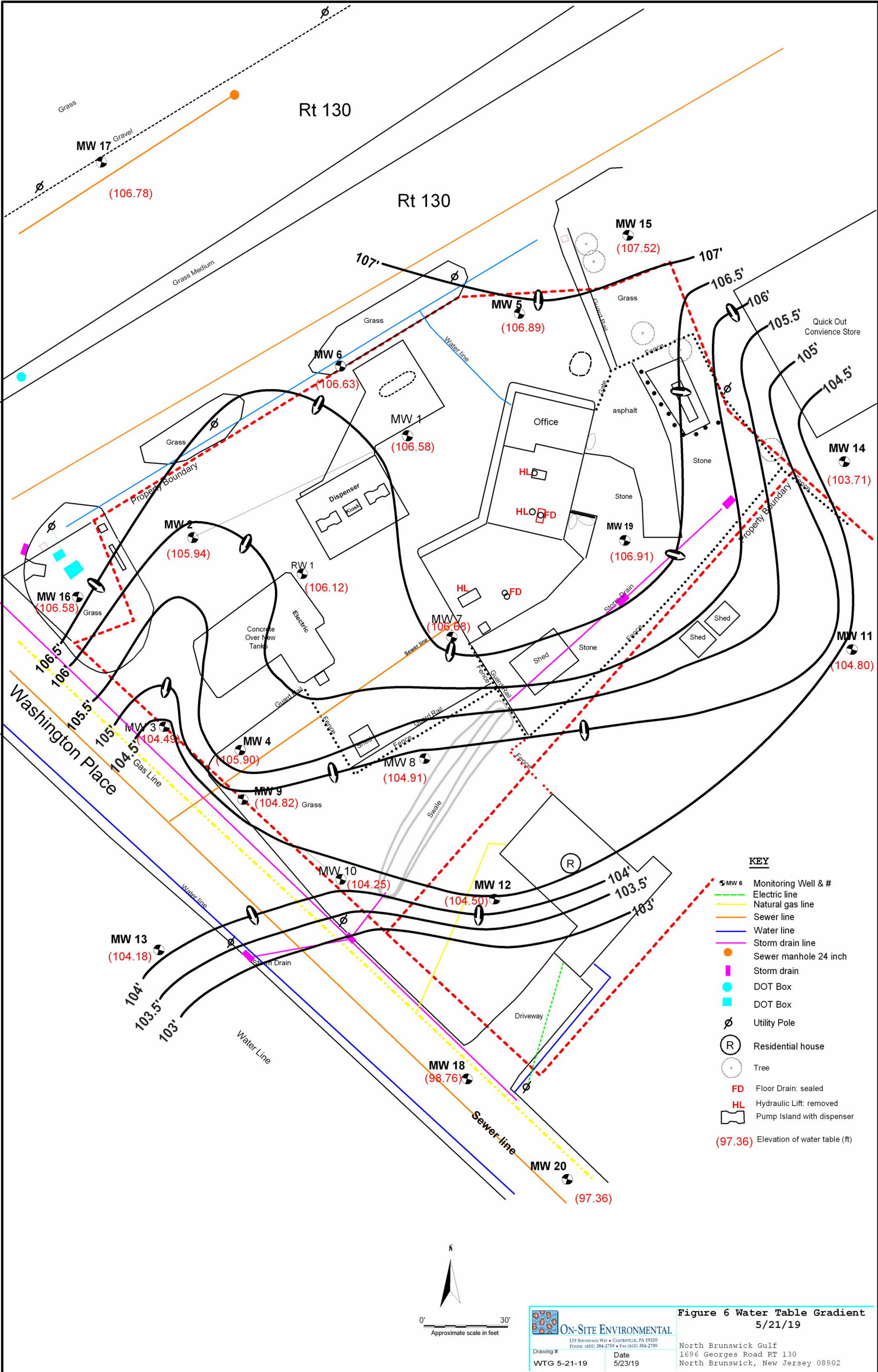
Horizontal Scale: 1 inch = 39 ft
 Vertical Scale: 1 inch = 6.5 ft
 Vertical Exaggeration = 6

ON-SITE ENVIRONMENTAL
 119 SHEPHERDS WAY • COATESVILLE, PA 19320
 PHONE: (610) 384-2719 • FAX: (610) 384-2709

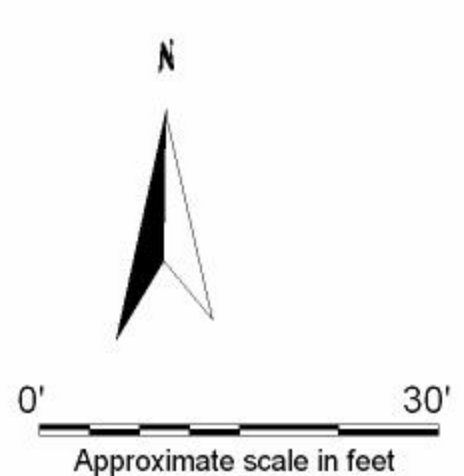
Drawing #: File : XSECT 17 to 11
 Date: 8/1/2019

Figure 5 Cross Section

North Brunswick Gulf
 1696 Georges RD RT 130
 North Brunswick, New Jersey



- KEY**
- MW 6 Monitoring Well & #
 - Electric line
 - Natural gas line
 - Sewer line
 - Water line
 - Storm drain line
 - Sewer manhole 24 inch
 - Storm drain
 - DOT Box
 - DOT Box
 - Utility Pole
 - Residential house
 - Tree
 - FD Floor Drain: sealed
 - HL Hydraulic Lift: removed
 - Pump Island with dispenser
 - (97.36) Elevation of water table (ft)



ON-SITE ENVIRONMENTAL
 119 SHEPHERD WAY • COATESVILLE, PA 19320
 PHONE: (610) 384-2719 • FAX: (610) 384-2709

Figure 6 Water Table Gradient
5/21/19

North Brunswick Gulf
 1696 Georges Road RT 130
 North Brunswick, New Jersey 08902

Drawing #: WTG 5-21-19 Date: 5/23/19

Table 1 (continued): MW 4 - Summary of Volatile Organics (ug/l)

Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	mTBE	TBA	Acetone	Bromobenzene	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	1,1,2-Dichloroethane	Cyclohexane	Camphor	Ethylhex diene(s)	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrachloroethene	1,1,2-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total TOCs	DTW (ft)	Date Sampled
MW 4	5/21/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.53	5/21/2019
	12/10/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	12/10/2019
	10/23/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	10/23/2019
	12/5/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	12/5/2019
	1/10/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	1/10/2020
	3/20/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	3/20/2020
4/27/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05	4/27/2020	
Chow IA Standard																											
Interim Groundwater Criteria																											
Groundwater Screening Levels (ug/l)	20	330,000	700	8,600	580	21,000,000	20	2,500,000	770	26,000	16,000	0.4								300,000							

MW 4 - Summary of Semi Volatile Organics (ug/l)

Well Number	Date Sampled	Acenaphthylene	Acenaphthylene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(a)pyrene	1,1-Biphenyl	Bis (2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Dibenz(p,h)anthracene	Dibenzofuran	Di-sec-butyl phthalate	Fluorene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC TOCs
MW 4	5/21/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/23/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/5/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/10/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	3/20/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/27/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chow IA Standard																													
Interim Groundwater Criteria																													
Groundwater Screening Levels (ug/l)	20	330,000	700	8,600	580	21,000,000	20	2,500,000	770	26,000	16,000	0.4								700	300	300	0.2		10	300	200	100,500	

Red number exceeds standard
 DTW: Depth to water
 ND: Not sampled
 NS: Not detected
 NA: Not analyzed

Note: Samples collected in May 2019 via low flow techniques

Table 1 (continued): MW 5 - Summary of Volatile Organics (ug/l)

Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	mTBE	TBA	Acetone	Bromobenzene	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	1,1,2-Dichloroethane	Cyclohexane	Camphor	Ethylhex diene(s)	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrachloroethene	1,1,2-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total TOCs	DTW (ft)	Date Sampled	
MW 5	5/21/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	5/21/2019
	12/10/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	12/10/2019
	10/23/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	10/23/2019
	12/5/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	12/5/2019
	1/10/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	1/10/2020
	3/20/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	3/20/2020
4/27/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	4/27/2020	
Chow IA Standard																												
Interim Groundwater Criteria																												
Groundwater Screening Levels (ug/l)	20	330,000	700	8,600	580	21,000,000	20	2,500,000	770	26,000	16,000	0.4																

MW 5 - Summary of Semi Volatile Organics (ug/l)

Well Number	Date Sampled	Acenaphthylene	Acenaphthylene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(a)pyrene	1,1-Biphenyl	Bis (2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Dibenz(p,h)anthracene	Dibenzofuran	Di-sec-butyl phthalate	Fluorene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC TOCs	
MW 5	5/21/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/10/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	10/23/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/5/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1/10/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	3/20/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/27/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chow IA Standard																														
Interim Groundwater Criteria																														
Groundwater Screening Levels (ug/l)	20	330,000	700	8,600	580	21,000,000	20	2,500,000	770	26,000	16,000	0.4								700	300	300	0.2		10	300	200	100,500		

Red number exceeds standard
 DTW: Depth to water
 ND: Not sampled
 NS: Not detected
 NA: Not analyzed

Note: Samples collected in May 2019 via low flow techniques

Table 1 (continued): MW 6 - Summary of Volatile Organics (ug/l)

Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	mTBE	TBA	Acetone	Bromobenzene	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	1,1,2-Dichloroethane	Cyclohexane	Camphor	Ethylhex diene(s)	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrachloroethene	1,1,2-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total TOCs	DTW (ft)	Date Sampled	
MW 6	5/21/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	5/21/2019
	12/10/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	12/10/2019
	10/23/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	10/23/2019
	12/5/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	12/5/2019
	1/10/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	1/10/2020
	3/20/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	3/20/2020
4/27/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	4/27/2020	
Chow IA Standard																												
Interim Groundwater Criteria																												

Table 1 (continued): MW 10 - Summary of Volatile Organics (ug/l)																													
Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromochloroethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,3-Dichlorobenzene	Cyclohexane	Cumene	Ethylhexane	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,3-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total THCs	DTW	Date Sampled		
MW 10	5/1/2019	<0.1	<0.1	<0.0	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	5/1/2019
	12/19/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	12/19/2016
	10/19/2009	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	10/19/2009
	10/19/2009	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	10/19/2009
Class II A Standard		1	600	700	1,000	70	100	6,000	10	300	50		2	70		700	0.03	40				1	3				100/500		
Interim Groundwater Criteria												5												100					
Groundwater Screening Levels for VI		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770	26,000		<1	16,000		0.4				900,000								

MW 10 - Summary of Semi Volatile Organics (ug/l)																													
Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(b)pyrene	1,1-Biphenyl	2-(2-Ethylhexyl)phthalate	Bis(2-ethylhexyl)phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-octylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC THCs		
MW 10	5/1/2019	<0.1	<0.1	<0.20	<0.20	<0.01	<0.01	<0.01	<0.01	<0.01	<0.20	<0.2	<0.2	<0.1	<0.1	<0.01	<0.2	<0.2	<0.16	<0.16	<0.01	<0.1	<0.1	<0.16	<0.16	<0.16	<0.16	<0.16	10/500
	12/19/2016	<0.1	<0.1	<0.20	<0.20	<0.01	<0.01	<0.01	<0.01	<0.01	<0.20	<0.2	<0.2	<0.1	<0.1	<0.01	<0.2	<0.2	<0.16	<0.16	<0.01	<0.1	<0.1	<0.16	<0.16	<0.16	<0.16	10/500	
	10/19/2009	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
	10/19/2009	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
Class II A Standard			400		700	2,000	0.1	0.2	0.6		0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500	
Interim Groundwater Criteria																							5				100		
Groundwater Screening Levels for VI			20		330,000	700		8,600	580		21,000,000	20	2,500,000	770	26,000		0.4		900,000						300				

Table 1 (continued): MW 11 - Summary of Volatile Organics (ug/l)																													
Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromochloroethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,3-Dichlorobenzene	Cyclohexane	Cumene	Ethylhexane	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,3-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total THCs	DTW	Date Sampled		
MW 11	5/1/2019	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	5/1/2019
	12/19/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	12/19/2016
	10/19/2009	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	10/19/2009
	10/19/2009	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	10/19/2009
Class II A Standard		1	600	700	1,000	70	100	6,000	10	300	50		2	70		700	0.03	40									100/500		
Interim Groundwater Criteria												5													100				
Groundwater Screening Levels for VI		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770	26,000		<1	16,000		0.4				900,000								

MW 11 Summary of Semi Volatile Organics (ug/l)																													
Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(b)pyrene	1,1-Biphenyl	2-(2-Ethylhexyl)phthalate	Bis(2-ethylhexyl)phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-octylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC THCs		
MW 11	5/1/2019	<0.1	<0.1	<0.21	<0.21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.21	<0.2	<0.2	<0.1	<0.1	<0.01	<0.2	<0.2	<0.17	<0.17	<0.01	<0.1	<0.1	<0.17	<0.17	<0.17	<0.17	10/500	
	12/19/2016	<0.1	<0.1	<0.21	<0.21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.21	<0.2	<0.2	<0.1	<0.1	<0.01	<0.2	<0.2	<0.17	<0.17	<0.01	<0.1	<0.1	<0.17	<0.17	<0.17	<0.17	10/500	
	10/19/2009	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	
	10/19/2009	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
Class II A Standard			400		700	2,000	0.1	0.2	0.6		0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500	
Interim Groundwater Criteria																							5				100		
Groundwater Screening Levels for VI		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770	26,000		<1	16,000		0.4		900,000						300				

Table 1 (continued): MW 12 - Summary of Volatile Organics (ug/l)																													
Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromochloroethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,3-Dichlorobenzene	Cyclohexane	Cumene	Ethylhexane	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,3-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total THCs	DTW	Date Sampled		
MW 12	5/1/2019	<0.1	<0.1	<0.0	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	5/1/2019
	12/19/2016	<0.1	<0.1	<0.0	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	12/19/2016
	10/19/2009	<0.1	<0.1	<0.0	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	10/19/2009
	10/19/2009	<0.1	<0.1	<0.0	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.87	10/19/2009
Class II A Standard		1	600	700	1,000	70	100	6,000	10	300	50		2	70		700	0.03	40				1	3			100/500			
Interim Groundwater Criteria												5													100				
Groundwater Screening Levels for VI		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770	26,000		<1	16,000		0.4				900,000								

