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November 16, 2012

Mr. David Szymanski Project Manager New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 11th Floor Albany, NY 12233-7011



RE: 2012 Periodic Review Report

Mineral Springs Road Former Manufactured Gas Plant Site

Dear Mr. Szymanski:

National Fuel Gas Distribution Corporation (NFG) completed construction on the remedial action for the Mineral Springs Road Former Manufactured Gas Plant (MGP) site (Mineral Springs Site) in 2001. Since then, NFG has performed operations and maintenance (O&M) activities for the remedy in accordance with the Final Engineering Report, Volume II – Operations and Maintenance (O&M) Plan, dated May 2002 (O&M Plan) for the project. Those activities have included preparation of annual O&M Reports, which have been submitted since 2002. Because of changes in NYSDEC reporting requirements, AECOM has prepared this Periodic Review Report (PRR) on behalf of NFG rather than an O&M Report to meet the reporting requirements of the O&M Plan.

1. Introduction

The former Mineral Springs MGP was built in the early 1920's and was operated until the 1960's. Coal and oil gasification wastes, particularly coal tar hydrocarbons and blue-stained purifier residuals, were generated during operation of the plant. Investigations were performed between 1990 and 1998 to evaluate environmental conditions at the site. Those investigations identified impacts to soil and groundwater by MGP residues, including organic constituents, dense non-aqueous phase liquids (DNAPL), and cyanide. Remedial activities including excavation, capping, DNAPL recovery, and institutional controls have been performed since 1997 to address these impacts.

This PRR presents and evaluates the results of annual O&M activities performed at the Mineral Springs Site from October 2011 to October 2012, and analytical data from 2001 (remedial action completion) through 2012. The annual O&M activities include annual inspections, groundwater and surface water monitoring, and maintenance and repair of engineering controls. Data collected during performance of these activities and an evaluation of the effectiveness of the remedy are presented below.

The results of the effectiveness evaluation show that the remedial action has been operated in accordance with the provisions of the O&M Plan and that engineering and institutional controls remain intact and effective.

The annual site inspection indicated there were a few locations where maintenance issues needed to be addressed. Except for sealing the asphalt cap south of Building 3, these activities have been completed as of November 14, 2012.

2. Site Overview

The Mineral Springs Site lies in a flat, mixed industrial and residential area of West Seneca (and Buffalo), New York. The Mineral Springs Site is an active NFG service center. Figure 1 shows the facility layout.

The stratigraphy of the site consists of 4- to 8-feet of soil and fill, approximately 10-feet of a nearly continuous upper confining clay layer (UCL), 10- to 15-feet of groundwater bearing silt, sand, and gravel, a lower confining clay layer (LCL), and bedrock. Overburden groundwater is typically encountered 5- to 12-feet below ground surface and fluctuates seasonally approximately 2 feet. Overburden groundwater flow is generally to the northwest towards Mineral Springs Road, Calais Street, and the Buffalo River. Average overburden groundwater velocity across the site is calculated to be approximately 0.06 feet per day.

The former Mineral Springs MGP was built in the early 1920's and was operated until the 1960's. Coal and oil gasification wastes, particularly coal tar hydrocarbons and blue-stained purifier residuals, were generated during operation of the plant. In 1990 and 1995, investigations and soil remediations were performed near an oil-water separator pit in the central area of the site. In 1997 and 1998, a Preliminary Site Assessment (PSA) and a follow-up PSA Addendum were conducted. The assessments concluded that soil and groundwater at the site were impacted by MGP residues including dense non-aqueous phase liquids (DNAPL) and cyanide.

An interim remedial measure (IRM) was conducted at the Mineral Springs Site in December 1997. During the IRM, 407 tons of purifier residuals were removed from the southwest corner of the site. On August 4, 1998 NFG submitted a Voluntary Cleanup Agreement (VCA) program application. VCA number B9-0538-98-08 was signed by NFG on June 2, 1999 and by NYSDEC on November 7, 1999. A Remedial Design Work Plan was subsequently developed by NFG and NYSDEC. From May 2000 to June 2001, the Remedial Design Work Plan was implemented and the following remedial tasks were completed:

- Excavation and offsite disposal of 32,200 tons of contaminated soil, rubble, and purifier waste.
- Construction of engineering controls including 39,369 square feet of clay cap, 76,144 square feet of geomembrane cap, 130;890 square feet of asphalt cap over areas where purifier waste was located.
- Capping of hydrocarbon seeps within the Eastern Drainage Ditch (EDD), including construction of 640 linear feet of geosynthetic cap and 750 linear feet of clay cap.
- Installation of additional chain link security fence around the site perimeter.
- Implementation of site use and deed restrictions.
- Collection, treatment, and disposal of 207,000 gallons of contaminated groundwater.

During the annual site inspection in April 2007, NFG identified a faint blue stain in surface gravel near Building 8. In July 2007, a soil investigation in the area identified a subsurface lens of bluish stained soils. Based on the results of the investigation, an IRM Work Plan was prepared describing an IRM to address the **stained soil**. The IRM Work Plan was submitted to NYSDEC in November 2008. The scope of the IRM included installation of a 24,000 square foot asphalt cap immediately to the east of the existing Building 3 East Asphalt Cap (B3EAC). Work to install the new cap took

place in June and July 2008. The new cap is designated as the Building 8 West Asphalt Cap (B8WAC), as shown on Figure 1.

3. Evaluation of Remedy Performance, Effectiveness, and Protectiveness

The objectives of the remedial action performed at the Mineral Springs Site include the following:

- Preventing human contact with compounds of concern (COC) in purifier waste, soil, and sediment.
- Preventing human contact or ingestion of COC in groundwater.
- Preventing leaching of COC from purifier waste to groundwater.
- Preventing leaching of COC from coal tar impacted soil to surface water.

Preventing human contact with COC was addressed by: excavating soil and purifier waste; capping areas where purifier waste was left in place; capping coal tar residues in the EDD; and, implementing institutional controls to limit site use, prevent use of groundwater, and provide protection for excavation workers. The effectiveness of the remedial action in meeting these objectives is evaluated by performing an annual inspection to verify that engineering controls remain intact and that site use has not changed. The results of this year's inspection, described in the next section, identified routine maintenance issues, but found that the caps remain in place and are intact and that the remedy is effective and protective.

Preventing leaching of COC to groundwater and surface water was addressed by: excavating soil and purifier waste; capping areas where purifier waste was left in place; capping coal tar residues in the EDD; and, removing DNAPL. The effectiveness of the remedial action in meeting these objectives is evaluated by performing an annual inspection and by implementing a groundwater and surface water monitoring program. As described above, the site inspection found that engineering controls remain intact and effective.

In January 1998, NFG performed a soil gas survey to evaluate potential exposures to workers inside buildings at the **Mineral Springs** Site. The report concluded that the results did not indicate a significant potential for exposure by site workers to excessive concentrations of airborne constituents resulting from soil gas migration into occupied building spaces.

Analytical Results and Conclusions

In 2012, groundwater monitoring was performed at the Mineral Springs Site in April and August. The sampling programs were performed in accordance with the 2002 O&M Plan. An evaluation of the groundwater and surface water monitoring results from data collected during the April 2012 and August 2012 sampling events is presented in the following sections. Details of the results of these monitoring events are presented in the April 2012 and August 2012 Groundwater and Surface Water Monitoring Reports, submitted to NYSDEC May 2012 and September 2012, respectively.

Figures 2 and 3 provide groundwater contours indicating the direction of groundwater flow at the Mineral Springs Site for April 2012 and August 2012, respectively. Appendix A presents the 2012 surface water and groundwater analytical results, as well as historic data from 1995 through 2011. These figures and data provide the basis for the following evaluation sections.

Upgradient Site Perimeter

Well MW-17 is located in the southeast corner of the Mineral Springs Site and monitors upgradient groundwater quality. Other than cyanide, MGP COC are not typically present in detectable concentrations in upgradient groundwater, although concentrations of several polynuclear aromatic hydrocarbon (PAH) compounds were detected at concentrations greater than groundwater standards¹ in 2010 and 2011. Concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) and PAHs were below detection limits during each of the 2012 groundwater sampling events.

Downgradient Site Perimeter

Wells MW-13, MW-14, MW-22 and MW-23 are located just inside the northern property boundary near Mineral Springs Road. Wells MW-20 and MW-21 are located downgradient of the western boundary of the Mineral Springs Site on Calais Street. These six "sentinel" wells monitor groundwater quality downgradient of the Mineral Springs Site remedial actions. The groundwater samples from these six wells are analyzed for total and free cyanide during each monitoring event. Monitoring wells MW-13 and MW-23 are also analyzed annually for BTEX and PAHs; annual monitoring is performed during the August sampling event.

Total cyanide concentrations in four of the wells, MW-13, MW-14, MW-20, and MW-22, appear to show no significant change over time. However, in two of the wells, MW-21 and MW-23, there does appear to be a consistent reduction in total cyanide concentrations in groundwater over the period 1997 through 2012.

For MW-13, only benzene is typically detected in the BTEX suite. Although benzene was detected above the groundwater standard at this well in August 2012 (1.6 µg/L versus 1.0 µg/L standard), a review of historic data indicates a decreasing trend in benzene concentration over time, BTEX compounds are not normally detected in MW-23, and again were not detected in 2012.

PAH compounds are not typically detected in MW-13 or MW-23, and again were not detected above groundwater standards in 2012.