MW 12 - Summary of Semi Volatile Organics (ug/l)																												
Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(b)pyrene	1,1-Biphenyl	2-(2-Ethylhexyl)phthalate	Bis(2-ethylhexyl)phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-octylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC THCs	
MW 12	5/1/2019	<0.1	<0.1	<0.20	<0.20	<0.01	<0.01	<0.01	<0.01	<0.01	<0.20	<0.2	<0.2	<0.1	<0.1	<0.01	<0.2	<0.2	<0.16	<0.16	<0.01	<0.1	<0.1	<0.16	<0.16	<0.16	<0.16	10/500
	12/19/2016	<0.1	<0.1	<0.20	<0.20	<																						

Table 1 (continued): MW 16 - Summary of Volatile Organics (ug/l)																													
Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromomethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,2-Dichlorobenzene	Cyclohexane	Cumene	Ethylhex diene	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,2-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total THCs	DTW	Date Sampled		
MW 16	5/21/2019	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5/21/2019
	12/19/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	12/19/2016
	10/15/2009	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	10/15/2009
Class II A Standard		1	800	700	1,000	70	100	6,000	10	300	50			2	70			700	0.03	40		1	3				100/500		
Interim Groundwater Criteria												5											100						
Groundwater Screening Levels (ug/l)		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770					16,000													

MW 16 - Summary of Semi Volatile Organics (ug/l)

Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(e)pyrene	1,1-Biphenyl	Bi(2-chlorophenyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC THCs	
MW 16	5/21/2019	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	12/19/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	10/15/2009	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
Class II A Standard		400		700	2,000	0.1	0.2	0.5	0.1	0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500	
Interim Groundwater Criteria				100																		5						
Groundwater Screening Levels (ug/l)																												
<p>NA: Not detected DTW: Depth to water BE: Not sampled ND: Not detected NA: Not analyzed</p> <p>Note: Samples collected in May 2019 via the flow techniques</p>																												

Table 1 (continued): MW 17 - Summary of Volatile Organics (ug/l)

Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromomethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,2-Dichlorobenzene	Cyclohexane	Cumene	Ethylhex diene	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,2-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total THCs	DTW	Date Sampled	
MW 17	5/21/2019	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5/21/2019
	12/19/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	10/15/2009	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Class II A Standard		1	800	700	1,000	70	100	6,000	10	300	50			2	70			700	0.03	40		1	3			100/500	100/500	
Interim Groundwater Criteria												5											100					
Groundwater Screening Levels (ug/l)		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770					16,000												

MW 17 - Summary of Semi Volatile Organics (ug/l)

Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(e)pyrene	1,1-Biphenyl	Bi(2-chlorophenyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC THCs
MW 17	5/21/2019	<0.1	<0.1	<0.1	<0.1	0.02B1	<0.01	<0.01	<0.01	<0.01	<0.1	<0.1	<0.1	<0.01	<0.18	<0.03	<0.22	<0.23	<0.17	<0.17	<0.03	NA	<0.21	<0.23	<0.18	<0.22	0
	12/19/2016	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.1	<0.1	<0.01	<0.18	<0.03	<0.22	<0.23	<0.17	<0.17	<0.03	NA	<0.21	<0.23	<0.18	<0.22	0
	10/15/2009	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.1	<0.1	<0.01	<0.18	<0.03	<0.22	<0.23	<0.17	<0.17	<0.03	NA	<0.21	<0.23	<0.18	<0.22	0
Class II A Standard		400		700	2,000	0.1	0.2	0.5	0.1	0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500
Interim Groundwater Criteria				100																		5					
Groundwater Screening Levels (ug/l)																											
<p>NA: Not detected DTW: Depth to water BE: Not sampled ND: Not detected NA: Not analyzed</p> <p>Note: Samples collected in May 2019 via the flow techniques</p>																											

Table 1 (continued): MW 18 - Summary of Volatile Organics (ug/l)

Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromomethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,2-Dichlorobenzene	Cyclohexane	Cumene	Ethylhex diene	2-Hexanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,2-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total THCs	DTW	Date Sampled	
MW 18	5/21/2019	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5/21/2019
	12/19/2016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	10/15/2009	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Class II A Standard		1	800	700	1,000	70	100	6,000	10	300	50			2	70			700	0.03	40		1	3			100/500	100/500	
Interim Groundwater Criteria												5											100					
Groundwater Screening Levels (ug/l)		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770					16,000												

MW 18 - Summary of Semi Volatile Organics (ug/l)

Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(e)pyrene	1,1-Biphenyl	Bi(2-chlorophenyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC THCs
MW 18	5/21/2019	5.2	0.82	<0.1	<0.2	0.03B2	<0.01	<0.01	<0.01	<0.01	1.5	<0.1	<0.06	1.1	<0.18	<0.06	2.2	1.5	0.82	3.9	<0.03	NA	5.8	25.1	4.8	0.82	21.2
	11/15/2019	3.1	0.6	<0.1	1.3	0.13	<0.01	<0.01	<0.01	<0.01	1.2	<0.1	<0.04	1.8	<0.17	<0.01	2.6	<0.21	1.4	2	<0.03	4	5.5	25.8	7	0.91	17.4
	10/15/2009	3.1	0.5	<0.1	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	1.8	<0.1	<0.02	1.4	<0.17	<0.01	0.95	<0.24	<0.16	2.8	<0.07	3.8	6.2	20.8	1.1	<0.21	8.8
Class II A Standard		400		700	2,000	0.1	0.2	0.5	0.1	0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500
Interim Groundwater Criteria				100																		5					
Groundwater Screening Levels (ug/l)																											
<p>NA: Not detected DTW: Depth to water BE: Not sampled ND: Not detected NA: Not analyzed</p> <p>Note: Samples collected in May 2019 via the flow techniques</p>																											

Table 1 (continued): MW 19 - Summary of Volatile Organics (ug/l)																												
Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromomethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,2-Dichlorobenzene	Cyclohexane	Cumene	Ethylacetylene	2-Heptanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,3-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total TICs	DTW	Date Sampled	
MW 19	5/22/2019	1.53	1.76	1.76	1.80	-10	12.1	141.7	-11.4	-1.0	-11	-15	-12	65.9	103	150	-0.003	-41	170	-37	-14	-11	2.65	5.18	9.18	5.98	5/22/2019	
MW 19	10/3/2018	8.8	1.66	1.76	1.76	-10	12.1	141.7	-11.4	-1.0	-11	-15	-12	65.9	103	150	-0.003	-41	170	-37	-14	-11	2.65	5.18	9.18	5.98	10/3/2018	
Class II A Standard																												
Interim Groundwater Objectives		1	600	700	1,000	70	100	6,000	10	300	50		2	70		700	0.03	80				1	3		100/500	100/500		
Groundwater Screening Levels for VI		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770	36,000					0.4											

MW 19 - Summary of Semi Volatile Organics (ug/l)																												
Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Benz(a)anthracene	Benz(b)fluoranthene	Benz(k)fluoranthene	Benzo(a)pyrene	Benz(a)pyrene	1,1-Biphenyl	Bis (2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Dibenz(p,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC/TICs	
MW 19	5/22/2019	0.12	<0.13	<0.20	<0.21	<0.022	<0.022	<0.022	<0.03	<0.033	1.4	<1.6	<0.41	3	<0.17	<0.026	<0.22	<0.23	<0.17	0.30	<0.037	NA	<0.1	<0.3	<0.02	<0.21	<0.21	3.88
MW 19	10/3/2018	0.84	<0.13	<0.20	<0.21	<0.022	<0.022	<0.022	<0.03	<0.033	1.4	<1.6	<0.41	3	<0.17	<0.026	<0.22	<0.23	<0.17	0.30	<0.037	NA	<0.1	<0.3	<0.02	<0.21	<0.21	3.88
Class II A Standard																												
Interim Groundwater Objectives		400		700	2,000	0.1	0.2	0.5	0.1	0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500	
Groundwater Screening Levels for VI		100																				5			100			

Table 1 (continued): MW 20 - Summary of Volatile Organics (ug/l)																												
Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromomethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,2-Dichlorobenzene	Cyclohexane	Cumene	Ethylacetylene	2-Heptanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,3-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total TICs	DTW	Date Sampled	
MW 20	5/22/2019	0.06	<0.53	<0.20	<0.20	<0.51	<0.8	<0.6	<1.6	<0.9	<0.56	<0.73	<0.6	<0.51	<0.78	<0.65	<0.052	<0.2	<0.60	<1.9	<0.9	<0.53	<1.6	NA	0	0	3.82	5/21/2019
MW 20	11/8/2019	<0.43	<0.53	<0.20	<0.20	<0.51	<0.8	<0.6	<1.6	<0.9	<0.56	<0.73	<0.6	<0.51	<0.78	<0.65	<0.052	<0.2	<0.60	<1.9	<0.9	<0.53	<1.6	NA	0	0	3.82	11/8/2019
Class II A Standard																												
Interim Groundwater Objectives		1	600	700	1,000	70	100	6,000	10	300	50		2	70		700	0.03	80				1	3		100/500	100/500		
Groundwater Screening Levels for VI		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770	36,000					0.4											

MW 20 - Summary of Semi Volatile Organics (ug/l)																												
Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Benz(a)anthracene	Benz(b)fluoranthene	Benz(k)fluoranthene	Benzo(a)pyrene	Benz(a)pyrene	1,1-Biphenyl	Bis (2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Dibenz(p,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC/TICs	
MW 20	5/22/2019	2.1	<0.14	<0.21	<0.21	<0.023	<0.023	<0.023	<0.04	<0.033	0.33	<1.2	<0.46	0.52	<0.18	<0.026	0.49	<0.23	<0.17	0.20	<0.037	NA	<0.26	0.26	<0.17	<0.21	5.2	
MW 20	11/8/2019	<0.14	<0.14	<0.20	<0.20	<0.022	<0.022	<0.022	<0.03	<0.033	<0.30	<1.6	<0.41	<0.22	<0.17	<0.026	<0.21	<0.22	<0.16	0.20	<0.037	NA	<0.26	0.26	<0.17	<0.21	5.2	
Class II A Standard																												
Interim Groundwater Objectives		400		700	2,000	0.1	0.2	0.5	0.1	0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500	
Groundwater Screening Levels for VI		100																				5			100			

Table 1 (continued): RW 1 - Summary of Volatile Organics (ug/l)																												
Well Number	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Acetone	Bromomethane	2-Butanone	Chlorobenzene	Chloroethane	1,2-Dichloroethane	o-1,2-Dichlorobenzene	Cyclohexane	Cumene	Ethylacetylene	2-Heptanone	Methylcyclohexane	4-Methyl-2-pentanone	Tetrahydrofuran	1,1,3-Trichloroethane	1,2,4-TMB	1,3,5-TMB	Total TICs	DTW	Date Sampled	
RW 1	5/22/2019	<1.8	<1.8	<0.6	1.40	0.9	11	<0.1	<0.3	<0.3	<1.2	<1.2	<1.2	<1.2	21.2	38.4	-0.005	<0.1	109.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.00	5/22/2019	
RW 1	10/3/2018	<0.5	<0.5	<0.5	1.40	0.9	11	<0.1	<0.3	<0.3	<1.2	<1.2	<1.2	<1.2	21.2	38.4	-0.005	<0.1	109.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.00	10/3/2018	
RW 1	12/1/2018	<0.5	<0.5	<0.5	1.40	0.9	11	<0.1	<0.3	<0.3	<1.2	<1.2	<1.2	<1.2	21.2	38.4	-0.005	<0.1	109.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.00	12/1/2018	
RW 1	10/19/2019	3	<2	<2	<10	6.5	<100	<20	<2	<10	<2	<2	<1	<2	NA	NA	NA	<10	NA	<10	<1	<2	NA	NA	29	6.33	10/19/2019	
RW 1	12/5/2017	<1	<1	<1	<10	7.5	<100	<20	<2	<10	<2	<2	<1	<2	NA	NA	NA	<10	NA	<10	<1	<2	NA	NA	29	6.04	12/5/2017	
Class II A Standard																												
Interim Groundwater Objectives		1	600	700	1,000	70	100	6,000	10	300	50		2	70		700	0.03	80				1	3		100/500	100/500	100/500	
Groundwater Screening Levels for VI		20	330,000	700	8,600	580		21,000,000	20	2,500,000	770	36,000					0.4											

RW 1 - Summary of Semi Volatile Organics (ug/l)																												
Well Number	Date Sampled	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Benz(a)anthracene	Benz(b)fluoranthene	Benz(k)fluoranthene	Benzo(a)pyrene	Benz(a)pyrene	1,1-Biphenyl	Bis (2-ethylhexyl)phthalate	Butyl benzyl phthalate	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Dibenz(p,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Total SVOC/TICs	
RW 1	5/22/2019	<0.13	<0.14	<0.21	<0.21	<0.023	<0.023	<0.023	<0.03	<0.033	<0.33	<1.2	<0.46	0.52	<0.18	<0.026	0.49	<0.23	<0.17	0.20	<0.037	NA	<0.26	0.26	<0.17	<0.21	5.2	
RW 1	10/3/2018	<0.13	<0.14	<0.21	<0.21	<0.023	<0.023	<0.023	<0.03	<0.033	<0.33	<1.2	<0.46	0.52	<0.18	<0.026	0.49	<0.23	<0.17	0.20	<0.037	NA	<0.26	0.26	<0.17	<0.21	5.2	
RW 1	12/1/2018	<0.13	<0.14	<0.21	<0.21	<0.023	<0.023	<0.023	<0.03	<0.033	<0.33	<1.2	<0.46	0.52	<0.18	<0.026	0.49	<0.23	<0.17	0.20	<0.037	NA	<0.26	0.26	<0.17	<0.21	5.2	
RW 1	10/19/2019	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
RW 1	12/5/2017	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
Class II A Standard																												
Interim Groundwater Objectives		400		700	2,000	0.1	0.2	0.5	0.1	0.1	400	3	100		5	0.3		700	300	300	0.2		30	300		300	100/500	
Groundwater Screening Levels for VI		100																				5			100			

MW 1 Groundwater Monitoring Data Table and Hydrographs with Trend Line

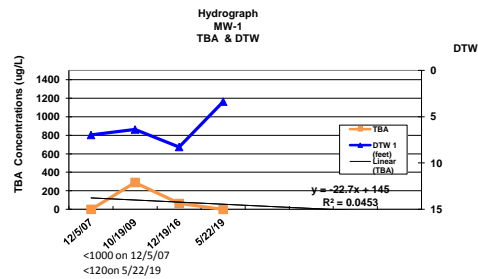
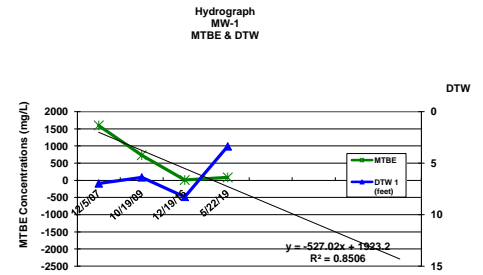
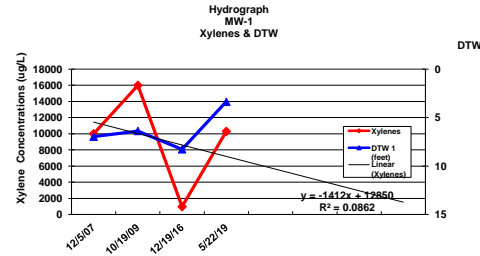
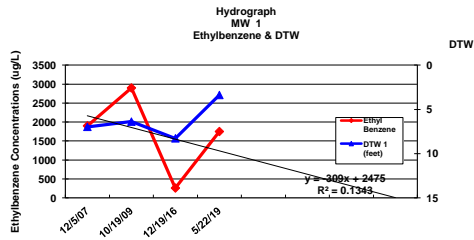
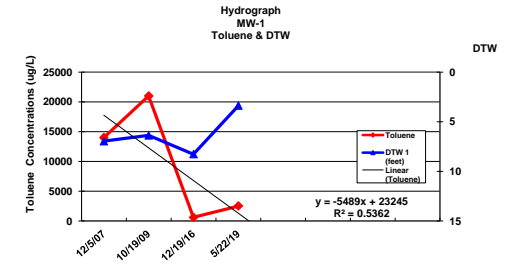
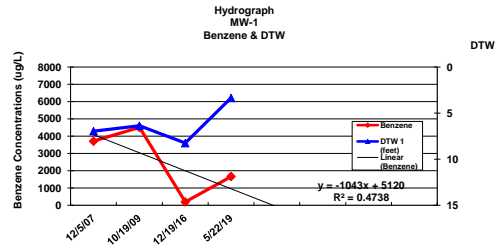
ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA
MW-1	2/27/02	8.57	7800	18000	3300	10000	17000	3000
	3/9/02	8.48	5300	9100	2500	9100	7200	1300
	1/11/05		1290	5160	1030	6590	753	540
	12/5/07	6.97	3700	14000	1900	10000	1600	<1000
	10/19/09	6.38	4500	21000	2300	16000	730	290
	12/19/16	8.27	180	580	260	980	9	63
	5/22/19	3.37	1660	2510	1750	10300	83.6	<120
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003

Only summary table of the analytical data for the samples collected in January 2005 by the Whitman Co. were available for review.



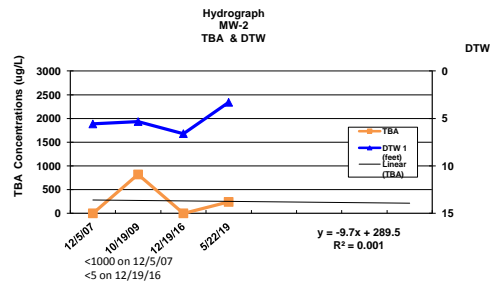
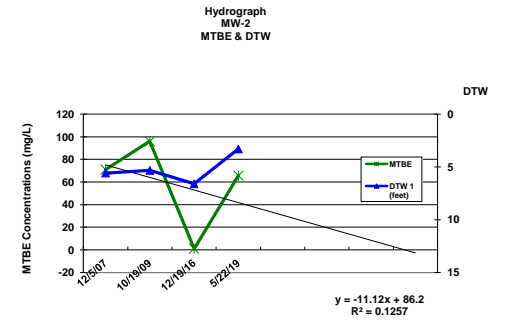
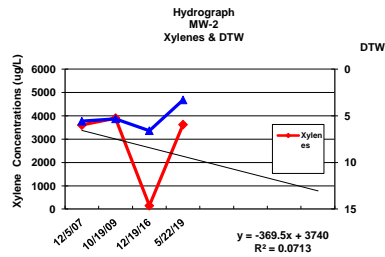
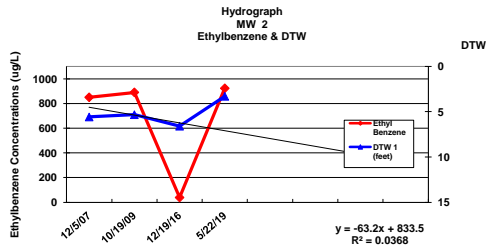
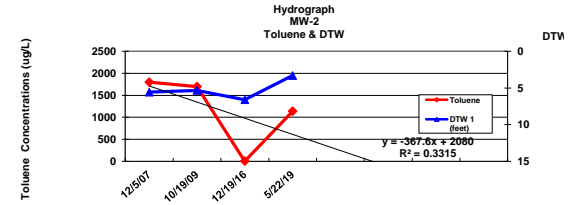
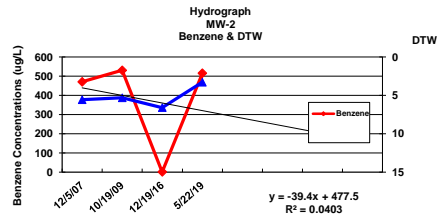
MW 2 Groundwater Monitoring Data Table and Hydrographs with Trend Line

ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA
MW-2	2/27/02	8.79	390	350	130	500	740	2500
	3/9/02	8.48	220	520	130	500	670	910
	1/11/05		474	2320	992	5240	223	833
	12/5/07	5.58	470	1800	850	3600	71	<1000
	10/19/09	5.33	530	1700	890	3900	96	820
	12/19/16	6.60	1	4	39	145	1	<5
	5/22/19	3.30	515	1140	923	3620	65.6	241.0
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003
Only summary table of the analytical data for the samples collected in January 2005 by the Whitman Co. were available for review.

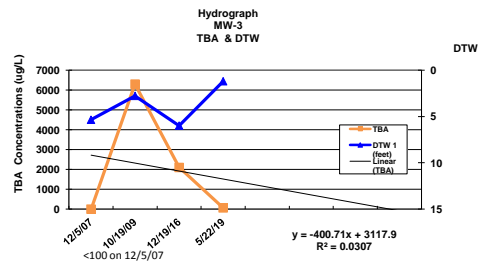
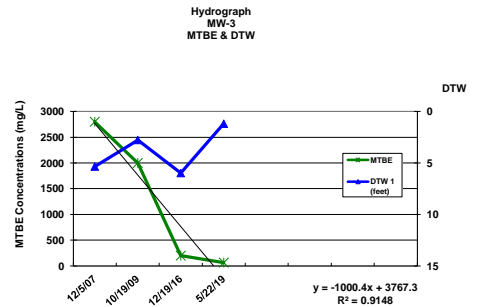
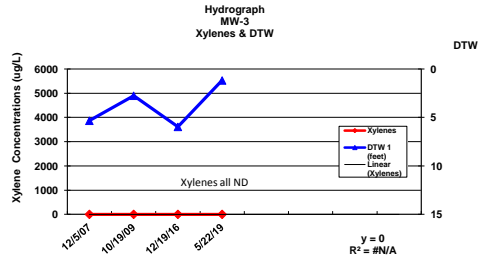
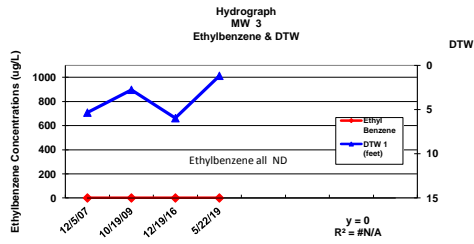
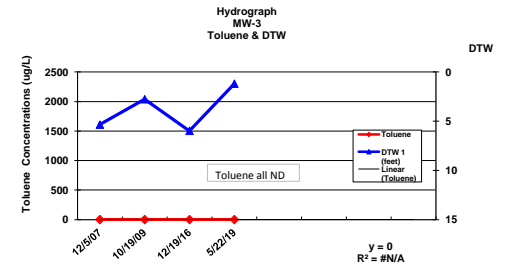
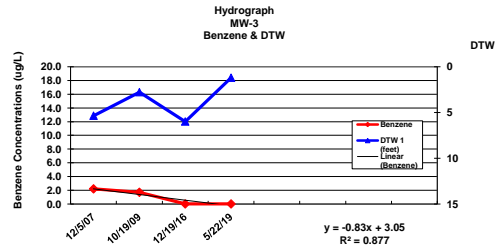


MW 3 Groundwater Monitoring Data Table and Hydrographs with Trend Lines ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	TBA
MW-3	2/27/02	9.59	3	<1	<1	<1	710	290
	3/9/02	9.53	19	<2	<5	<2	3000	360
	1/11/05		0.659	ND	ND	ND	116	732
	12/5/07	5.35	2.2	<5	<5	<10	2800	<100
	10/19/09	2.77	1.7	<2	<2	<10	2000	6300
	12/19/16	5.98	<0.5	<0.5	<0.5	<0.5	200	2100
	5/22/19	1.19	<0.43	<0.53	<0.6	<0.59	65.4	64.3
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003
Only summary table of the analytical data for the samples collected in January 2005 by the Whitman Co. were available for review.



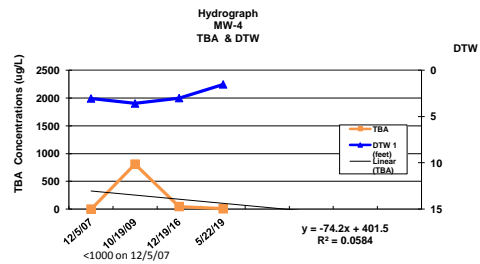
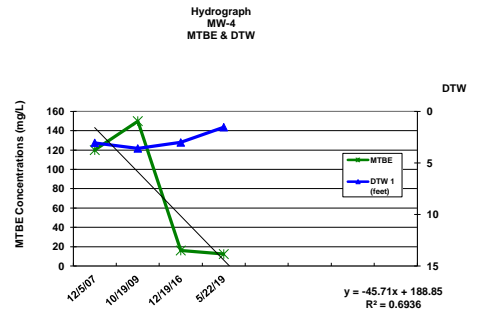
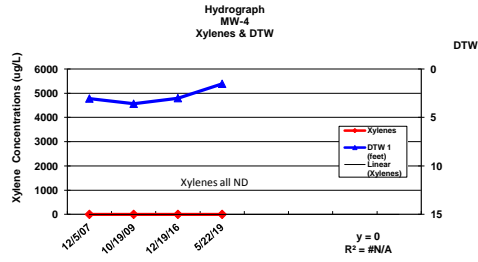
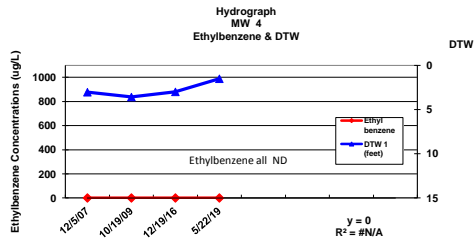
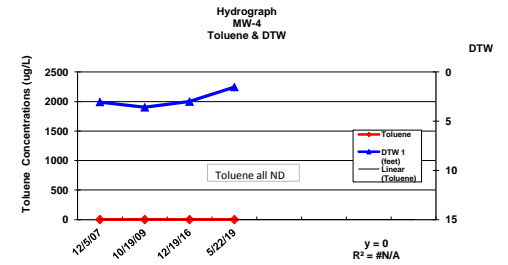
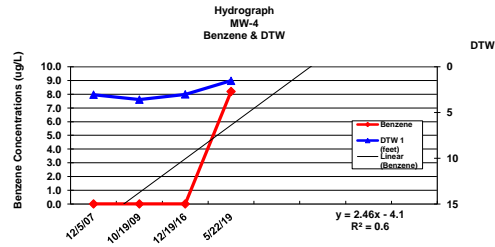
MW 4 Groundwater Monitoring Data Table and Hydrographs with Trend Lines

ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	TBA
MW-4	2/27/02	9.59	<1	1	<5	<1	230	450
	3/9/02	9.18	<1	<2	ND	<3	390	410
	1/11/05		ND	ND	<5	ND	865	2190
	12/5/07	3.05	<1	<5	<2	<10	120	<100
	10/19/09	3.59	<1	<2	<10	<10	150	810
	12/19/16	3.01	<0.5	<0.5	<0.5	<0.5	16	47
	5/22/19	1.53	8.2	<0.53	<0.6	<0.59	12.3	7.0
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003
Only summary table of the analytical data for the samples collected in January 2005 by the Whitman Co. were available for review.



MW 5 Groundwater Monitoring Data Table and Hydrographs with Trend Lines

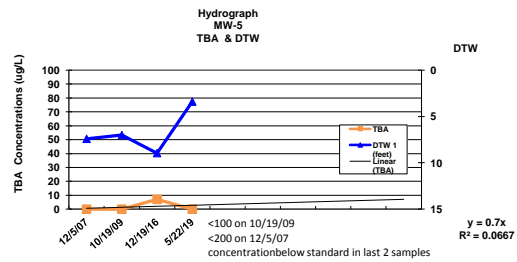
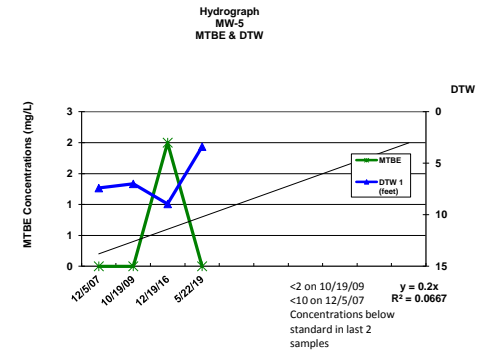
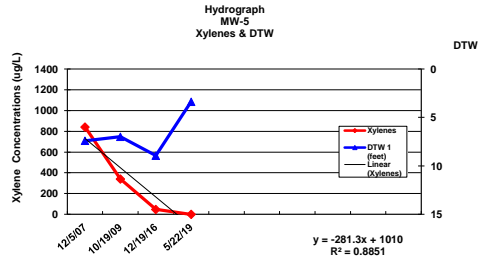
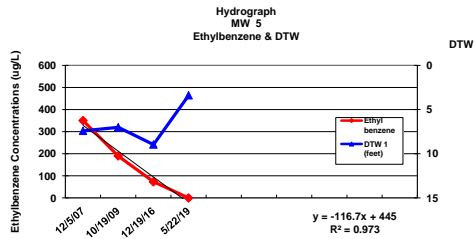
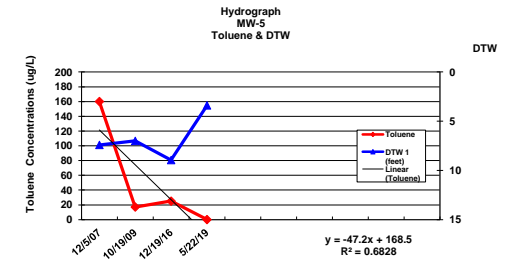
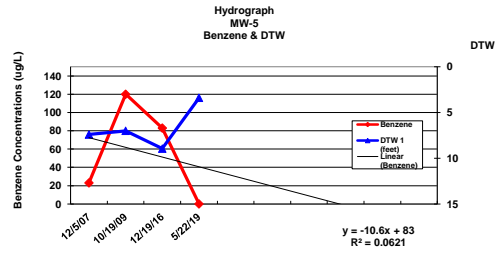
ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	TBA
MW-5	1/11/05		122	53.6	526	1270	86.2	ND
	12/5/07	7.41	23	160	350	840	<10	<200
	10/19/09	7.00	120	17	190	340	<2	<100
	12/19/16	8.95	83.0	25	73	47	2	7
	5/22/19	3.39	<0.43	<0.53	<0.60	<0.59	<0.51	<5.8
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003

Only summary table of the analytical data for the samples collected in January 2005 by the Whitman Co. were available for review.