On-site Purifier Residuals Impacted Areas

Wells MW-12 and MW-16 monitor groundwater quality at the Eastern Swale HDPE Cap (ESHC) and the Clay Cap (CC), respectively. These are locations of known subsurface deposits of purifier box residuals. These deposits were remediated by capping. Samples from these two wells are analyzed for total and free cyanide.

Analytical results for 2012 sampling events are consistent with results in recent years. As the table in Appendix A shows, there does not seem to be any significant change in the concentration of total cyanide in MW-12 over time. On the other hand, there does appear to have been a consistent increase in total cyanide in MW-16 since 2001. The cause of this change is not known.

¹ Reference for NYSDEC groundwater and surface water standards: NYSDEC Technical Operational and Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998.

On-site Hydrocarbon Impacted Areas

Wells MW-07, MW-10 (downgradient of the Separator Pits Excavation [SPE]), MW-11A (adjacent to the drainage ditch cap), and MW-19 (downgradient of the Northern and Eastern Tar Boils Excavations) monitor on-site groundwater quality. These are locations where subsurface soils impacted with hydrocarbon NAPL are found. Samples from these wells are analyzed for BTEX and PAH compounds.

BTEX compounds are generally non-detect or detected at low levels in MW-10. Concentrations of individual compounds commonly do not exceed groundwater standards. PAH compounds are typically also detected at low levels in this well. Concentrations of BTEX and PAH compounds were not measured above groundwater standards in 2012.

BTEX and PAH compounds are consistently detected at concentrations well above groundwater standards in wells MW-07, MW-11A, and MW-19. A review of historic analytical data indicates that there has been no significiant change in concentrations of organic compounds in MW-11A or MW-19. However, there appears to be a decrease in both PAH and BTEX compounds in MW-07 since groundwater monitoring began. The results for samples collected in 2012 are consistent with the results measured in previous years.

Surface Water

Surface water samples are coffected near the Calais Street storm sewer inlet (S-01) to monitor concentrations of COC in surface water downgradient of the Mineral Springs Site, and at the EDD near the Class D Stream (S-02) to monitor surface water downgradient of the EDD Cap. Surface water samples are collected for total and free cyanide analyses, and BTEX and PAH analyses.

Total cyanide has never been detected at a concentration above the surface water standard of 9,000 µg/L in either sampling location.

BTEX compounds are typically not detected or detected at very low levels (i.e., well below standards) in surface water samples. Consistent with this trend, no BTEX compounds were detected in surface water samples in 2012.

PAHs are typically not detected or detected at very low levels in surface water samples. No PAH compounds were detected at downstream location S-01 in 2012; the most recent prior detection for any PAH compound was April 2008 (naphthalene; well below standard). However, since 2009, concentrations of two PAHs, benzo(a)anthracene and benzo(a)pyrene, have been detected at location S-02 above water quality standards on three different occasions, each time during the late summer monitoring event. In August 2012, benzo(a)anthracene was measured at an estimated concentration of 0.26 μ g/L compared to the groundwater standard of 0.23 μ g/L.

4. O&M Plan Compliance Report

The components of the O&M program for the Mineral Springs Site are established in the 2002 O&M Plan. These include groundwater and surface water monitoring, DNAPL recovery, annual inspections, maintenance and repair of engineering controls, and reporting. Details of this program are described in the O&M Plan and summarized in Table 1. Table 2, taken from the O&M Plan, summarizes the groundwater and surface water monitoring program.

O&M activities completed since the last PRR (dated October 2011) include the following:

- The annual site inspection was performed on April 19, 2012.
- Two groundwater and surface water monitoring rounds performed on April 18 and 19, 2012 and August 7 and 8, 2012.
- Continued operation of the DNAPL recovery system and removal of approximately 0.5 gallon (1 gallon overall) of water containing DNAPL blebs in April 2012 and August 2012.

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- Submittal of the Groundwater and Surface Water Monitoring Reports for the monitoring events performed in April and August 2012.
- Performance of maintenance activities to address issues identified during the annual inspection.

During the April 2012 annual inspection, observations of site conditions were recorded. The inspection checklist is included as Appendix B. Photographs taken during the inspection are included in Appendix C. An Institutional and Engineering Controls Certification Form is attached in Appendix D.

Annual Site Inspection

Clay Caps

Clay caps, designated CC on Figure 1, are located southeast of Building 14 and in the Eastern Drainage Ditch north of the northern culvert and south of the southern culvert, designated EDD.

The clay cap southeast of Building 14 has been mowed periodically to prevent tree growth. No blue stained soils were observed during the inspection. The surface of the cap was intact and no sink holes or animal burrows were observed.

In the clay-capped sections of the EDD, no erosion, animal burrows, or hydrocarbon sheen were observed. Warning signs were in place and no woody plants were observed near the clay portion of the cap.

Geomembrane Caps

Geomembrane caps, constructed of 40-mil high density polyethylene (HDPE) and soil or stone cover, are located in the Eastern Swale and in the EDD between the culverts. These caps are designated ESHC and EDD cap, respectively.

The ESHC has been mowed periodically. No plastic or geofabric, rutting, animal burrows, or blue-stained surface soil were visible. The 6 inch corrugated HDPE drain pipe exhibited minor damage consisting of three small holes, which were apparently caused by animal gnawing. The pipe was repaired.

The EDD cap includes an 18-inch diameter HDPE surface water drain pipe. There was no erosion, animal burrows, deep-rooted perennial plant species, or hydrocarbon sheen observed. The "no dig" signage was in place.

Asphalt Caps

Asphalt caps are located south and east of Building 3, designated B3SAC and B3EAC respectively; north and south of the Eastern Swale, designated ESNAC and ESSAC; and west of Building 8, designated B8WAC. All caps except for B3SAC were observed to be intact with no significant cracking.

On the Building 3 South Asphalt Cap, significant settlement and cracking were observed in several locations and seals were missing from some previously sealed cracks. Repairs to the cap were completed during the week ending November 9, 2012 except as noted. The work included the following:

- Sawcut and remove approximately 3,000 square feet of cracked and stressed asphalt pavement.
- Regrade sub-base to eliminate low area that is holding water.
- Install a 4.5 inch asphalt binder layer and 1.5 inch topcoat.
- Apply asphalt sealer with sand and polymer hardener over approximately 60,000 square feet of existing asphalt pavement and re-stripe. The sealer work has been postponed until the spring of 2013 due to weather conditions including low temperature and rain.

Other Areas

Throughout the remainder of the site, no tar boils or blue-stained soils were observed. No hydrocarbon sheens were observed in the Class D Stream or the EDD. The compacted backfill placed in the various former Tar Boils and Separator Pit excavations has been maintained as necessary to assure run-off control. These areas showed no ponding of surface water. The site perimeter security fence was observed to be intact.

Groundwater and Surface Water Monitoring

Groundwater and surface water monitoring results for the April 2012 and August 2012 monitoring events are presented in the groundwater and surface water monitoring reports, prepared by AECOM and submitted to NYSDEC in May 2012 and September 2012, respectively. A summary of groundwater and surface water analytical results for the period between August 1995 and August 2012 is tabulated in Appendix A. Sampling locations are shown on Figure 1. Discussion of the results of monitoring in specific areas of the site have been presented in previous sections of this report.

Conclusions

Since the last PRR, O&M.activities described have been performed at the Mineral Springs Site as specified in the O&M Plan and no deficiencies have been identified. All engineering and institutional controls are intact and remain effective. NFG has been prompt in making repairs and performing maintenance when significant issues have been identified.

As discussed above, the results of groundwater monitoring indicate that there have been changes in groundwater concentrations of organic constituents and cyanide in some wells. Concentrations of cyanide in groundwater in the sentinel wells at the downgradient property boundary remain at concentrations somewhat higher than NYSDEC standards although significant reductions in concentrations were noted in two wells.

5. Overall PRR Conclusions and Recommendations

As discussed above, the O&M program is being implemented in accordance with the provisions of the Mineral Springs Site O&M Plan. The results of the site inspection indicate that engineering and institutional controls remain intact and continue to be effective in meeting remedial objectives.

The results of groundwater and surface water monitoring show that groundwater concentrations have changed since remediation at the site was completed. At the downgradient property boundary, concentrations in two of the five wells have shown a decrease in the concentrations of cyanide. One

has shown a decrease in the concentration of BTEX. It is the conclusion of this report that the remedial action remains in place, effective, and protective.

A few maintenance issues related to the caps installed during the remedial action were identified during the April 2012 site inspection. Those issues have been addressed as of November 14, 2012 with the exception of asphalt sealer that will be applied in the spring of 2013. Please do not hesitate to call me with questions at 978-905-2161.

Sincerely yours,

Thomas P. Clark, P.E.