MW 6 Groundwater Monitoring Data Table and Hydrographs with Trend Lines

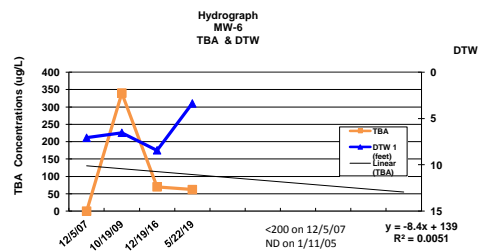
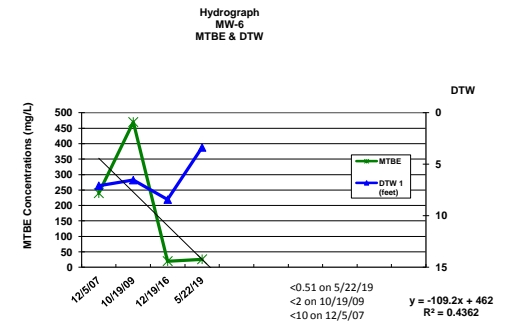
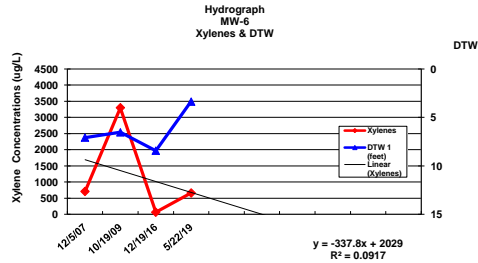
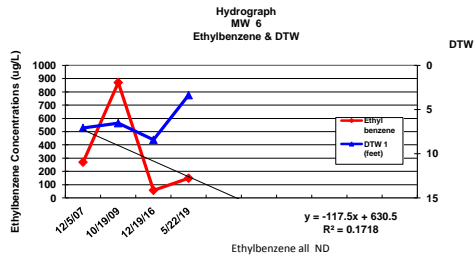
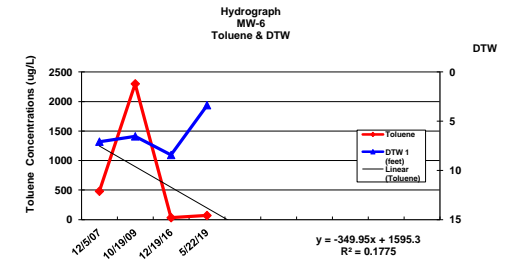
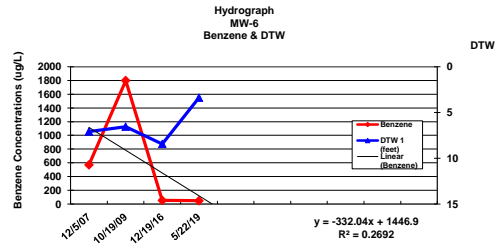
ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	TBA
MW-6	1/11/05		385	1210	313	4110	483.0	ND
	12/5/07	7.08	570	480	270	710	240	<200
	10/19/09	6.54	1800	2300	870	3300	470	340
	12/19/16	8.43	51.0	32	58	66	20	70
	5/22/19	3.37	46.2	69.5	149	662	26	62
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003

Only summary table of the analytical data for the samples collected in January 2005 by the Whitman Co. were available for review.



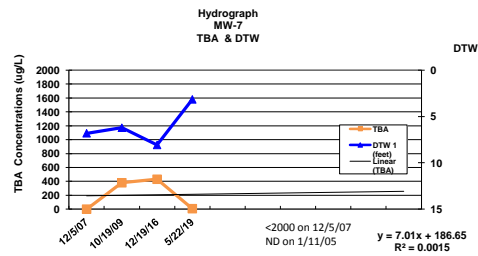
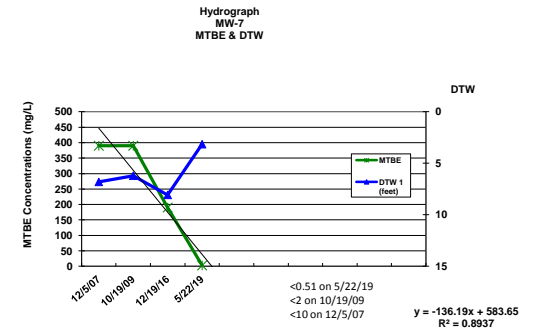
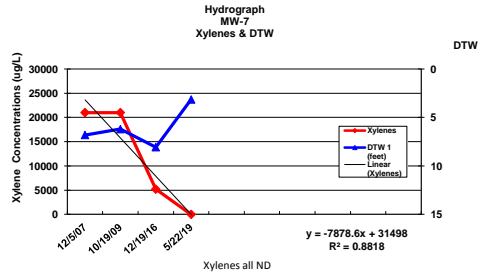
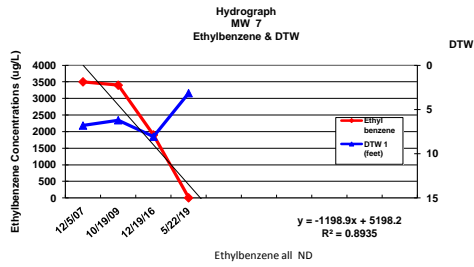
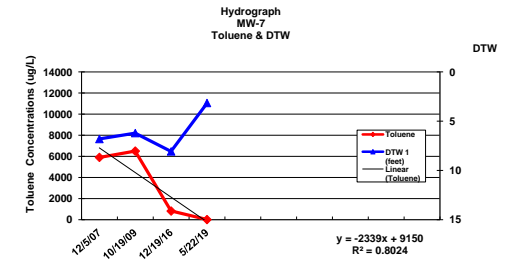
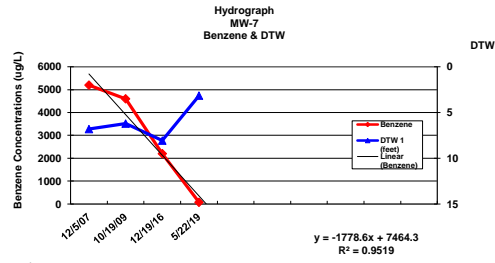
MW 7 Groundwater Monitoring Data Table and Hydrographs with Trend Lines

ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	TBA
MW-7	1/11/05		5330	12600	3790	25100	254	ND
	12/5/07	6.81	5200	5900	3500	21000	390	<2000
	10/19/09	6.21	4600	6500	3400	21000	390	380
	12/19/16	8.07	2200	810	1900	5200	190	430
	5/22/19	3.15	71.5	<0.53	3.7	5	3	6.7
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003
Only summary table of the analytical data for the samples collected in January 2005 by the Whitman Co. were available for review.



RW 1 Groundwater Monitoring Data Table and Hydrographs with Trend Lines

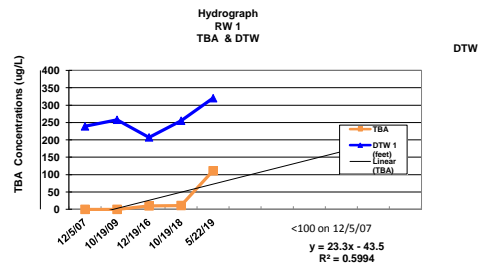
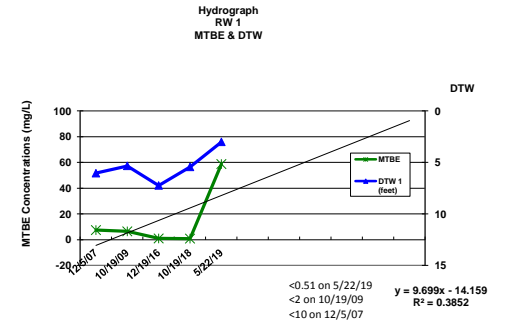
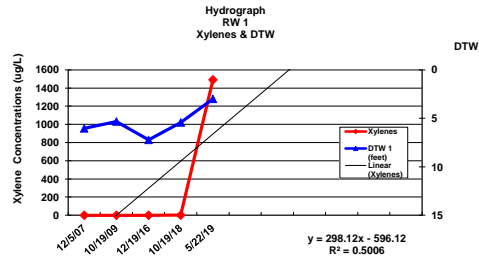
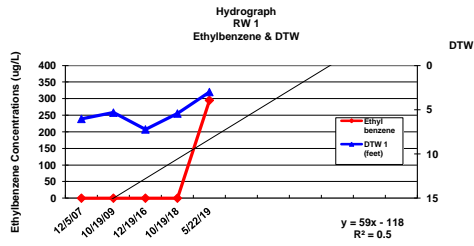
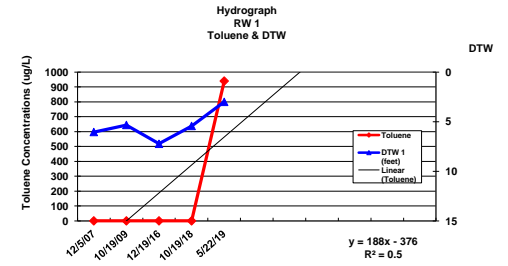
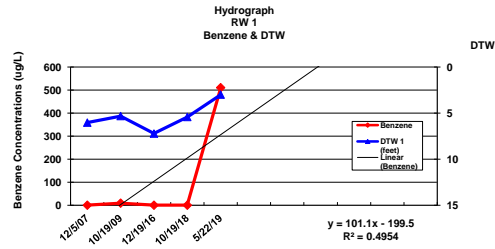
ug/L

Well No.	Date	DTW ¹ (feet)	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	TBA
RW 1	12/5/07	6.04	<1	<5	<5	<10	7.5	<100
	10/19/09	5.33	9	<2	<2	<10	6.5	<100
	12/19/16	7.23	<0.5	<0.5	<0.5	<0.5	1	10
	10/19/18	5.43	<0.43	<0.53	<0.60	1.2	0.89	11
	5/22/19	3.00	510	940	295	1490	58.80	111
Groundwater Quality Standard			1	600	700	1,000	70	100

¹ DTW depth to groundwater

NO remedial activities were conducted after July 2003

Only summary table of the analytical data for the samples collected on 12/5/07 by the Whitman Co. were available for review.



State of Idaho

Department of Environmental Quality

Waste Management and Remediation Division

Mann-Kendall Statistical Test

Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 1
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	3,700.00	14,000.00	1,900.00	10,000.00	1,600.00	1000.00				
2	19-Oct-09	4,500.00	21,000.00	2,900.00	16,000.00	730.00	290.00				
3	21-Dec-16	190.00	580.00	260.00	980.00	9.00	63.00				
4	22-May-19	1,660.00	2,510.00	1,750.00	10,300.00	83.60	100.00				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		-2	-2	-2	0	-4	-4				
Number of Rounds n =		4	4	4	4	4	4				
Average =		2512.50	9522.50	1702.50	9320.00	605.65	363.25				
Standard Deviation =		1956.28	9676.85	1088.74	6207.54	737.73	435.99				
Coefficient of Variation (CV) =		0.78	1.02	0.64	0.67	1.22	1.20				
Trend ≥ 80% Confidence Level		No Trend	No Trend	No Trend	No Trend	DECREASING	DECREASING				
Trend ≥ 90% Confidence Level		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		CV ≤ 1 STABLE	CV > 1 NON-STABLE	CV ≤ 1 STABLE	CV ≤ 1 STABLE	NA	NA				
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho

Department of Environmental Quality

Waste Management and Remediation Division

Mann-Kendall Statistical Test

Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 2
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	21/5/07	470.00	1,800.00	850.00	3,600.00	71.00	1000.00				
2	19-Oct-09	530.00	1,700.00	890.00	3,900.00	96.00	820.00				
3	21-Dec-16	1.00	4.00	39.00	145.00	1.00	5.00				
4	22-May-19	515.00	1,140.00	923.00	3,620.00	65.60	241.00				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		0	-4	2	0	-2	-4				
Number of Rounds n =		4	4	4	4	4	4				
Average =		379.00	1161.00	675.50	2816.25	58.40	516.50				
Standard Deviation =		253.29	824.20	425.38	1786.09	40.49	470.25				
Coefficient of Variation (CV) =		0.67	0.71	0.63	0.63	0.69	0.91				
Trend ≥ 80% Confidence Level		No Trend	DECREASING	No Trend	No Trend	No Trend	DECREASING				
Trend ≥ 90% Confidence Level		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		CV ≤ 1 STABLE	NA	CV ≤ 1 STABLE	CV ≤ 1 STABLE	CV ≤ 1 STABLE	CV ≤ 1 STABLE	NA			
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho

Department of Environmental Quality

Waste Management and Remediation Division

Mann-Kendall Statistical Test

Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 3
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	2.20	2.50	2.50	5.00	2,800.00	50.00				
2	19-Oct-09	1.70	1.00	1.00	5.00	2,000.00	6300.00				
3	21-Dec-16	0.25	0.27	0.25	3.80	200.00	2100.00				
4	21-May-19	0.22	0.27	0.30	0.30	65.40	64.30				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		-6	-5	-4	-5	-6	0				
Number of Rounds n =		4	4	4	4	4	4				
Average =		1.09	1.01	1.01	3.52	1266.35	2128.58				
Standard Deviation =		1.01	1.05	1.05	2.23	1350.27	2942.98				
Coefficient of Variation (CV) =		0.93	1.05	1.04	0.63	1.07	1.38				
Trend ≥ 80% Confidence Level		DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	No Trend				
Trend ≥ 90% Confidence Level		DECREASING	No Trend	No Trend	No Trend	DECREASING	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		NA	NA	NA	NA	NA	CV > 1 NON-STABLE				
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho
Department of Environmental Quality
Waste Management and Remediation Division