Senior Engineer

cc: C. Burke - NFG

T. Alexander - NPG

S. Messier - NYSDOH (electronic submittal)

R. Kennedy - Hogdson Russ LLP

T. Raby, AECOM

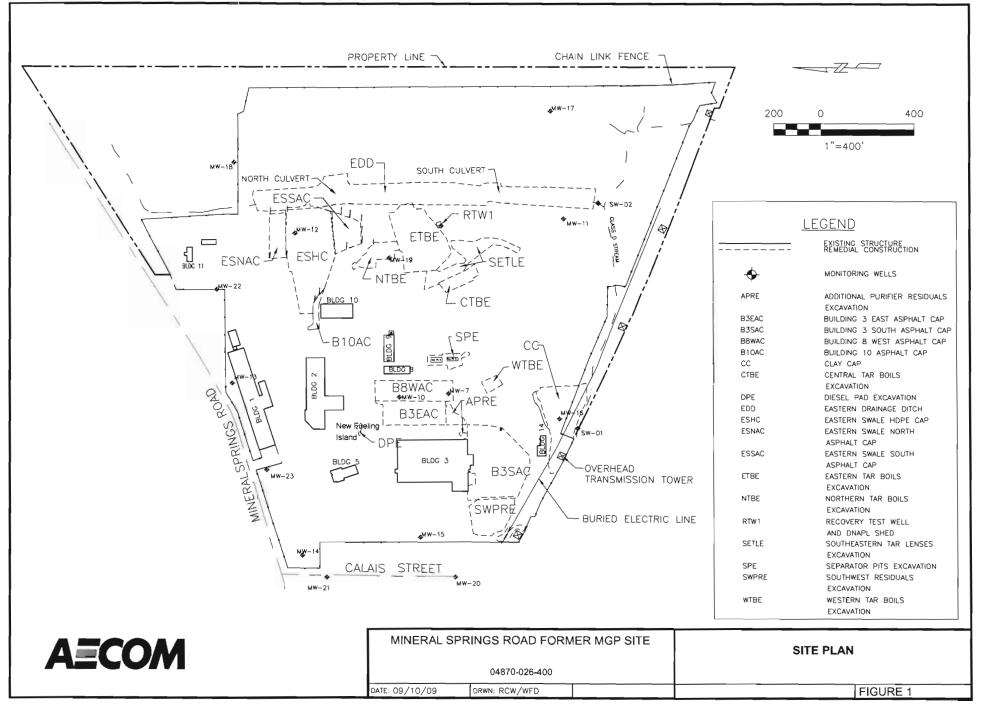
Tables

Table 1
Operations, Maintenance, and Monitoring Scope of Work
Mineral Springs Former MGP Site

	Frequency	Description	Notes
Groundwater and Surface Water Monitoring	Twice a year	Groundwater and surface water monitoring as specified in Table 2. Monitoring takes place in April or May and July or August.	Scope in 2002 included monitoring three times a year. The frequency was modified in 2003 with NYSDEC approval.
DNAPL Recovery Test Well	Twice a year	DNAPL recovery from well RTW-1.	Continuous operations of RTW-1 was halted in 2002 with NYSDEC approval since only de minimus amount of DNAPL was being recovered
Site Inspections	Annual	Inspection of the following: Clay, geomembrane, and asphalt caps Ground surface for signs of tar or purifier residues Fencing Stream	
Maintenance and Repair	As needed	Activities determined based on inspection results	
Describe	Twice a year	Groundwater Monitoring Report	
Reporting	Annually	O&M Report	Periodic Review Report (PRR) now submitted annually to meet new NYSDEC requirements

			Table 2 Sampling S Mineral Sprin	Summary Ta	able	
Location	Cyanide, Total	Cyanide, Free	BTEX	PAHs	Water Elevation	Benchmark Elevation
	USEPA SW846 9012A	ASTM D4282-89	USEPA SW846 8260B	USEPA SW846 8270C		(top of PVC casing)
Upgradient Si	te Perimeter					
MW-17	X	X	Х	Х	X	587.28
Downgradient	Site Perimet	er				
MW-13	X	x	annually	annually	X	591.85
MW-14	Х	×			X	589.81
MW-15					Х	590.93
MW-20	Х	×			X	587.30
MW-21	Х	×			X	587.88
MW-22	Х	×			X	592.50
MW-23	X	х	annually	annually	Х	589.28
Onsite Purifier	r Residuals lı	mpacted Areas	 S			
MW-12	X	×			Х	591.40
MW-16	X	.X			X	588.99
Onsite Hydrod	arbon Impac	ted Areas				
MW-07			X	X	X	587.26
MW-10			X	X	X	587.61
MW-11			X	X	x	590.03
MW-19		_	Х	X	X	589.83
Onsite Surface	e Water					
SW-01	X	X	X		X	top of headwall = 587.0
SW-02	X	X	X	X		
QA/QC Sample						
Trip Blank			X			(one per shipment)
Field Duplicate	х	x	х	X		(one per event)
Equipment Blank	Х	х	×	Х		(one per event)
DNAPL Recov	ery					
RTW-1					(purge well	of accumulated DNAPL)
Total	13	13	10 or 12	9 or 11	15	
Container, Preservative	500 ml plastic, NaOH	1 L plastic amber, NaOH	40 mL VOA vial, HCI (x2)	1 L glass amber, NP (x2)		

Figures



Appendix A

Groundwater and Surface Water Monitoring Results

'	MW-07	MW-07 A	MW-07	MW-07	MW-07	MW-07	-MW-0	7 MW-07	MW-07	MW-07	MW-07-	MW-07 N	AW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-07	MW-0						
ATE	Aug-95	May-96	Ju1-97	Feb-98	Jun-99	Apr-00	Apr-01	1 Jul-01	Nov-01	Apr-02	Jun-02	Nov-02' A	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-1
Benzene	3320	1210	4900		5100	5200	4800	3900	3300	2700	2200	3000	2100	1900	3200	2800	2000	1700	2800	2000	2900	2600	2000	1900	490	1100	780	850	330	840	690	600	690	420
Toluene	389	20	750		2000				1700	1500	1200		1200	930	1700	1800	1300	930	1100	840	1100	570	620	100	270	590	420	250	96	44	210	37	77	6.9
Ethylbenzene	2400		2900		3700	3600			2100	2300	1900		1900	1900	2700	2500	2500	1800	2700	2200	3100	2500	2500	2000	410	1500	1100	1000	520	1200	1200	800	1000	470
Xytene (sum of isomers)	1038	63	1200		1800	1900	:		1100		1100		1100	1000	1400	1200	1400	1000	1600	1300	1800	1500	1400	1100	270	910	820	700	360	820	770	510	660	270
Total BTEX	7147		9750					10900		7700	6400		6300	5730	9000	8300	7200	5430	8200	6340	8900	7170	6520	5100	1440	4100	3120	2800	1306	2904	2870	1947	2427	1166.
Naphthalene	3270	3000	2400		4100	5900	3400	3400	3600	2200	2600	5000	3100	3800	3200	3700	2700	4600	3500	3600	3000	3600	3700	3100	430	1000	1600	1400	650	1700	2100	1500	1700	870
Acenaphthylene	nd	nd	nd		nd	nd	nd	2,2	nd	hd	nd	nd	nd	nd	nd	nd	3	nd	nd	nd	nd	nd	nď	nd	2.5	nd	0.63	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	240	150	180		180	180	150	140	160	BO	120	150	nd	160	120	160	160	160	130	220	120	130	nď	130	19	69	32	36	15	60	76	49	64	49
Fluorene	nd	28	45		nd	nd	nd	28	nd	nd	nd	33	nd	nd	27	nd	42	nd	24	. 46	32	24	nd	25	7.6	13	6.4	6.2	2.7	12	13	9.6	11	11
Phenanthrene	nd	nd	37		nd	nd	nd	32	nd	nd	nd	30	nd	nd	nd	nd	38	nd	nd	nd	33	28	nd	25	2.5	12	4.3	4.6	2.1	11	16	9.5	11	9.1
Anthracene	nd	nď	nd		nd	nd	nď	3.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	5.4	3.9	nd	. 3	2.5	1.5	nd	nd	0.23	1.4	nď	0,98	1.5	1.3
Fluoranthene	nď	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	0.2	0.27	nd	nd	nd	nd
Pyrene	nď	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	0.28	nd	nd	nď	0.17
Benzo(a)Anthracene	nď	nd	nd		nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd
Chrysene	nď	nd	nd		nď	nd	nd	nø	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nď	nd
Benzo(b)Fluoranthene	nď	nd	nd		nď	nd	ŋd	nd	na	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene	nď	nd	nd		nd	nd	nd	nd	nd	nd	nđ	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	, nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene	nd	nď	nd		nď	nd	nd	nd	nd	nd	nø	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1.2,3-cd)Pyrene	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	nď	nd	nd	nd
Dibenzo(a,h)Anthracene	nd	nd	nd		nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.47	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,ħ,i)Perylene	nd	nd	nd		nď	nd	nd	nď	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
2-Methylnaphthalene							180	190	200	100	180	230	nd	280	170	270	320	300	230	400	350	250	270	230	24	120	73	84	33	110	160	90	120	66
Total PAHs	3510	3178	2662		4280	6080	3730	3796	3960	2380	2900	5443	3100	4240	3517	4130	3283	5060	3884	4266	3541	4036	3970	3513	488	1215.5	1716.33	1531	703.23	1894.95	2365	1659.08	1907.5	1006.
																						:												
Cyanide, total (Exygen/ Test			189								=																							
Cyanide, total (Clarkson Uni	iv.)																			1														
Cyanide, free (Exygen/ Test	t America)																			!				!										
Cyanide, free (Clarkson Univ	iv.)																			!		!												
Water Elevation (feet)			EBO 13	E01 60	E70 04	E 61 70		50 579.9	500 50	E E D 2 0 1	600 D6	E00 26	501 SS	590 21	500.33	592.45	581.24	581 36	582.28	579.76	581.90	570 24	582 58	578.21	581 99	580,83	581 93	581 01	582.26	580.00	583.60	579.76	581.56	578
AAste: Cleastlou (sest)			380.13	361.08	1319.84	301.70	, 301.5	0 5/9.90	360.50	302.01	360.90	J00.20	301.00	300.31	350.32	302.43	301.24	301.30	302.20	, 313.10	301.30	575.24	JUZ.30	0,0.21	001.33	550,05	501.50	201.01	552.20	550.00	,	0, 3.70	001.00	310.

MW-10	MW-10	MW-10	MW-10 MW-	-10 MW-10	MW-10	MW-10	MW-10	MW-10 M	fW-10 l	MW-10 P	/W-10 M	V-10 M	W-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10), MW							
PATE	Aug-95	May-96	Jul-97 Feb-	98 Jun-99	Apr-00	Apr-01	Jul-01	Nov-01 A	pr-02	Jun-02 1	Nav-02 Ap	r-03 J	u l- 03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug
Benzene		-4	nd	1				nd.				2	-4	nd	nd	nď	-4	0.83	nd	n.d		nd		n.d	nd	nd	n.d	24	nd.	ad	nd		_
	nd	nd	1	nd	110	na	nu - d	nu - d	nu o oo	110	6	.2	nu				nd			110		nu	no 	nu - d			nu - d	nu - d		nu		nd	no
oluene	nd	nd	nd '	nd	na	no .	na		0.89	nd		.81	nd	nd	nd	nď	nd	nd	nd	na	nd	na i	nd	nd	nd .	nd	no						
thylbenzene	nd	nd	nd	nd	nd	nd .	nd	nd	nd	n d).9	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	1,3	ħd	nd	nd .	nd	nd	nd	nd	nd	nd	no
(ylene (sum of isomers)	nď	nd	nd .	nd	nd	nd	nd	nd .	nd	n d		nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0,66	nd	nα	nd	no						
otal BTEX	0	0	0	1 0	0	0	0	0	0.89	o	0 2	.91	D	0	0	0	0	0,83	0	0	0	0	1.96	0	0	0	0	0	0	0	0	0	0
aphthalene	nd	nd	nd '	nd	nd	nd	nd	nd	nd	nd	2.1	nd	nd	nd	nd	nd	nd	0.78	nd	43	nd	nd	2.3	hd	nd	n							
cenaphthylene	nd	nd	nd	nd	nd	nd	nd	nd	nd	n ⊄	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	hd	nd	n							
cenaphthene	nd	nd	nď	, no	nd	nď	nd	nd ,	nd	n d	nd	nd	n d	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	hd	nd	n							
luorene	nd	nd	nd	· nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	ne						
henanthrene	nd	nd	nd	. nd	nd	nď	nd	nd	hd	nd	nd	nď	n d	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	ħd	nď	nď	nd	nd	nd	0.69	nd	nd	n
Anthracene	nd	nd	nd	nd	nd	nď	nd	nd	hď	nd	nd	nď	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	n
luoranthene	nd	nd	nd	nd	nď	nď	nd	nd	nd	n d	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.77	, nd	nd	n
yrene	nď	nd	nd	nd	nď	nď	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nď	nd	. nd	nd	i , nd	nd	nd	nd	nd	nd	nd	nd	nd	0.53	nd	nd	n
enzo(a)Anthracene	nď	nd	nd	nd	nd	nď	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	n¢	nď	nd	nd	nd	nď	nď	nd	nd	nd	nd	0.27	nd	nd	nd	n
Chrysene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	n¢	nď	nd	nd	nd	nď	nď	nd	nd	nd	nd	0.41	nd	nd	nd	n
Benzo(b)Fluoranthene	nd	nd	nd	nd	nď	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0,18	nd	nd	n
Benzo(k)Fluoranthene	nd	nd	nd	nd	nď	nď	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	n
Benzo(a)Pyrene	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	no	nd	nd	nd	nd	n
ndeno(1,2,3-cd)Pyrene	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	0.35	nd	nd	nd	n
Dibenzo(a,h)Anthracene	nd	nd	nd	na	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	nď	nd	nd	n
Benzo(g,h,i)Perylene	nd	nd	nd	! nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.28	nd	nd	nd	n
-Methylnaphthalene				!		nď	nα	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	3.8	nď	nd	n										
otal PAHs	0	0	0	. 0	0	0	0	0	0	0	2.1	0	0	0	0	0	0	0.78	0	46.8	0	0	2.3	0	0	0	0	0	1.31	2.17	::0	0	
Cyanide, total (Exygen/Test Ar	merica)		334																	ı													
yanide, total (Clarkson Univ.))																			!			!							i			
yanide, free (Exygen/ Test Ar	merica)			!																			i										
yanide, free (Clarkson Univ.)				!																:													
Vater Elevation (feet)			579.87 581	.44 579.3	3 581.19	581.07	579.64	580.10 5	581.61	580.51	579.51 5	1.23 5	79.93	579.16	581.92	580.80	580.90	581.78	579.53	581,15	580.04	582.06	578,19	581.51	580.45	581.10	580.82	580.49	580.56	583.39	579.53	581,05	5 579

DATE	Aug-95	May-96 Jul-97	Fah-08 lun-0	ο Δητ00	: - Δnr-Ω1	JuL01	Nov-01 Apr-03	.lun≖Ω	2 Nov-0	Δης-03	Jul-03	Nav-03	Mar-04	.lun=04	Nov-04	Anr-05	.luL05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-
ATE	Aug-35	may-90 Jur-97	rep-so sures	3 Api-00	1	34-01	140V-01 Apt-02	Juli-0	2 1404-02	. Ap: -00	34-03	1444-03	INDI-O-	0411-04	1107-01	Api-00	021-00	Apr -00	Aug-oc	Ap07	rug-07	Apr co	CCP CC	741-00	Aug-ou	7-41-10	Aug 10	7 (p) 11	ОСР	741 12	Aug
enzene		35	nd	nd	nd	nd	nd	nd	nd	nd	350	80	50	270	150	140	250	67	140	100	180	230	210	190	200	77	150	15	170	31	85
oluene		17	nd	nd	nd	68	nd	3.8	nd	na	230	1.2	0.7	35	nd	1.2	7	0.56	1,2	0.99	nd	5.5	nd	nď	nd	0.78	1.9	nď	nd	nd	1.4
thylbenzene		94	nd	nd	nd	nd	nd	nd	nd	nd	6 50	3.5	6.9	30	5.4	9.6	38	2.5	8.7	2.8	5.5	69	71	67	80	35	56	5.7	63	7.1	, 34
lylene (sum of isomers)		83	7	nd	nd	nd	hd	nd	nd	nd	410	9.1	9.2	38	16	16	30	8.1	14	5,5	29	41	30	24	28	21	27	3.5	25	4.3	15
otal BTEX		229	7	0	0	68	0	4	0	0	1640	94	67	373	171	187	325	78	164	109	215	34 6	311	281	308	133.78	234.9	24.2	258	42.4	135.
Naphthalene		140	12	nd	nd	nd	nd	nď	nd	nd	160	130	nď	39	31	nď	20	2.9	nd	nd	0.79	7.1	2.5	4.1	9.3	0.78	2.6	0.28	4	nd	0.81
Acenaphthylene		9	2	nd	nd	nd	, nd	nď	nd	nd	12	8.4	nd	7.9	9.4	2.8	8.9	5.1	nd	5.8	0.93	6.9	3.4	3.7	4.6	2.4	3.8	0.72	2.8	1.3	2.2
Acenaphthene		7	nd	nd	nd	nd	i nd	nd	nd	nd	4,4	3.1	1.2	4.5	5.9	4.5	5.6	nd	nd	nd	2.7	5.6	5	4.1	6.1	3.1	5.1	2.6	4,6	2.0	3.8
luorene		nd ·	nd	nd	nd	nd	hd	nd	nd	nd	2.2	nd	nd	1.9	2.3	1.3	1.7	1.5	nd	nd	nd	5.1	0.86	0.89	1.6	0.72	1.2	0.83	nd	nd	0.9
Phenanthrene		nd .	nd	nd	nd	nd	ħd	nd	nd	nd	2.7	2.2	nd	3.7	6.4	nd	2	nd	nd	nd	nd	1.5	nd	nd	2.8	nd	0.56	nd	nd	nd	nd
Anthracene		nd	· nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.5	1.6	nd	nd	nd	nd	nd	nd	2.2	nd	nd	nd	nd	0.3	0.24	nd	nd	nd
luoranthene		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	nd	nd	nd	nd	0.57	nd	nd	0.32	0.52	0.24	0.51	0.45	0.42	nd	0.4
yrene		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	0.73	0.46	0.33	nd	nd	nd	1.2	nď	nd	0.36	0.75	0.27	0.52	0.71	0.56	nd	0.5
Benzo(a)Anthracene		nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd
Chrysene		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd
enzo(b)Fluoranthene		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nď	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene		nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nď	nd	nd	nd	nd	nd	nď	nď	nd	nd	nd	nd	nď	nd	nď	nd	nd	nd	nd	ı no
Benzo(a)Pyrene		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	: nd
ndeno(1.2,3-cd)Pyrene		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	nd
Dibenzo(a,h)Anthracene		nd	nd	nd	na	nd	าต์	nd	nd	nd	nd	nd	nd	nď	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd
Benzo(g,h.i)Perylene		nd	, nd	nd	nd	no	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
2-Methylnaphthalene					nd	nd	nd	nd	nd	nd	31	4.4	nd	0.26	nd	nd	0.15	nd	nd	, nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	no
Fotal PAHs		156	14	0	0	0	0	0	. 0	0	202	148	1	58	57	9	39	10	0	6	6	28	11.76	13.47	25.67	7.51	14.59	5.83	12.38	3.3	8.6
																	:			:											
Cyanide, total (Exygen/Test A		1040					1340										:			:											
yanide, total (Clarkson Univ.	.)		;																:												
yanide, free (Exygen/Test A	America)						nd		1																			;			
yanıde, free (Clarkson Univ.)																		!									i			
į			!																!												
Vater Elevation (feet)		580.28	582.26 579.8	2 583.55	583.8	5 579.28	581.30 583.8	5 581.3	2. 581.0	3 582.97	580.70	581.11	583.03	581.54	581.87	582.74	580.09	582.38	580.78	583.07	578.46	582.43	581.32	582.35	581.46	582.85	580.37	584.05	580.22	582.07	7 579