Mann-Kendall Statistical Test
Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 4
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	0.50	2.50	2.50	5.00	120.00	50.00				
2	19-Oct-09	0.50	1.00	1.00	5.00	150.00	810.00				
3	21-Dec-16	0.50	0.25	0.25	0.25	16.00	47.00				
4	22-May-19	8.20	0.27	0.30	0.30	12.30	7.00				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		3	-4	-4	-3	-4	-4				
Number of Rounds n =		4	4	4	4	4	4				
Average =		2.43	1.00	1.01	2.64	74.58	228.50				
Standard Deviation =		3.85	1.06	1.05	2.73	70.86	388.16				
Coefficient of Variation (CV) =		1.59	1.05	1.04	1.04	0.95	1.70				
Trend ≥ 80% Confidence Level		No Trend	DECREASING	DECREASING	No Trend	DECREASING	DECREASING				
Trend ≥ 90% Confidence Level		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		CV > 1 NON-STABLE	NA	NA	CV > 1 NON-STABLE	NA	NA				
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho

Department of Environmental Quality

Waste Management and Remediation Division

Mann-Kendall Statistical Test

Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 5
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	23.00	160.00	350.00	840.00	5.00	100.00				
2	19-Oct-09	120.00	17.00	190.00	340.00	1.00	50.00				
3	19-Dec-16	83.00	23.00	73.00	47.00	2.00	7.00				
4	22-May-19	0.22	0.27	0.30	0.30	0.26	2.90				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		-2	-4	-6	-6	-4	-6				
Number of Rounds n =		4	4	4	4	4	4				
Average =		56.55	50.07	153.33	306.82	2.06	39.98				
Standard Deviation =		54.85	73.92	152.64	385.94	2.08	45.33				
Coefficient of Variation (CV) =		0.97	1.48	1.00	1.26	1.01	1.13				
Trend ≥ 80% Confidence Level		No Trend	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING				
Trend ≥ 90% Confidence Level		No Trend	No Trend	DECREASING	DECREASING	No Trend	DECREASING				
Stability Test, If No Trend Exists at 80% Confidence Level		CV ≤ 1 STABLE	NA	NA	NA	NA	NA				
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho

Department of Environmental Quality

Waste Management and Remediation Division

Mann-Kendall Statistical Test

Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 6
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	570.00	480.00	270.00	710.00	240.00	200.00				
2	19-Oct-09	1,800.00	2,300.00	870.00	3,300.00	470.00	340.00				
3	19-Dec-16	51.00	32.00	58.00	66.00	20.00	70.00				
4	22-May-19	46.20	69.50	149.00	662.00	26.00	62.00				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		-4	-2	-2	-2	-2	-4				
Number of Rounds n =		4	4	4	4	4	4				
Average =		616.80	720.38	336.75	1184.50	189.00	168.00				
Standard Deviation =		826.21	1072.46	365.95	1440.43	213.46	130.96				
Coefficient of Variation (CV) =		1.34	1.49	1.09	1.22	1.13	0.78				
Trend ≥ 80% Confidence Level		DECREASING	No Trend	No Trend	No Trend	No Trend	DECREASING				
Trend ≥ 90% Confidence Level		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		NA	CV > 1 NON-STABLE	CV > 1 NON-STABLE	CV > 1 NON-STABLE	CV > 1 NON-STABLE	NA				
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho
Department of Environmental Quality
Waste Management and Remediation Division

Mann-Kendall Statistical Test
Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 7
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	5,200.00	5,900.00	3,500.00	21,000.00	390.00	2000.00				
2	19-Oct-09	4,600.00	6,500.00	3,400.00	21,000.00	390.00	380.00				
3	19-Dec-16	2,200.00	810.00	1,900.00	5,200.00	190.00	430.00				
4	22-May-19	71.50	0.27	3.70	4.80	2.70	6.70				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		-6	-4	-6	-5	-5	-4				
Number of Rounds n =		4	4	4	4	4	4				
Average =		3017.88	3302.57	2200.93	11801.20	243.18	704.18				
Standard Deviation =		2353.35	3370.87	1637.45	10831.54	185.98	884.29				
Coefficient of Variation (CV) =		0.78	1.02	0.74	0.92	0.76	1.26				
Trend ≥ 80% Confidence Level		DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	DECREASING				
Trend ≥ 90% Confidence Level		DECREASING	No Trend	DECREASING	No Trend	No Trend	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		NA	NA	NA	NA	NA	NA				
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho

Department of Environmental Quality

Waste Management and Remediation Division

Mann-Kendall Statistical Test

Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		MW 8
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	170.00	16.00	150.00	330.00	370.00	50.00				
2	19-Oct-09	32.00	2.20	17.00	12.00	280.00	340.00				
3	19-Dec-16	0.25	0.25	0.25	1.60	1.00	2.50				
4	22-May-19	0.22	0.27	0.30	0.30	0.75	2.90				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		-6	-4	-4	-6	-6	-2				
Number of Rounds n =		4	4	4	4	4	4				
Average =		50.62	4.68	41.89	85.97	162.94	98.85				
Standard Deviation =		80.99	7.60	72.50	162.77	190.71	162.31				
Coefficient of Variation (CV) =		1.60	1.62	1.73	1.89	1.17	1.64				
Trend ≥ 80% Confidence Level		DECREASING	DECREASING	DECREASING	DECREASING	DECREASING	No Trend				
Trend ≥ 90% Confidence Level		DECREASING	No Trend	No Trend	DECREASING	DECREASING	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		NA	NA	NA	NA	NA	CV > 1 NON-STABLE				
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		28-Jun-19	Checked By =		FJ			
Concentration Units =		ug/L									

State of Idaho

Department of Environmental Quality

Waste Management and Remediation Division

Mann-Kendall Statistical Test

Version 2.01 12/5/13

Instructions: To use the spreadsheet, provide at least four rounds and up to ten rounds of data. Enter the data in cells with yellow background. Output is presented in blue background cells. Use consistent concentration units. All non-detect values should be assigned a single value, less than the detection limit, even if the detection limit varies over time. The spreadsheet contains several error checks and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at 80% and 90% confidence levels. If an increasing or decreasing trend is not present, use the additional coefficient of variation (CV) test for stable and non-stable conditions, as proposed by Wiedemeier, et al (2000), *Designing Monitoring Programs to Effectively Evaluate the Performance of Natural Attenuation*, AFCEE, San Antonio, Texas, January 2000. Clicking the PRINT button will print both the data analysis sheet and the plot of concentration trends.

This spreadsheet is adapted from State of Wisconsin DNR, Remediation and Redevelopment Program Form 4400-215 (2/2001), developed by George Mickelson.

Site Name =		North Brunsick Gulf	City =			Site ID =			Well Number =		RW 1
Compound		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA				
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)				
1	5-Dec-07	0.50	2.50	2.50	5.00	7.50	50.00				
2	19-Oct-09	9.00	1.00	1.00	5.00	6.50	50.00				
3	19-Dec-16	0.25	0.25	0.25	0.25	1.00	0.25				
4	22-May-19	510.00	940.00	295.00	1,490.00	58.80	111.00				
5											
6											
7											
8											
9											
10											
Mann Kendall Statistic S =		2	0	0	1	0	1				
Number of Rounds n =		4	4	4	4	4	4				
Average =		129.94	235.94	74.69	375.06	18.45	52.81				
Standard Deviation =		253.41	469.38	146.88	743.30	27.05	45.33				
Coefficient of Variation (CV) =		1.95	1.99	1.97	1.98	1.47	0.86				
Trend ≥ 80% Confidence Level		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend				
Trend ≥ 90% Confidence Level		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend				
Stability Test, If No Trend Exists at 80% Confidence Level		CV > 1 NON-STABLE	CV > 1 NON-STABLE	CV > 1 NON-STABLE	CV > 1 NON-STABLE	CV > 1 NON-STABLE	CV > 1 NON-STABLE	CV ≤ 1 STABLE			
Error Check, Blank If no Errors Detected											
Data Entry By =		FJ	Date =		25-Jul-19	Checked By =		FJ			
Concentration Units =		ug/L									

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

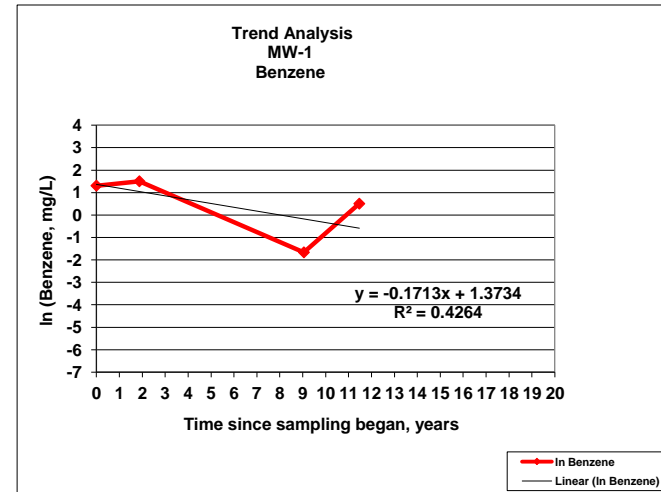
Facility ID: _____

Facility Location and Address: 1696 Georges Rd Rt 130 North Brunswick, NJ

Date: 7/10/19

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): Source well - MW 1

Sampling Date	Depth to Ground Water feet	Benzene MW-1 mg/L	Benzene MW-1 ug/L	In Benzene MW-1 mg/L	Elapsed time since 12/5/07 years
12/5/07		3.700	3700	1.308	0.00
10/19/09		4.500	4500	1.504	1.87
12/21/16		0.190	190	-1.661	9.05
5/22/19		1.660	1660	0.507	11.47
cleanup standard		0.001	1	-6.907755279	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-1, Benzene		
Enter C _{CL}	⇒	0.001
Enter C _o	⇒	3.7
Enter k _{point}	⇒	0.1713
Time to reach cleanup level		48.0 years
36.53 more years to reach standard from 5/22/19		

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

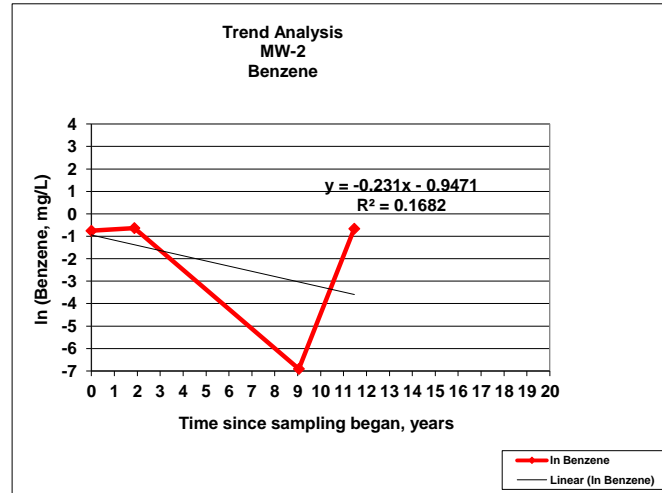
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 2 - side gradient downgradient

Sampling Date	Depth to Ground Water feet	Benzene MW-2 mg/L	Benzene MW-2 ug/L	In Benzene MW-2 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.470	470	-0.755	0.00
10/19/09		0.530	530	-0.635	1.87
12/21/16		0.001	1	-6.908	9.05
5/22/19		0.515	515	-0.664	11.47
<i>cleanup standard</i>		<i>0.001</i>	<i>1</i>	<i>-6.907755279</i>	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-2, Benzene

Enter C_{CL} ⇒ **0.001**

Enter C_o ⇒ **0.47**

Enter k_{point} ⇒ **0.231**

Time to reach cleanup level 26.6 years

15.13 more years to reach standard from 5/22/19

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

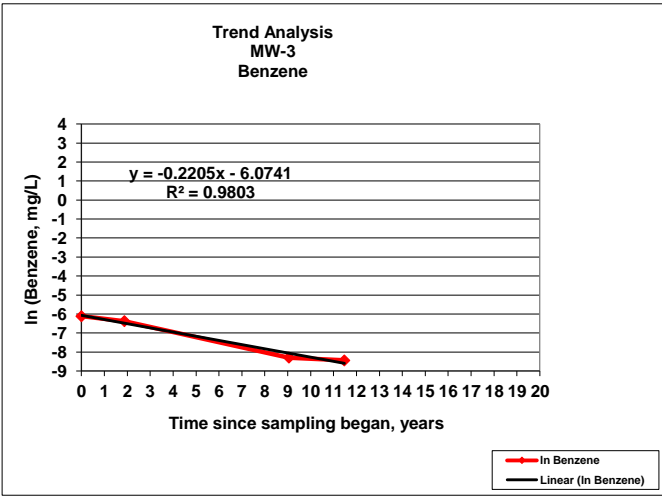
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 3 - downgradient

Sampling Date	Depth to Ground Water feet	Benzene MW-3 mg/L	Benzene MW-3 ug/L	In Benzene MW-3 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.0022	2.2	-6.119	0.00
10/19/09		0.0017	1.7	-6.377	1.87
12/21/16		0.00025	<0.5	-8.294	9.05
5/22/19		0.000215	<0.43	-8.445	11.47
<i>cleanup standard</i>		0.001	1	-6.907755279	
<i>For non-detects used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-3, Benzene		
Enter C _{CL}	⇒	0.001
Enter C _o	⇒	0.0022
Enter k _{point}	⇒	0.2205
Time to reach cleanup level		3.6 years
Groundwater reached the cleanup level in last 2 samples		

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

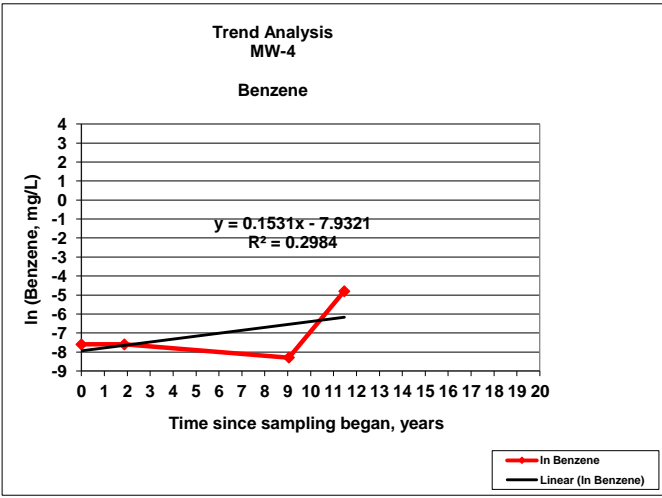
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/19