MW-12	MW-12	MW-12 MW-	-12 MW-12	MW-12 M	MW-12 A	WW-12 N	/W-12	MW-12 N	/W-12 N	/W-12 N	√W-12 N	IW-12	MW-12																				
DATE	Aug-95	May-96 Jul-	97 Feb-98	Jun-99	Apr-00 /	Apr-01	Jul-01	Nov-01 /	Apr-02 J	Jun-02 N	Nov-02 A	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-12
Benzene		17	,																		. !												
Toluene		no	i																														
Ethylbenzene		no	i																											:			
Xylene (sum of isomers)		no	i																														
Total BTEX		17	7																														
Naphthalene		no	1																														
Acenaphthylene		no	1																	!													
Acenaphthene		no	d																														
Fluorene		no	t																														
Phenanthrene		no	d																														
Anthracene		no	d																														
Fluoranthene		no	d																												:	•	
Pyrene		no	d								:																				:		
Benzo(a)Anthracene		no	d								:																						
Chrysene		no	d							- 1																							
Benzo(b)Fluoranthene		no	d							i																							
Benzo(k)Fluoranthene		ne	d							1																							
Benzo(a)Pyrene		ne	d																														
Indeno(1,2,3-cd)Pyrene		ne	d							- 8																							
Dibenzo(a,h)Anthracene		ne	d							1																							
Benzo(g,h,i)Perylene		ne	d							ĺ																				i			
2-Methylnaphthalene																																	
Total PAHs		0)																														
Cyanide, total (Exygen/ Test An	nerica)	37	'5	294	380	434	1840	393	522	2020	438	440	384	437	134	458	514	2110											708	837	720	670	480
Cyanide, total (Clarkson Univ.)			1							1						461	491	425	413	440	415	459	454	473	550	472	449	550					
Cyanide, free (Exygen/ Test Am	erica)			1	nd	nd	nd	nd	nd	58	7	nd	88	57	19	6	5	817	!										6.0	7.0	nd	10	23
Cyanide, free (Clarkson Univ.)										1					6.7	nd	nd	3.3	2.9	2.6	nd	nd	6.B	25	7.2	4.1	4.7	nd					
Water Elevation (feet)		579	.45 581.07	7¦578.98	580.90	580.72	579.30	579,54	581.40	580.30	579. 2 9'	580.82	579.59	579.75	581.55	580.39	580.51	581.48	579.27	580.96	579.78	581.88	578.7	581.25	580.16	581.10	580.35	581.45	579.50	583.27	579.21	580.82	578.49

MW-13	MW-13	MW-13 MW-	13 MW-	13 MW-13	MW-13.N	MW-13 N	1W-13 M	W-13 MW-	13 MW-1	MW-13	MW-13	MW-13	MW-13	MVV-13	MW-13																	
DATE	Aug-95	May-96 Jul-9																														
'																																
Benzene		4	nd							1,8			3.7			1.2			i	1.9		2.1	nd			1		0.44		0.72	i	1.6
Toluene į		nd	nd		i					nd			nd			nd			1	nd		nd	nd			nd		nd		nd	i	nd
Ethylbenzene		nd	nd							nd			nd			nd			į	nd		0.38	nd			nd		nd		nd	:	nd
Xylene (sum of isomers)		nd	nd		·					nd			nd			nd			i	nd		nd	nd			nd		nd		nd		nd
Total BTEX		4	0							1.8			3.7			1.2				, 1.9		2.48	0			1		0.44		0.72	1	1.6
1																																
Naphthalene		nd								nd			nd			nd				2.8		0.88	ħd			nd		nd		nd		nd
Acenaphthylene ,		nd								nd			nd			nd				nd		nd	hd			nd		nd		nd		nd
Acenaphthene		nd								nd			nd			nd			i	nd		nd	ħd			nd		nd		nd		nd
Fluorene		nd								nd			nd			nd				nd		nd	ħd			nd		nd		nd		nd
Phenanthrene		nd								nd			nd			nd				nd		nd	nd			nd		nd		nd		nd
Anthracene .		nd								nd			nd			nd				nd		nd	nd			nd		nd		nd		nd
Fluoranthene		nd	1		1					nd			nd			nd				nd		nd	nd			nd		nd		nd		nd
Pyrene		nd	1		ŀ					nd			nd			nd				nd .		nd	nd			nd		nd		nd		nd
Benzo(a)Anthracene		nd	1		Ţ					nd			nd			nd	i			nd		nd	nd			nd		nď	i	nd		nd
Chrysene		nd	3		- 1					nd			nd			nd				nd		nd	nd			nd		nd		nd		nd
Benzo(b)Fluoranthene		nd	Ų.							nd			nd			nd				nd		nd	nd			nd		nd		nd		nd
: Benzo(k)Fluoranthene		nd								nd			nd			nd				nd		nd	nd			nd		nd		nd		nd
Benzo(a)Pyrene		nd	i							nd			nd			nd				nd		' nd	nd			nd		nd		nd		nd
Indeno(1,2,3-cd)Pyrene		nd								nd			nd			nd				nd	- 1	nd	nd			nd		nd		nd		nd
Dibenzo(a,h)Anthracene		nd			+					nd			nd			nd				nd	- 8	nd	nd			nd		nd		nd		nd
Benzo(g,h,i)Perylene		nd			-					nd			nd			nd				nd		: nd	nd			nd		nd		nd		nd
2-Methylnaphthalene					- 4					nd			nd			nd				nd		nd	nd			nd		nd		nd		nd
Total PAHs		0			:					0			0			0				2.8		0.88	0			0		0		0		0
					- :																											
Cyanide, total (Exygen/ Test A	America)	323	3	356	280	129	465	716 no	157	399	142	423	528	175	108	280	103											449	nd	620	10	670
Cyanide, total (Clarkson Univ.))														145	234	55	363	61	300 '	3	664	54	467	27	327	nd					
Cyanide, free (Exygen/ Test A	merica)				na	33	119	nd no	96	13	nd	51	22	22	nd	nd	45											nd	nd	nd	0.87	21
Cyanide, free (Clarkson Univ.))													5.3	nd	nd	nd	3	nd	nd	nd	5.3	2.3	8.2	nd	nd	nd					
																				,												
Water Elevation (feet)		578.1	17 579.	72 577.70	579.47 5	579.28 5	77.91 57	78.23 579.	90 578.80	577.83	579.23	578.13	578.18	579.78	578.69	578.80	579.87	577.95	579.42	, 578.30	580.29	577.3	579.65	578.95	579.44	578.59	579.65	578.10	581.97	577.73	579.09	577.19
				!																1												

MW-14	MW-14	MW-14 MW-14 M	W-14 MW	/-14 MW	-14 MW-	14 MW-1	4 MW-14	MW-14	MW-14	MW-14 [:] MV	N-14 P	MW-14	MW-1																			
DATE	Aug-95	May-96 Jul-97 F	eb-98 Jun	-99 Apr-	00 Apr4	01 JuH0	1 Nov-01	Apr-02	Jun-02	Nov-02, Ap	or-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-1
									į																							
Benzene		nd																														
Toluene		nd																														
Ethylbenzene		nd																														
Xylene (sum of isomers)		nd							1													į										
Total BTEX		0		į					ź													:										
:				1					-																				:			
Naphthalene		nd		'					3													į										
Acenaphthylene		nd																		i									,			
Acenaphthene		nd																														
Fluorene		nd			3																											
Phenanthrene		nd			1														;													
Anthracene		nd			į.																											
Fluoranthene		nd			1																											i
Pyrene		nd																														
Benzo(a)Anthracene		nd			-																											
Chrysene		nd			1																											
Benzo(b)Fluoranthene		nd		1.1	1																											
Benzo(k)Fluoranthene		nd																														
Benzo(a)Pyrene		nd																														
Indeno(1,2,3-cd)Pyrene		nd			1																											
Dibenzo(a,h)Anthracene		nd			1																											
Benzo(g.h,ı)Perylene		nd			;																									i		
2-Methylnaphthalene					-													ı														
Total PAHs		٥			1																										1	
					;																											
Cyanide, total (Exygen/ Test Ar	merica)	644	4	27 _i 80	ю 91	4 378	449	886	416	487	664	962	583	nd	503	537												541	623	670	610	610
Cyanide, total (Clarkson Univ.)															514	571		423	305	281	404	422	374	486	425	422	480					
Cyanide, free (Exygen/ Test Am	merica)			. 0	d no	d nd	na	nd	17	12	nd	9	7	nd	14	13												nd	nd	nd	1.7	nd
Cyanide, free (Clarkson Univ.)														nd	nd	nd		nď	nd	nd	nd	, nd	4	2.5	4.1	nd	nd					
Water Elevation (feet)		577.36 5	579.19 57	7.03 578	.44 578.	21 577.2	21 577.31	1 576.56	577.61	576.76 5	77.92	577.23	577.11	578.15	577.55	577.46		577.07	577.99	577.29	577.89	577.43	577.87	576.48	577.57	577.15	578.05	577.27	579.98	577.05	577.85	576.