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 4 - downgradient

Sampling Date	Depth to Ground Water feet	Benzene MW-4 mg/L	Benzene MW-4 ug/L	In Benzene MW-4 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.00050	<1.0	-7.601	0.00
10/19/09		0.00050	<1.0	-7.601	1.87
12/21/16		0.00025	<0.5	-8.294	9.05
5/22/19		0.0082	8.2	-4.804	11.47
<i>cleanup standard</i>		<i>0.001</i>	<i>1</i>	<i>-6.907755279</i>	
<i>For non-detects used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-4, Benzene		
Enter C _{CL}	⇒	0.001
Enter C _o	⇒	0.0005
Enter k _{point}	⇒	0.1531
Time to reach cleanup level		-4.5 years
Not applicable because concentrations increased		

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

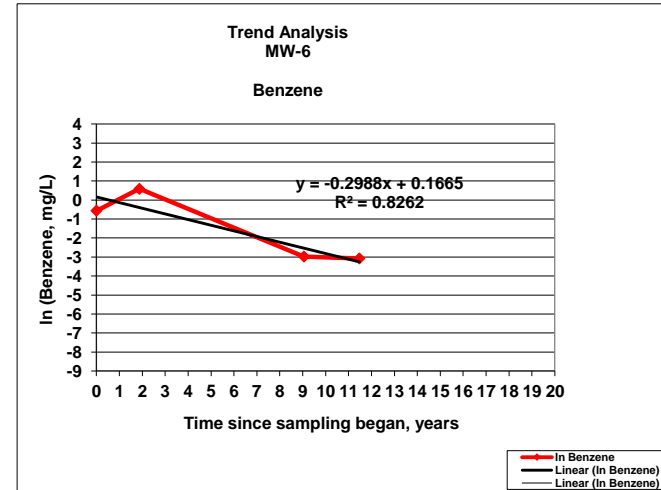
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 6 - side gradient

Sampling Date	Depth to Ground Water feet	Benzene MW-6 mg/L	Benzene MW-6 ug/L	In Benzene MW-6 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.570	570	-0.562	0.00
10/19/09		1.800	1800	0.588	1.87
12/21/16		0.051	51	-2.976	9.05
5/22/19		0.0462	46.2	-3.075	11.47
<i>cleanup standard</i>		<i>0.001</i>	<i>1</i>	<i>-6.907755279</i>	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-6, Benzene

Enter C_{CL} ⇒ **0.001**

Enter C_o ⇒ **0.57**

Enter k_{point} ⇒ **0.2988**

Time to reach cleanup level 21.2 years

9.73 more years to reach standard from 5/22/19

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

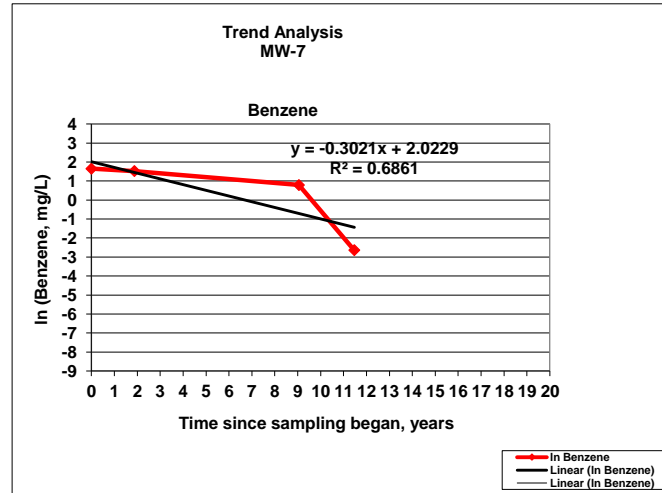
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 7 - side gradient

Sampling Date	Depth to Ground Water feet	Benzene MW-7 mg/L	Benzene MW-7 ug/L	In Benzene MW-7 mg/L	Elapsed time since 12/5/07 years
12/5/07		5.200	5200	1.649	0.00
10/19/09		4.600	4600	1.526	1.87
12/21/16		2.200	2200	0.788	9.05
5/22/19		0.0715	71.5	-2.638	11.47
<i>cleanup standard</i>		<i>0.001</i>	<i>1</i>	<i>-6.907755279</i>	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-7, Benzene

Enter C_{CL} ⇒ **0.001**

Enter C_o ⇒ **5.2**

Enter k_{point} ⇒ **0.3021**

Time to reach cleanup level 28.3 years

16.83 more years to reach standard from 5/22/19

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

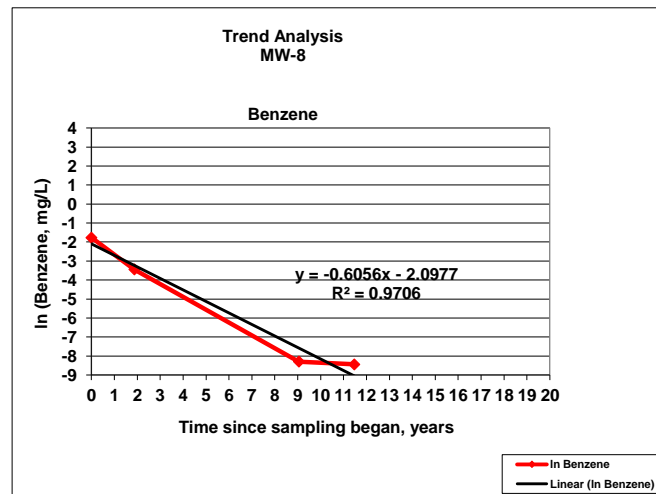
Release ID: _____

Facility Location and Address: 1696 Georges Rd Rt 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 8 downgradient

Sampling Date	Depth to Ground Water feet	Benzene MW-8 mg/L	Benzene MW-8 ug/L	In Benzene MW-8 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.170	170	-1.772	0.00
10/19/09		0.032	32	-3.442	1.87
12/21/16		0.00025	<0.5	-8.294	9.05
5/22/19		0.000215	<0.43	-8.445	11.47
<i>cleanup standard</i>		<i>0.001</i>	<i>1</i>	<i>-6.907755279</i>	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-8, Benzene

Enter C_{CL} ⇒ **0.001**

Enter C_o ⇒ **0.017**

Enter k_{point} ⇒ **0.6056**

Time to reach cleanup level 4.7 years

Groundwater reached standard in last 2 samples

First-Order Decay Rate Calculation

Facility Name: Norht Brunswick Gulf

Facility ID: _____

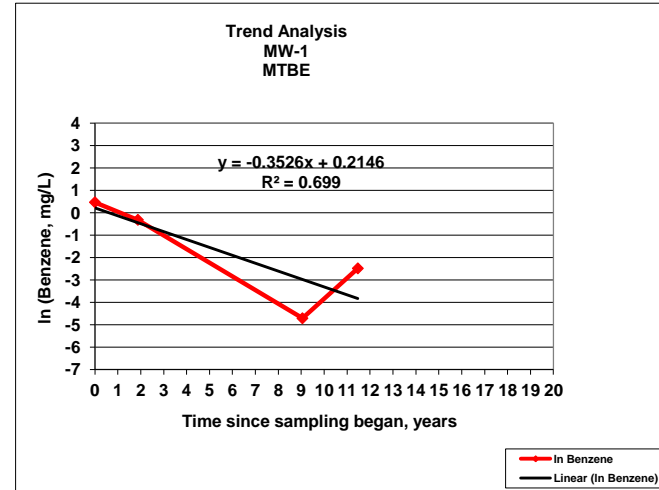
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 1 source

Sampling Date	Depth to Ground Water feet	MTBE MW-1 mg/L	MTBE MW-1 ug/L	In MTBE MW-1 mg/L	Elapsed time since 12/5/07 years
12/5/07		1.600	1600	0.470	0.00
10/19/09		0.730	730	-0.315	1.87
12/21/16		0.009	9	-4.711	9.05
5/22/19		0.0836	83.6	-2.482	11.47
<i>cleanup standard</i>		<i>0.07</i>	<i>70</i>	<i>-2.659260037</i>	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y



Solutions

MW-1, MTBE

Enter C_{CL} 0.07

Enter C_o 1.6

Enter k_{point} 0.3526

Time to reach cleanup level 8.9 years

Groundwater will likely reach standard in next few years

First-Order Decay Rate Calculation

Facility Name: Example from EPA Issue Paper (Newell, Rifai Wilson, Connor, Aziz and Suarez, November 2002)

Facility ID: _____

Facility Location and Address: _____

Release ID: _____

Type of cleanup system: _____

Date: _____

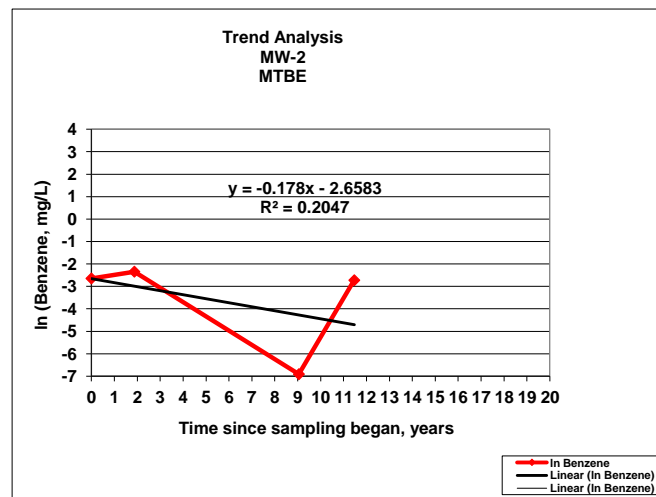
Dates of cleanup system operation: _____

State Project Manager: _____

Effectiveness of cleanup system for contaminant mass removal: _____

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): _____

Sampling Date	Depth to Ground Water feet	MTBE MW-2 mg/L	MTBE MW-2 ug/L	In MTBE MW-2 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.071	71	-2.645	0.00
10/19/09		0.096	96	-2.343	1.87
12/21/16		0.001	1	-6.908	9.05
5/22/19		0.0656	65.6	-2.724	11.47
cleanup standard		0.07	70	-2.659260037	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW 2 MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **0.071**

Enter k_{point} ⇒ **0.178**

Time to reach cleanup level 0.1 years

Groundwater reached standard in last 2 samples

First-Order Decay Rate Calculation

Facility Name: Example from EPA Issue Paper (Newell, Rifai Wilson, Connor, Aziz and Suarez, November 2002)

Facility ID: _____

Facility Location and Address: _____

Release ID: _____

Type of cleanup system: _____

Date: _____

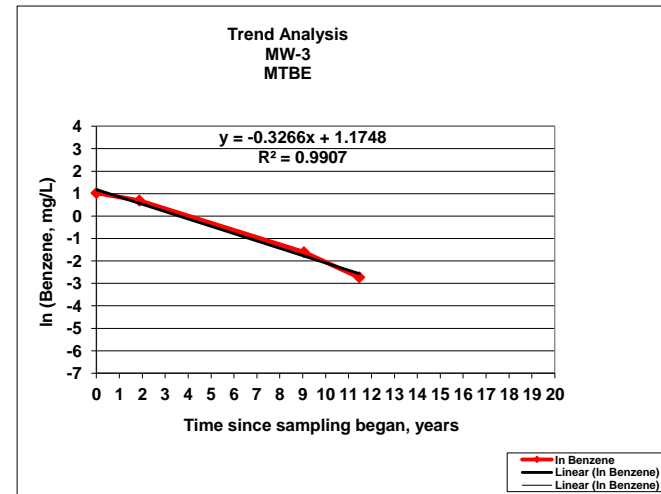
Dates of cleanup system operation: _____

State Project Manager: _____

Effectiveness of cleanup system for contaminant mass removal: _____

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): _____

Sampling Date	Depth to Ground Water feet	MTBE MW-3 mg/L	MTBE MW-3 ug/L	In MTBE MW-3 mg/L	Elapsed time since 12/5/07 years
12/5/07		2.800	2800	1.030	0.00
10/19/09		2.000	2000	0.693	1.87
12/21/16		0.200	200	-1.609	9.05
5/22/19		0.0654	65.4	-2.727	11.47
cleanup standard		0.07	70	-2.659260037	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-3, MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **2.8**

Enter k_{point} ⇒ **0.3266**

Time to reach cleanup level 11.3 years

Groundwater reached the standard in the last sample

First-Order Decay Rate Calculation

Facility Name: Example from EPA Issue Paper (Newell, Rifai Wilson, Connor, Aziz and Suarez, November 2002)

Facility ID: _____

Facility Location and Address: _____

Release ID: _____

Type of cleanup system: _____

Date: _____

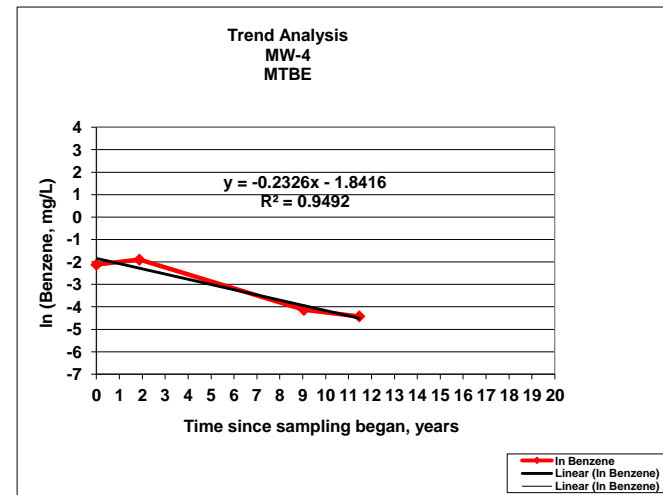
Dates of cleanup system operation: _____

State Project Manager: _____

Effectiveness of cleanup system for contaminant mass removal: _____

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): Downgradient

Sampling Date	Depth to Ground Water feet	MTBE MW-4 mg/L	MTBE MW-4 ug/L	In MTBE MW-4 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.120	120	-2.120	0.00
10/19/09		0.150	150	-1.897	1.87
12/21/16		0.016	16	-4.135	9.05
5/22/19		0.0120	12.3	-4.423	11.47
cleanup standard		0.07	70	-2.659260037	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-3, MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **0.12**

Enter k_{point} ⇒ **0.2326**

Time to reach cleanup level 2.3 years

Groundwater reached the standard in the last sample2 samples

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

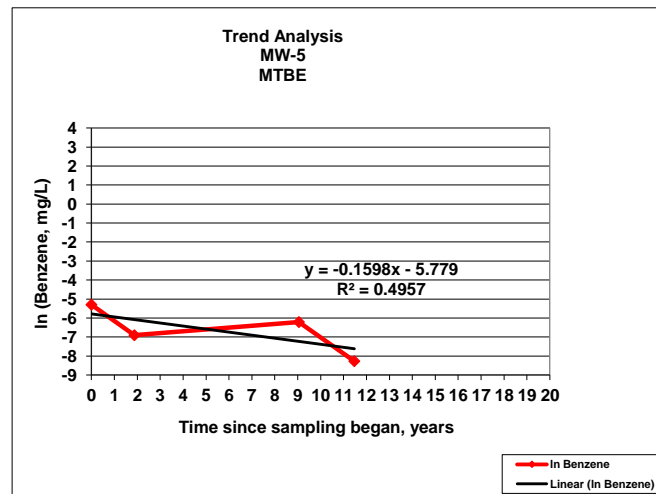
Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Release ID: _____

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 5 - upgradient

Sampling Date	Depth to Ground Water feet	MTBE MW-5 mg/L	MTBE MW-5 ug/L	In MYBE MW-5 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.005	<10	-5.298	0.00
10/19/09		0.001	<2	-6.908	1.87
12/21/16		0.002	2	-6.215	9.05
5/22/19		0.000255	<0.51	-8.274	11.47
cleanup standard		0.07	70	-2.659260037	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-5, MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **0.005**

Enter k_{point} ⇒ **0.1598**

Time to reach cleanup level -16.5 years

never was above cleanup standard of 70

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

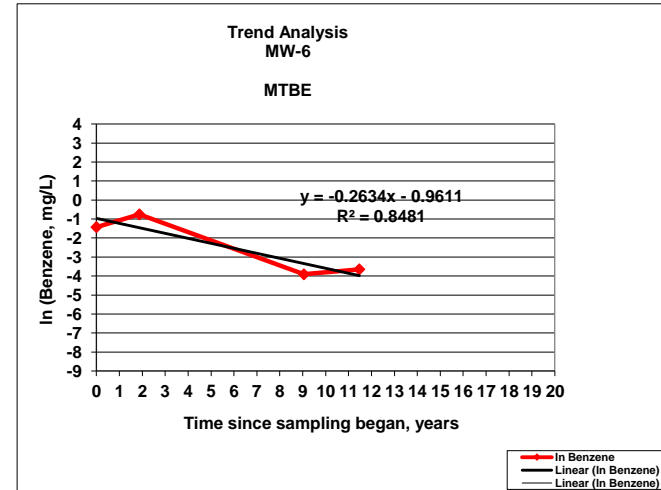
Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Release ID: _____

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 6 - side gradient

Sampling Date	Depth to Ground Water feet	MTBE MW-6 mg/L	MTBE MW-6 ug/L	In MTBE MW-6 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.240	240	-1.427	0.00
10/19/09		0.470	470	-0.755	1.87
12/21/16		0.020	20	-3.912	9.05
5/22/19		0.026	26	-3.650	11.47
<i>cleanup standard</i>		<i>0.07</i>	<i>70</i>	<i>-2.659260037</i>	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-6, MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **0.24**

Enter k_{point} ⇒ **0.2634**

Time to reach cleanup level 4.7 years

Groundwater was below standard in last 2 samples

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

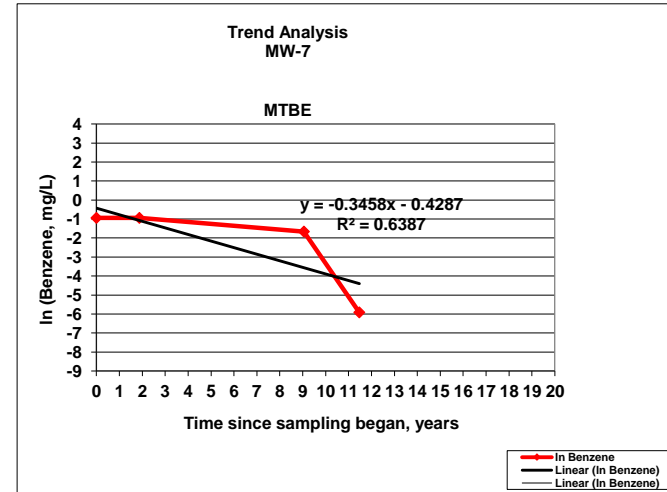
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 7 - side gradient

Sampling Date	Depth to Ground Water feet	MTBE MW-7 mg/L	MTBE MW-7 ug/L	In MTBE MW-7 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.390	390	-0.942	0.00
10/19/09		0.390	390	-0.942	1.87
12/21/16		0.190	190	-1.661	9.05
5/22/19		0.0027	2.7	-5.915	11.47
<i>cleanup standard</i>		<i>0.07</i>	<i>70</i>	<i>-2.659260037</i>	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-7, MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **0.39**

Enter k_{point} ⇒ **0.3458**

Time to reach cleanup level 5.0 years

Groundwater reached standard in last sample

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

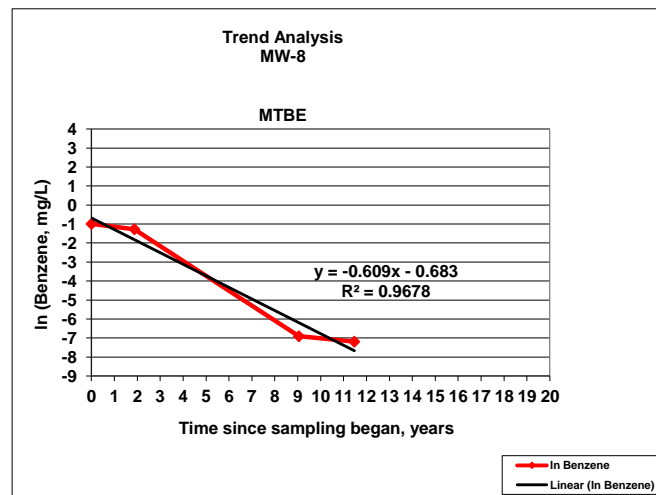
Facility Location and Address: 1696 Georges Rd Rt 130 North Brunswick, NJ

Release ID: _____

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 8 downgradient

Sampling Date	Depth to Ground Water feet	MTBE MW-8 mg/L	MTBE MW-8 ug/L	In MTBE MW-8 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.370	370	-0.994	0.00
10/19/09		0.280	280	-1.273	1.87
12/21/16		0.001	1	-6.908	9.05
5/22/19		0.00075	0.75	-7.195	11.47
<i>cleanup standard</i>		<i>0.07</i>	<i>70</i>	<i>-2.659260037</i>	



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-8, MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **0.37**

Enter k_{point} ⇒ **0.609**

Time to reach cleanup level 2.7 years

Groundwater reached standard in last 2 samples

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

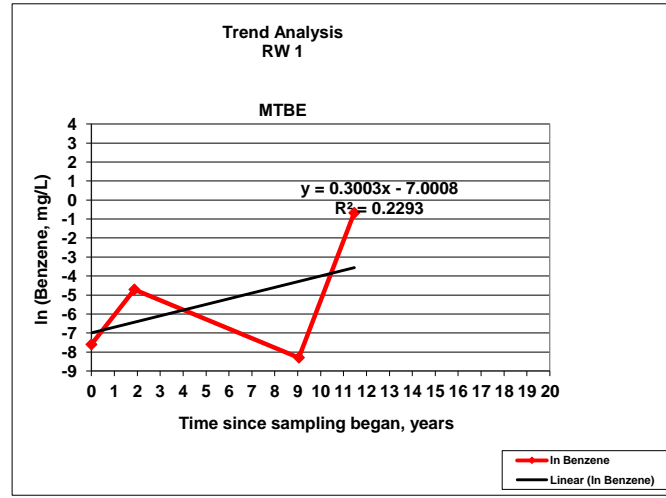
Release ID: _____

Facility Location and Address: 1696 Georges Rd Rt 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): RW 1 near source

Sampling Date	Depth to Ground Water feet	MTBE RW 1 mg/L	MTBE RW 1 ug/L	In MTBE RW 1 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.0005	<1	-7.601	0.00
10/19/09		0.009	9	-4.711	1.87
12/21/16		0.000	<0.5	-8.294	9.05
5/22/19		0.510	510	-0.673	11.47
cleanup standard		0.07	70	-2.659260037	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-8, MTBE

Enter C_{CL} ⇒ **0.07**

Enter C_o ⇒ **0.0005**

Enter k_{point} ⇒ **0.003**

Time to reach cleanup level **-1647.2** **years**

Not applicable because concentrations increased

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

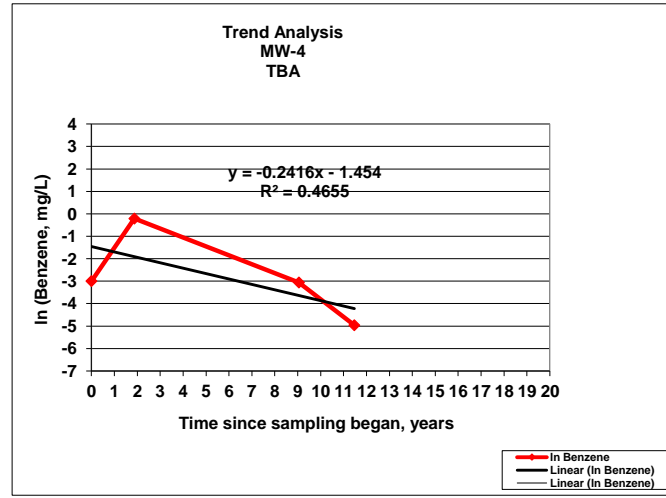
Release ID: _____

Facility Location and Address: 1696 Georges RD RT 130 North Brunswick, NJ

Date: 7/10/19

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 4 downgradient

Sampling Date	Depth to Ground Water feet	TBA MW-4 mg/L	TBA MW-4 ug/L	In TBA MW-4 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.050	<100	-2.996	0.00
10/19/09		0.810	810	-0.211	1.87
12/21/16		0.047	47	-3.058	9.05
5/22/19		0.007	7	-4.962	11.47
cleanup standard		0.1	100	-2.302585093	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-4, TBA

Enter C_{CL} ⇒ **0.1**

Enter C_o ⇒ **0.05**

Enter k_{point} ⇒ **0.4655**

Time to reach cleanup level -1.5 years

Groundwater reached the standard in last 2 samples

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

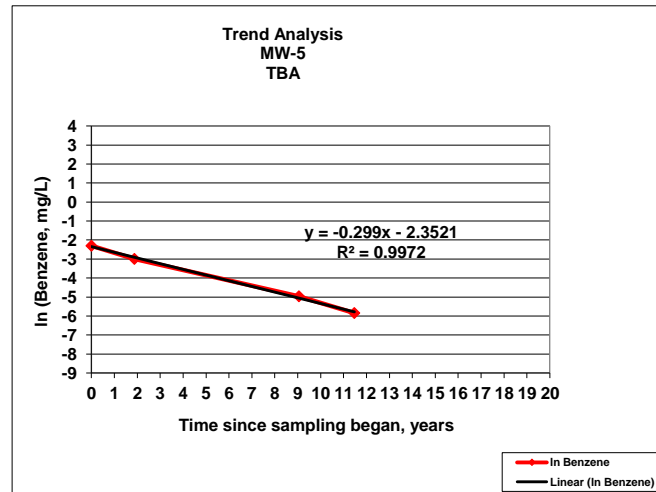
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 5 - upgradient

Sampling Date	Depth to Ground Water feet	TBA MW-5 mg/L	TBA MW-5 ug/L	In TBA MW-5 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.100	<200	-2.303	0.00
10/19/09		0.050	<100	-2.996	1.87
12/21/16		0.007	7	-4.962	9.05
5/22/19		0.0029	<5.8	-5.843	11.47
cleanup standard		0.1	100	-2.302585093	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-5, TBA		
Enter C _{CL}	⇒	0.1
Enter C _o	⇒	0.1
Enter k _{point}	⇒	0.299
Time to reach cleanup level		0.0 years
Groundwater reached standard in last 3 samples		

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

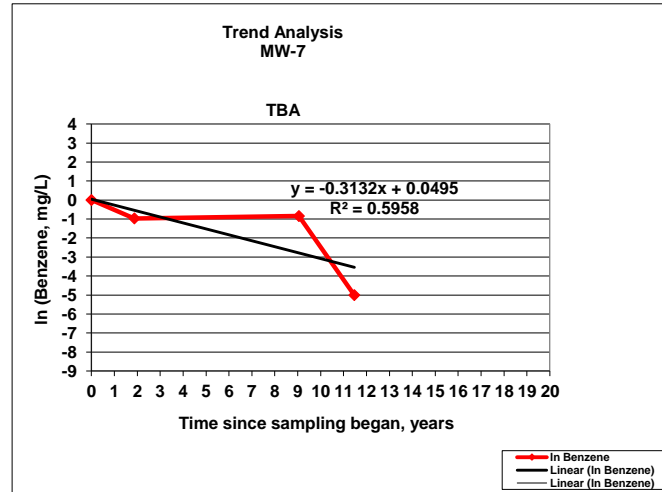
Release ID: _____

Facility Location and Address: 1696 Georges Rd RT 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 7 - side gradient

Sampling Date	Depth to Ground Water feet	TBA MW-7 mg/L	TBA MW-7 ug/L	In TBA MW-7 mg/L	Elapsed time since 12/5/07 years
12/5/07		1	<2000	0.000	0.00
10/19/09		0.380	380	-0.968	1.87
12/21/16		0.430	430	-0.844	9.05
5/22/19		0.0067	6.7	-5.006	11.47
cleanup standard		0.1	100	-2.302585093	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-7, TBA

Enter C_{CL} ⇒ **0.1**

Enter C_o ⇒ **1**

Enter k_{point} ⇒ **0.3132**

Time to reach cleanup level 7.4 years

Groundwater reached standard in last sample

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

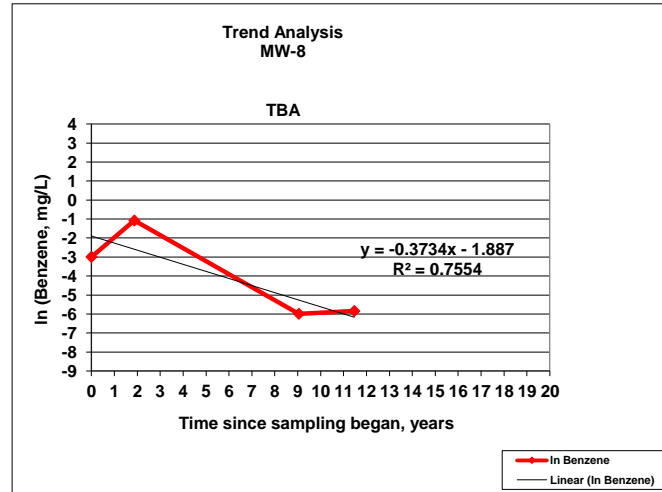
Facility Location and Address: 1696 Georges Rd Rt 130 North Brunswick, NJ