MW-15	MW-15	MW-15 MW-	15 MW-15 MV	V-15 MW-15	MW-15 MW	/-15 MW-1	5 MW-15	MW-15 MV	N-15 MW-	-15 MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15
DATE	Aug-95	May-96 Jul-9	7 Feb-98 Ju	n-99 Apr-00	Apr-01 Jul	-01 Nov-0	1 Apr-02	Jun-02 No	v-02 Apr-	03 Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	· Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	! Apr-12	Aug-12
Benzene		nd																		i										
Toluene		nd																												
Ethylbenzene		nd																											į.	
Xylene (sum of isomers)		nd																		11									i	
Total BTEX		0																												
TVAILET EX		·																									į			
Naphthalene		nd																									-			
Acenaphthylene		nd																												:
Acenaphthene		nd		:																										
Fluorene		nd																												
Phenanthrene		nd																												
Anthracene		nd																												
Fluoranthene		nd							;																					
Pyrene		nd							į									i												
Benzo(a)Anthracene		nd																												
Chrysene		nď							- 1																					
Benzo(b)Fluoranthene		nd						i	- 1																					
Benzo(k)Fluoranthene		nd		1				4										:												
Benżo(a)Pyrene		nd		Ī																										
Indeno(1,2,3-cd)Pyrene		nd		1																							:			
Dibenzo(a,h)Anthracene		nd		2																										
Benzo(g,h,i)Perylene		nd						1																						
2-Methylnaphthalene								- 9																					i	
Total PAHs		0																											:	
								4																			:			:
Cyanide, total (Exygen/ Test Am	nerica)	78.8	1																	1										,
Cyanide, total (Clarkson Univ.)																				1										
Cyanide, free (Exygen/ Test Am	verica)														,															
Cyanide, free (Clarkson Univ.)															;															
Water Elevation (feet)		579.	11 579,81.57	8.70 580.15	580.55 578	3.98 579.4	9 580.98	579.48 _. 57	8.88 580.	40 579.11	579.30	581.04	579.99	_	580.54	579.45	580.54	579.36	_	577.89	580.60	579.65	580.61	579.65	580.87	579.18	582.58	578.76	NM	576.28

Intercacion	MW-16	MW-16	MW-16 M	V-16 MW-	16 MW-1	6-MW-1	6 MW-16	6 MW-16	MW-16	M W-16	MW-16	MW-16 N	W-16 i	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	B MW-16	MW-16						
oliuman nd iptere (jum of alomers) nd iptere (jum of alomers) nd iptere (jum of alomers) nd interphiliptere nd interphili	DATE	Aug-95	May-96 Ji	⊢97 Feb-	98 Jun-9	9 Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02 A	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	3 Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-12
Thisphacenes	Benzene			nd																														
years (sur of sacress)	Toluene			nd																	i													
years (sur of sacress)	Ethylbenzene			nd																														
Rephthalens	Xylene (sum of isomers)			nd																	1													
Compositive	Total BTEX			0		ŧ					i																							
Compositive									1		:																					i		
Listense	Naphthalene			nd		1																												
The mainthraine	Acenaphthylene			nd							;																							
The nanthriane nd nd contractane nd	Acenaphthene			nd							:										:													
The nanthriane nd nd contractane nd	Fluorene			nd							:																							!
yrane nd pyrane	Phenanthrene			nd		9	:																											ii .
yrane nd pyrane	Anthracene																																	
Prene	Fluoranthene			nd			-												9															
Parago(a)Anthracene	Pyrene			nd			!												- 1															
Paragraph of the property of t				nd			:																											
Renzo(s)Fluoranthene				nd																														
Penzo(k)Fluoranthene				nd		1																	:											
Perzo(a)Pyrene nd nd ndeno(1,2,3-cd)Pyrene nd nd pibenzo(a,h)Anthracene nd pibenzo(a,h)Anthracene nd pibenzo(a,h)Perylene nd perzo(a,h)Perylene nd perzo(a,h)Perzo(a,h)Perylene nd perzo(a,h)Per				nd																														
Ademotical (Payrene and political (Exygen/ Test America) 346 459 360 214 214 138 174 23 187 203 130 220 254 297 293 307 602 617 700 840 750 (Payride, free (Clarkson Univ.) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																															-			
Disenzo(g,h,i)Perylene nd				nd			li.																								1			
Perzo(g, h,i)Perylene nd							Ē.																											
-Methylinaphthalene Stal PAHs 0 Syanide, total (Exygen/ Test America) 346 459 360 214 214 138 174 23 187 203 130 220 254 297 293 307 Syanide, total (Clarkson Univ.) 332 297 305 299 266 368 317 429 467 540 531 504 566 Syanide, free (Exygen/ Test America) nd nd 147 nd nd 17 13 nd 89 20 95 12 104 nd 7,0 9,0 7,0 9,5 37 Syanide, free (Clarkson Univ.) 3,4 2,8 nd nd nd nd nd nd d 6,9 5,0 5,5 4,4 2,4							1																											
Cyanide, total (Exygen/ Test America) 346 459 360 214 214 138 174 23 187 203 130 220 254 297 293 307 602 617 700 840 750 Cyanide, total (Clarkson Univ.) 332 297 305 299 266 368 317 429 467 540 531 504 566 Cyanide, free (Exygen/ Test America) nd nd 147 nd nd 17 13 nd 89 20 95 12 104 nd 7,0 9,0 7,0 9,5 37 Cyanide, free (Clarkson Univ.) 3,4 2,8 nd nd nd nd nd nd nd d 6,9 5,0 5,5 4,4 2,4																																!		
Expanide, total (Exygen/ Test America) 346 459 360 214 214 138 174 23 187 203 130 220 254 297 293 307 602 617 700 840 750 Expanide, total (Clarkson Univ.) 332 297 305 299 266 368 317 429 467 540 531 504 566 Expanide, free (Exygen/ Test America) nd nd 147 nd nd 17 13 nd 89 20 95 12 104 nd 7.0 9.0 7.0 9.5 37 Expanide, free (Clarkson Univ.) 3.4 2.8 nd nd nd nd nd nd d 6.9 5.0 5.5 4.4 2.4				0																												'		
Syanide, total (Clarkson Univ.) 332 297 305 299 266 368 317 429 467 540 531 504 566 Eyanide, free (Exygen/ Test America) 1 nd nd 147 nd nd 17 13 nd 89 20 95 12 104 nd 7,0 9,0 7,0 9,5 37 Eyanide, free (Clarkson Univ.) 3,4 2,8 nd nd nd nd nd nd 4 6,9 5,0 5,5 4,4 2,4	10(01) 7010			•																														
Syanide, total (Clarkson Univ.) 332 297 305 299 266 368 317 429 467 540 531 504 566 Syanide, free (Exygen/ Test America) 1 nd nd 147 nd nd 17 13 nd 89 20 95 12 104 nd 7.0 9.0 7.0 9.5 37 Syanide, free (Clarkson Univ.) 3.4 2.8 nd nd nd nd nd d 6.9 5.0 5.5 4.4 2.4	Cyanide, total (Exygen/ Test Ame	erica)	:	146	459	360	214	214	138	174	23	187	203	130	220	254	297	293	307											602	617	700	. 840	750
Syanide, free (Exygen/ Test America)	Cyanide, total (Clarkson Univ.)					'														299	266	368	317	429	467	540	531	504	566	302	017	, 00		700
Syanide, free (Clarkson Univ.) 3.4 2.8 nd nd nd nd nd d 6.9 5.0 5.5 4.4 2.4		rica)			,	nd	nd	147	nd	nd	17	13	nd	89	20	95					200	-	.,,	-23		→ 0	001	001	~~0	7.0	9.0	7.0	0.6	37
Vater Elevation (feet) 580.17 581.49-579.68 581.81 581.59 580.08 580.77 582.08 580.23 580.34 581.92 580.42 580.95 582.83 581.35 581.72 581.08 579.91 582.14 580.56 582.87 578.25 581.82 581.7 582.26 581.28 582.21 580.23 584.06 580.04 582.00 576.20	Cyanide, free (Clarkson Univ.)				1															nd	nd	nd	nd	4	6.9	5.0	5.5	4.4	2.4	7.0	3.0	7.0	5.5	31
582.05 581.07 582.26 581.27 582.27 58	Water Flevation (feet)		£.6	0 17 581	40. 570 £	R 581 0	1 591 50	580 C	590 77	592 no	500.22	E00 24 5	91.02	E00 42	600.00	E 9 2 9 2	E01 20	E91 70	E04.00	£70.0:	500.4	500.50	500 CT	£70.00							*****			
	TTOLOI LISTALION (1881)		56	V. 17 501.	+a· 3/ a.o	0 001.0	1 301.58	300.00	36U,//	362.08	560.23	580.34 5	81.92	580.42	580.95	582.83	581.35	581.72	581.08	5/9.91	582.14	580.56	582.87	578.25	581.82	581.7	582.26	581.28	582 21	580.23	584.06	580.04	582.00	576.28