Release ID: _____

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 8 downgradient

Sampling Date	Depth to Ground Water feet	TBA MW-8 mg/L	TBA MW-8 ug/L	In TBA MW-8 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.050	<100	-2.996	0.00
10/19/09		0.340	340	-1.079	1.87
12/21/16		0.0025	<5	-5.991	9.05
5/22/19		0.0029	<5.8	-5.843	11.47
<i>cleanup standard</i>		0.1	100	-2.302585093	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-8, TBA		
Enter C _{CL}	⇒	0.1
Enter C _o	⇒	0.05
Enter k _{point}	⇒	0.3734
Time to reach cleanup level		-1.9 years
Groundwater reached standard in last 2 samples		

First-Order Decay Rate Calculation

Facility Name: North Brunswick Gulf

Facility ID: _____

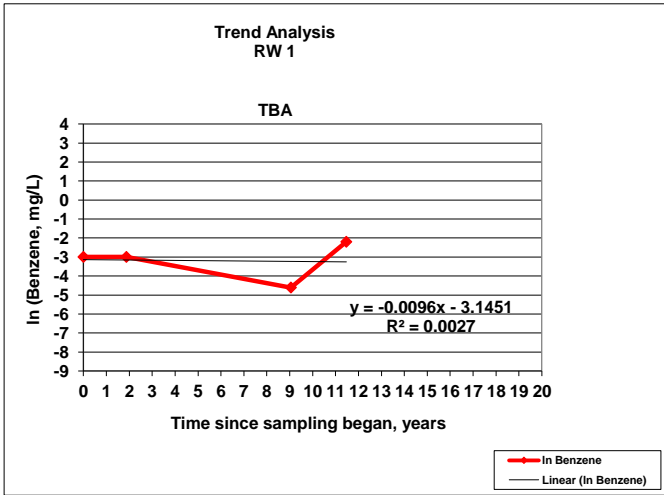
Release ID: _____

Facility Location and Address: 1696 Georges Rd Rt 130 North Brunswick, NJ

Date: 7/10/2019

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other): MW 8 downgradient

Sampling Date	Depth to Ground Water feet	TBA RW 1 mg/L	TBA RW 1 ug/L	In TBA RW 1 mg/L	Elapsed time since 12/5/07 years
12/5/07		0.050	<100	-2.996	0.00
10/19/09		0.050	<100	-2.996	1.87
12/21/16		0.010	10	-4.605	9.05
5/22/19		0.111	111	-2.198	11.47
cleanup standard		0.1	100	-2.302585093	
<i>For non-detected used detection level divided by 2 as the value</i>					



Formula

$$t = -[\ln(C_{CL}/C_o)] / k_{point}$$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years⁻¹

= slope of the line, y

Solutions

MW-8, TBA

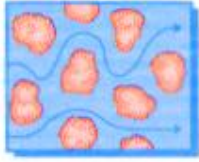
Enter C_{CL} ⇒ **0.1**

Enter C_o ⇒ **0.05**

Enter k_{point} ⇒ **0.0096**

Time to reach cleanup level -72.2 years

Not applicable because concentrations increased



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

Middlesex County Health Department
35 Kennedy Blvd..
East Brunswick, New Jersey 08816
Attn: Lester Jones - Director

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 RT 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Mr. Jones:

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Contact information for the responsible party and the Licensed Site Remediation Professional (LSRP) overseeing the project is listed below:

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsiteefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsiteefj@aol.com.

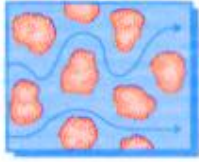
Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

Attachments: CEA Fact Sheet
Location & CEA Map

Cc: Middlesex County Clerk: Elaine Flynn
Middlesex County Planning Board: Mirah Becker

North Brunswick Health Officer: Nick DeStefano
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Department of Public Works: Eric Chaszar
New Jersey Department of Transportation: Dianne Scaccetti
Thomas Csepes: Property within CEA boundary
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp: Ted Owens: tenant
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

Middlesex County Administration Bldg.
1st Floor
75 Bayard St.
New Brunswick, New Jersey 08901
Attn: Elaine Flynn - Clerk

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Ms. Flynn:

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC. is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Contact information for the responsible party and the Licensed Site Remediation Professional (LSRP) overseeing the project is listed below:

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

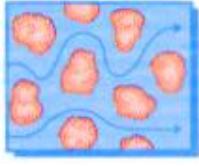
Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

Attachments: CEA Fact Sheet
Location & CEA Maps

NBG
CEA proposal

Page 2 of 2

Cc: Middlesex County Health Dept.: Lester Jones
Middlesex County Office of Planning: Mirah Becker
North Brunswick Health Officer: Nick DeStefano
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Department of Public Works: Eric Chaszar
New Jersey Department of Transportation: Dianne Scaccetti
Thomas Csepes: Property within CEA boundary
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp: Ted Owens: tenant
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

Middlesex County
Office of Planning
5th Floor
75 Bayard St.
New Brunswick, New Jersey 08901
Attn: Mirah Becker

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Ms Becker:

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Contact information for the responsible party and the Licensed Site Remediation Professional (LSRP) overseeing the project are listed below:

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

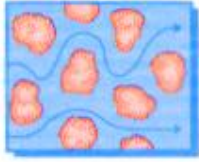
Attachments: CEA Fact Sheet
Location & CEA Maps

NBG
CEA proposal

Page 2 of 2

Cc:

Middlesex County Health Department: Lester Jones
Middlesex County Clerk: Elaine Flynn
North Brunswick Health Officer: Nick DeStefano
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Department of Public Works: Eric Chaszar
New Jersey Department of Transportation: Dianne Scaccetti
Thomas Csepes: Property within CEA boundary
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp: Ted Owens: tenant
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

North Brunswick Municipal Building
710 Hermann Road
North Brunswick, New Jersey 08902
Attn: Lisa Russo - Municipal Clerk

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Ms. Russo

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC. is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

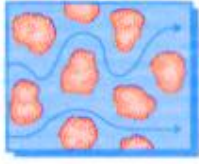
Attachments: CEA Fact Sheet
Location & CEA Maps

Cc: Middlesex County Health Department: Lester Jones
Middlesex County Clerk: Elaine Flynn
Middlesex County Planning Board: Mirah Becker
North Brunswick Health Officer: Nick DeStefano

NBG
CEA proposal

Page 2 of 2

North Brunswick Department of Public Works: Eric Chaszar
New Jersey Department of Transportation: Dianne Scaccetti
Thomas Csepes: Property within CEA boundary
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp: Ted Owens: tenant
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

North Brunswick Municipal Building
710 Hermann Road
North Brunswick, New Jersey 08902
Attn: Nick DeStefano -Health Officer

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Mr. DeSefano

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

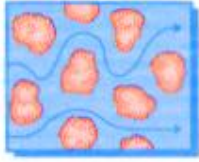
Attachments: CEA Fact Sheet
Location & CEA Maps

Cc: Middlesex County Health Department: Lester Jones
Middlesex County Clerk: Elaine Flynn
Middlesex County Planning Board: Mirah Becker
North Brunswick Municipal Clerk: Lisa Russo

NBG
CEA proposal

Page 2 of 2

North Brunswick Department of Public Works: Eric Chaszar
New Jersey Department of Transportation: Dianne Scaccetti
Thomas Csepes: Property within CEA boundary
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp: Ted Owens: tenant
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

North Brunswick Twp.
Department of Public Works
45 Quarry Lane
North Brunswick, New Jersey 08902
Attn: Eric Chaszar - Director

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Mr. Chaszar

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC. is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

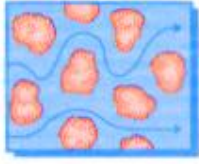
Frank Jasiulewicz, P.G. , SSE, LSRP
On-Site Environmental, Inc.
President

Attachments: CEA Fact Sheet
Location & CEA Maps

Cc: Middlesex County Health Department: Lester Jones
Middlesex County Clerk: Elaine Flynn
Middlesex County Planning Board: Mirah Beker

On-Site Environmental, Inc.
119 Shepherds Way Coatesville, Pa. 19320
Phone 610-384-2719 ♦ Fax 610-384-2709

North Brunswick Health Officer: Nick DeStefano
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Dept. of Public Works: Eric Chaszar
New Jersey Department of Transportation: Dianne Scaccetti
Thomas Csepes: Property within CEA boundary
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp: Ted Owens: tenant
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US Mail

NJ Department of Transportation
Davis Goldberg Complex
1035 Parkway Avenue
Trenton, NJ 08625
Attn: Dianne Scaccetti: Commissioner

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 RT 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Ms. Scaccetti:

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and heating oil type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figures provide information regarding the location of the CEA and contaminant concentrations.

Contact information for the responsible party and the Licensed Site Remediation Professional (LSRP) overseeing the project is listed below:

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

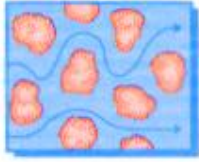
Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

Attachments: CEA Fact Sheet
Location & CEA Maps

On-Site Environmental, Inc.
119 Shepherds Way Coatesville, Pa. 19320
Phone 610-384-2719 ♦ Fax 610-384-2709

Cc: Middlesex County Health Department: Lester Jones
Middlesex County Clerk: Elaine Flynn
Middlesex County Planning Board: Mirah Becker
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Health Officer: Nick DeStefano
North Brunswick Department of Public Works: Eric Chaszar
Thomas Csepes: Property within CEA boundary
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp: Ted Owens: tenant
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

Brunswick Auto Craft.
1696 Georges Rd
North Brunswick, NJ 08902

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Sir:

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property and your property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Contact information for the responsible party and the Licensed Site Remediation Professional (LSRP) overseeing the project is listed below:

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

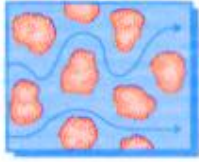
Attachments: CEA Fact Sheet
Location & CEA Maps

Cc: Middlesex County Health Department: Lester Jones
Middlesex County Clerk: Elaine Flynn

NBG
CEA proposal

Page 2 of 2

Middlesex County Planning Board: Mirah Becker
North Brunswick Health Officer: Nick DeStefano
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Public Works Dept: Eric Chaszar
New Jersey Department of Transportation: Dianne Scacetti
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp.: Ted Cohen tenant
Hare Krishna Fuel, Inc: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

Hare Krishna Fuel.
1696 Georges Rd RT 130
North Brunswick, NJ 08902

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Sir:

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property and your property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Contact information for the responsible party and the Licensed Site Remediation Professional (LSRP) overseeing the project is listed below:

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

Attachments: CEA Fact Sheet
Location & CEA Maps

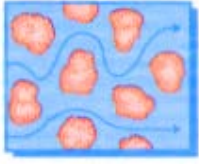
Cc: Middlesex County Health Department: Lester Jones
Middlesex County Clerk: Elaine Flynn

On-Site Environmental, Inc.
119 Shepherds Way Coatesville, Pa. 19320
Phone 610-384-2719 ♦ Fax 610-384-2709

NBG
CEA proposal

Page 2 of 2

Middlesex County Planning Board: Mirah Becker
North Brunswick Health Officer: Nick DeStefano
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Public Works Dept: Eric Chaszar
New Jersey Department of Transportation: Dianne Scacetti
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Petroleum Supply Corp.: Ted Cohen tenant
Brunswick Auto craft: tenant



On-Site Environmental, Inc.

Consulting Assessment Remediation

9/16/19

Sent Via US mail

Petroleum Supply Corp.
3701 Bedford Ave.
Brooklyn, NY 11229
Attn: Ted Cohen

Ref: Groundwater Classification Exception Area Notification
Lawrence Fuel LLC, AKA 1696 Rt 130, LLC, AKA North Brunswick Gulf
1696 Georges Rd RT 130
North Brunswick, NJ
Block 282 Lot 1
NJDEP PI # 010180
NJDEP Case #: 01-08-30-1546-07 & 01-08-30-1549-55 & 19-05-08-1010-08

Dear Mr. Cohen:

In accordance with the New Jersey Department of Environmental Protection's (NJDEP's) Administrative Requirements for the Remediation of Contaminated Sites (ARRCS, N.J.A.C. 7:26C-7.3[d]), On-Site Environmental, Inc. (On-Site) on behalf of 1696 RT 130 LLC is providing you notification of the intent to establish a groundwater Classification Exception Area (CEA) at the above referenced property and your property due to the presence of impacted groundwater.

The CEA is being established due to the presence of gasoline and petroleum type compounds detected in the groundwater that are above the NJDEP ground water quality standards. The enclosed CEA Fact Sheet and figure provides information regarding the location of the CEA and contaminant concentrations.

Contact information for the responsible party and the Licensed Site Remediation Professional (LSRP) overseeing the project is listed below:

Responsible party: 1696 RT 130 LLC	LSRP ID#:585751
Representative: Mr. Walter Lapp	LSRP Name: Frank Jasiulewicz
Mailing address: 555 Georges Rd Dayton, NJ 08810	Mailing Address: 119 Shepherds Way Coatesville, Pa. 19320
Phone #: 732-710-7209	Phone #: 610-384-2719
Email: lapphouse@verizon.net	Email: onsitefj@aol.com

If you have any questions, please feel free to contact me at 610-384-2719 or by email at onsitefj@aol.com.

Sincerely,

Frank Jasiulewicz, P.G., SSE, LSRP
On-Site Environmental, Inc.
President

Attachments: CEA Fact Sheet
Location & CEA Maps

Cc: Middlesex County Health Department: Lester Jones

On-Site Environmental, Inc.
119 Shepherds Way Coatesville, Pa. 19320
Phone 610-384-2719 ♦ Fax 610-384-2709

NBG
CEA proposal

Page 2 of 2

Middlesex County Clerk: Elaine Flynn
Middlesex County Health Act Agency
Middlesex County Planning Board: Mirah Becker
North Brunswick Health Officer: Nick DeStefano
North Brunswick Municipal Clerk: Lisa Russo
North Brunswick Public Works Dept: Eric Chaszar
New Jersey Department of Transportation: Dianne Scacetti
Walter Lapp: Owner of NBG site: via email
Ruth Frey: Owner of NBG site: via email
Brunswick Auto Craft: tenant
Hare Krishna Fuel, Inc: tenant