MW-17	MW-17	MW-17 N	W-17	√ W-17	MW-17	7:MW-1	7 MW	-17 MW	/-17 M	W-17!M	W-17	MW-17	MW-17	MW-17	MW-17	MVV-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	! MW-
DATE	Aug-95	May-96 J	Jul-97	Feb-98	Jun-99	Apr-0	0 Apr	01 Jul	-01 N	10v-01! A	pr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-1
Benzene				nd	nd	! nd	no	l n	d	nd !	nd	nd	nd	nd	nd	nd	0.32	nd	nď	nd	nd	nd	nd	nd	' nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Toluene				nd	nd	nd	no	l n	ď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene				nd	nd	nd	no	l n	ď	nd	hd	nď	nd	nď	nd	nd	nd	1.1	nd	nd	nd	nd													
Xylene (sum of isomers)				nd	nd	nd	no	l n	d	nd	nď	nd	nd	nd	nď	nd	nd	nd	nd	nd	nď	nd	nd	nď	0.63	hd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total BTEX				0	0	0	0	()	٥.	ō	0	0	0	0	0	0.32	0	0	0	0	0	0	0	1.73	0	0	0	0	0	0	0	0	0	0
Naphthalene				nd	nd	! ! nd	no	. :	3	nd	hd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nď	hd	nd	: nď	nd	ħd	nd	nd	nď	nd	nd	: ad	nd		
Acenaphthylene				nd	nd	nd	no	l n	d	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd nd	nd	nd	nd						
Acenaphthene				nd	nd	nd	no	s n	d	nd '	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	hd	nd	' nd	nd	nd	nd								
Fluorene				nd	nd	nd	no	l n	d	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	: nd	nd	nd nd	nd
nenanthrene				nd	nd	nd	no	s n	d	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	, nd	nd	nd	nd
Anthracene				nd	nd	nd	no	s n	d	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd nd
luoranthene				nd	nd	nd	no	i n	d	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	0.73	nd	nd						
² yrene				nd	nd	nd	no	ı n	d	nd	nd	nd -	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.75	nd	nd									
Benzo(a)Anthracene				nd	nd	nd	no	ı n	d	nd	ng	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	0,61	nd	1.3	nd	nd						
Chrysene				nd	nd	nd	no	ı n	d	nď	nd	nd	nd	nď	nd	nď	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.63	nd	1.3	nd	nď
Benzo(b)Fluoranthene				nd	nd	nd	no	ı n	d	nd	nd	nd	nd	nď	nď	nď	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0,54	nd	2	nd	nd
Benzo(k)Fluoranthene				nd	nď	nd	no	l n	d	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	i nd	nd	nd	nd	nd	nď	nd	nď	nd	0.59	nd	1,5	nd	nd
Benzo(a)Pyrene				nd	nd	nd	no	5 n	d	nd	na	nd	nd	nd	nď	nd	nd	nd	nď	nd	nd	i nd	nd	nd	nd	nd	nď	nd	nd	nd	0.50	nd	1,80	nd	l nd
Indeno(1,2,3-cd)Pyrene				nd	nd	: nd	no	n	d	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	. nd	nd	nd	nd	nd	nď	nd	nd	nd	0.76	nd	4.4	nd	nd
Dibenzo(a,h)Anthracene				nd	nd	nd	no	l n	d	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nď	nd	0.83	nd	4.7	nd	! nd
Benzo(g,h,i)Perylene				nď	nd	nd	no	l n	d	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	nď	' nd	nď	nd	nd	nď	nd	nd	nd	nď	0.7	nd	1.6	nd	nd
2-Methylnaphthalene							no	l n	d	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	, nd	nd	nd	nd	nď	nd	nd	nď	nď	nd	nd	nd	nd	nd
Total PAHs				0	0	. 0	0	:	3	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	5.16	0	20.08	0	0
Cyanide, total (Exygen/ Test Ar	menca)			34	nd	27	65	3	8	74	185	127	108	185	50	66	378	106	160	217											93	297	230	210	81
Cyanide, total (Clarkson Univ.)																		142	162	260	161	263	183	369	148	285	144	279	148	242					
yanide, free (Exygen/ Test An	nerica)					nd	13	l n	d	nd	nd	nd	nď	nd	16	nd	nd	nd	nd	61									-		nd	4	nd	0.98	nd
Cyanide, free (Clarkson Univ.)																	nd	nd	nd	nd	nd	5.2	nđ	nd	nd	5.9	nd	5.0	nd	na				5.55	.10
Vater Elevation (feet)				582.36	579.73	581.9	0 581.	96 580	.12 5	80.88 5	82.38	579.86	580.48	582.01	580.46	580.96	582.40	581.27	581.72	582.71	579.96	582.14	580.62	582.87	578.36	583.02	581.13	582.30	581.36	582.61	580.18	583.98	NM	581.93	3 578.9

MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-1
DATE	Aug-95	May-96	Ju⊢97	Feb-98	Jun-99	Apr-00	Apr-01	JuH01	Nov-01	Apr-02
Benzene				nd	nd	nd	nď	nd	nd	nd
Toluene				nd	nd	nd	nd	1,1	nd	nd
Ethylbenzene				nd						
Xylene (sum of isomers)				nd						
Total BTEX				0	0	0	0	1.1	0	0
Naphthalene				nd	nď	nď	nd	nd	nď	nd
Acenaphthylene				nd	nď	nď	nd	nd	nd	nd
Acenaphthene				nd	nď	nď	nd	nd	nd	nd
Fluorene				nd	nd	nď	nd	nd	nd	nd
Phenanthrene				nd						
Anthracene				nd						
Fluoranthene				nd	nd	nď	nd	nd	nd	лd
Pyrene				nd	nd	nď	nd	nd	nd	nd
Benzo(a)Anthracene				nd	nd	nď	nd	nd	nd	nd
Chrysene				nď	nd	nď	nd	nd	nd	nd
Benzo(b)Fluoranthene				nď	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene				nd						
Benzo(a)Pyrene				nd	nd	nd	nd	nd	nd	nď
Indeno(1,2,3-cd)Pyrene				nd	nd	nď	nd	nd	nd	വർ
Dibenzo(a,h)Anthracene				nd	nd	nd	nd	nd	nď	nď
Benzo(g.h,i)Perylene				nd						
2-Methylnaphthalene							nd	nd	nd	nď
Total PAHs				0	0	0	0	0	0	0
Cyanide, total (Exygen/ Test Am	nerica)			nd	nd	nd	13	nd	nd	nď
Cyanide, total (Clarkson Univ.)										
Cyanide, free (Exygen/ Test Am	erica)					nd	nď	24	nď	nď
Cyanide, free (Clarkson Univ.)										
Water Elevation (feet)				585.46	582.65	585.06	585.40	583.84	583.84	582.74

MW-19	MW-19	MW-19 MW	-19 MW-19	9 MW-19	MW-19:	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19 !	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19							
DATE	Aug-95	May-96 Jul-	-97 Feb-98	3 Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-12
				1						1																							
Benzene				4700	5700	6000	4600	4700	4800	3800	4200	4600		5300	4900	6000	5800	7500	5800	5800	5600	6700	4500	5200	3700	3700	3700	4300	4700	4400	4200	3800	4300
Foluene				nd	nd ,	nd	160	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
Ethylbenzene				nd .	280 :	260	nd	nd	160	150	140	170		130	170	330	180	350	270	260	200	220	100	210	120	180	170	290	230	280	170	190	130
(ylene (sum of isomers)				1500	2200	1500	930	660	580	470	540	560		400	440	1000	660	950	770	730	810	710	470	780	510	470	450	340	190	nd	nď	nd	,nd
Total BTEX				6200	8180	7760	5690	5360	5540	4420	4880	5330		5830	5510	7330	6640	8800	6840	6790	6610	7630	5070	6190	4330	4350	4320	4930	5120	4680	4370	3990	4430
																		anno.		0000	2000	0400	4000	4400	0000	0000	2000	2222	2700	2000	0700	2000	0000
Naphthalene					2200	2200	2000	2100	2300	2000	2100	2400	2100	2000	2700	2900	2800	3000	2600	2800	3600	3100	4600	4100	2600	3600	3600	3300	3700	3300	2700	3200	2900
Acenaphthylene				nd	nd	nd	nd	nd	nd	nd	nd .	nd	nd	nd	nd	nd	nd	nd '	nd	nd	nd	nd	nd	nd 4.6	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene				nd	nd	nd	nd .	nd .	nd	nd	nd	no	nd -	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.5	nd	nd	nd	nd	0.27	nd	nd	nd	nď
luorene				nd	nd	nd	nď	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď
henanthrene				nd	nď	nd	nd	nd	nd	net .	nď	nd	nd	nd	nd	nď	nd	nd	nd -	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd.
Inthracene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
luoranthene				nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd
yrene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Anthracene				nd	nd	nď	nd	nd	nd	nd	nd	nd	nđ	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd
Chrysene				nd	nd	nď	nd	nd	nd	nď	nd	nd	nđ	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nď	nď	nd	nd	nd	nd	nd
Benzo(b)Fluoranthene				nd	nd	nď	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nď	nd	nd	nď	nd	nd	nd	nd	nd	nd
Benzo(k)Fluoranthene				nd	nd	nď	nď	nd	'nd	nd	nd	nd	nđ	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene			!	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd
ndeno(1,2,3-cd)Pyrene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd
Dibenzo(a,h)Anthracene				nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene				nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene						nd	0.82	nd	nd	nd	nd	nd	nď	nd	nd	nd	nd	nd	nd	5.5	4.8	nd	5.5	4,7	3.5	6.2	6.7	7.2	7.6	9.3	6.1	6.2	11
Total PAHs				1900	2200	2200	2001	2100	2300	2000	2100	2400	2100	2000	2700	2900	2800	3000	2600	2806	3605	3100	4606	4106	2603.5	3606.2	3606.7	3307.2	3707.87	3309.3	. 2706.1	3206.2	2 2911
Cyanide, total (Exygen/ Test A	merica)			1100																											1	_	_
Cyanide, total (Clarkson Univ.)	,																				!										,		
Cyanide, free (Exygen/ Test Ar	mericai																															_	_
Cyanide, free (Clarkson Univ.)																																	
Vater Elevation (feet)				577 43	581.36	581.13	579.63	580.12	581.73	579.73	579.83	581.24	580.01	580.19	582.00	580.79	580.98	581.90	579.57	581.42	580.15	582.26	578.2	581.6	580.52	581.46	580.70	581.8	579.78	583.45	579.54	581.21	1 578.6

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MW-20	MW-20	MW-20 MW-20 MW-2	0 MW-20	MW-20	MW-20	MW-20 #	₩₩-20 N	1W-20 N	NW-20 M	W-20 MW-;	0 MW-2	0 MW-2	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
DATE	Aug-95	May-96 Jul-97 Feb-9	8 Jun-99	Apr-00	Apr-01	Ju⊢01 N	Nov-01 A	Apr-02 J	lun-02 N	ov-02 Apr-(3 Ju⊢0	3 Nov-0	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	80-1qA	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-12
																		!													
Benzene			nď															!													
Toluene			nď																												
Ethylbenzene			nd																												
Xylene (sum of isomers)			nď																!												
Total BTEX			0																ł												A
																			:											- 1	
Naphthalene			nd	i														:	•												
Acenaphthylene			nd	i																											
Acenaphthene			nd						:										:												
Fluorene			nd						'										!												
Phenanthrene			nd																i												
Anthracene			nd																:												
Fluoranthene			nď																												
Pyrene			nd																												
Benzo(a)Anthracene			nď																												
Chrysene			nď																												
Benzo(b)Fluoranthene			nd																												
Benzo(k)Fluoranthene			nd																												
Benzo(a)Pyrene			nd	;																											
indeno(1.2,3-cd)Pyrene			nd						- 1																			:			
Dibenzo(a,h)Anthracene			nd						-:																						
Benzo(g,h,i)Perylene			nd						1																						
2-Methylnaphthalene			, na																												
			. 0																		:										
Total PAHs			. 0						- 1												!										
Cyanide, total (Exygen/ Test A	mades)		344	450	295	439	46	455	361	8 506	399	21	501	242	387	644											139	690	560	790	280
Cyanide, total (Clarkson Univ.)			344	~50	290	439	40	400	-!	0 500	398	21	501		444		160	420	172	460	227	40.4	115	410	268	495	139	090	, 360	190	280
		1				- 4		- 4	40					242		402	160	429	172	469	, 337	494	115	418	268	495			- 4		
Cyanide, free (Exygen/ Test Ar				nd	13	nd	nd	nd	10	9 nd	44	14	nd .	nd .	53	13	- 4	- 4				2.5					na	6	nd	2.2	6.0
Cyanide, free (Clarkson Univ.)									i				nď	nd	2,6	3.2	nd	nd	nd	nd											
Water Elevation (feet)			576.67	579.24	578.86	576.76	577.15	579.20	577.4915	76.60 578.	4 576.9	0 577.1	5 578.9€	577.42	577.82	578.82	576,60	578.20	577.07	579.03	575.78	578.43	577.4	578.78	577.87	578.9	577.11	580.62	576.41	578.45	574.2
																	:														

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MW-21 MV	IW-21	MW-21 MW-21	MW-21 MW-	21 MW-2	1 MW-2	MW-21	MW-21 M	/W-21 N	fW-21 M	W-21 M	W-21 M	/W-21	MW-21	MW-21	MW-21																	
DATE Au	ug-95	May-96 Jul-97	Feb-98 Jun-9	99 · Apr-0	0 Apr-01	Jul-01	Nov-01 A	Apr-02 J	un-02 N	0V-02 A	pr-03 ,	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-12
Benzene			nd							i																						
Toluene			nd	1																												
Ethylbenzene			nd	1																												
Xylene (sum of isomers)			nd	ı																												
Total BTEX			0															- 1	10	1												
				1														7														
Naphthalene			nd	, ;					:																			11				
Acenaphthylene			nd						1	;																		- 1	H			
Acenaphthene			nd																													
Fluorene			nd																													
Phenanthrene			nd							- ;								1	-													
Anthracene			nd																													
Fluoranthene			nd																													!
Pyrene			nd																													i
Benzo(a)Anthracene			nd																													
Chrysene			nd																													
Benzo(b)Fluoranthene			nd																											:		
Benzo(k)Fluoranthene			nd						;																					i .		
Benzo(a)Pyrene			nd																											-		
Indeno(1,2,3-cd)Pyrene			nd																													
Dibenzo(a,h)Anthracene			nd						-																							
Benzo(g,h.i)Perylene			nd																													
2-Methylnaphthalene									,																							
Total PAHs			0																			İ										
TOTAL PALIS			·																										i			
Cyanide, total (Exygen/ Test Ameri	rica)		51	1 560	898	558	535	756	674	670	637	708	569	714	741	740	664											433	539	420	480	420
Cyanide total (Clarkson Univ.)	,				450	444	***								749	709	688	545	404	448	574	560	543	417	485	441	508					
Cyanide, free (Exygen/ Test Americ	ica)		'	nd	14	nd	nd	24	12	13	nd	11	nď	nď	nd	7	20	0		.40		00	3.0		100			nd	6	nd	1.6	nd
Cyanide, free (Clarkson Univ.)	,		:	114		714				-				nd	nd	nd	nd	2.6	nd	nd	nd	nd	18.5	4.2	nd	nd	nd					
oyamaa, maa (alankaan ame.)			:																.14	.10			.0.0									
Water Elevation (feet)			: ! 578	51 578 0	8 577 6	8 576 55	578 58	578.03	576 97 4	78 28 5	75 32	576 55	576.42	577 70	576.86	576.85	577 71	576 38	577 28	576.75	578 38	576 79	577 42	576 94	577 35	576.93	577 43	578 67	579.32	2 575.29	577 09	575.89
TYBIS Elevation (leet)			; 3/6.	.01 010.0	011.0	370.55	370.30	0,0.00	J. U. 31	77 3.20 3	77.5E	0.0.00	570.42	377.70	370.00	370.03	311.11	370.30	317.20	370.73	310.30	3,0.75	077.42	0.0.54	3,7,33	0,0.53	5,,,43	3,0.3,	0,0.02	2 0,0.29	5,,,00	. 0,0.00

MW-22	MW-22	MW-22 MW-22 MW-	22 MW-2	21MW-22	MW-22	MW-22	MW-22 N	W-22 N	MW-22 N	W-22 M	N-22 N	/W-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22
DATE	Aug-95	May-96 Jul-97 Feb-	98 Jun-9	9 Apr-00	Apr-01	Jul-01	Nov-01 /	Apr-02 、	Jun-02'1	Nov-02 A	or-03 J	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-12
Benzene			6							- 6																						
Toluene			nd																,	:												
Ethylbenzene			nd																													
Xylene (sum of isomers)			nd							i																						
Total BTEX			6																													
Naphthalene			nd																													
Acenaphthylene			nd							4																						
Acenaphthene			nd																													
Fluorene			nd							- 1																						
Phenanthrene			· nd							1									į													
Anthracene			nd							1									!													
Fluoranthene			nd							1																						
Pyrene			' nd							-																						
Benzo(a)Anthracene			' nd																													i
Chrysene			nd																													
Benzo(b)Fluoranthene			nd																													
Benzo(k)Fluoranthene			; nd							- 1																						
Benzo(a)Pyrene			nd																													
Indeno(1,2,3-cd)Pyrene			. uq							- 1																						
Dibenzo(a,h)Anthracene			nd							- 1																						
Benzo(g,h,i)Perylene			nd																											!		
2-Methylnaphthalene		:								1																						
Total PAHs			0																													
			-							i																						
Cyanide, total (Exygen/ Test Ame	erica)		487	600	1010	734	460	703	1570	467	504	560	1080	741	504	803	941											778	1030	860	1,000	870
Cyanide, total (Clarkson Univ.)															676	759	628	534	587	540	642	641	666	785	704	690	771					
Cyanide, free (Exygen/ Test Arne	enca)			nd	nd	201	nd	nd	49	231	267	88	49	132	nd	207	99											nd	7	nd	5.5	26
Cyanide, free (Clarkson Univ.)													_	nd	8	nd	3.1	2.4	nd	nd	nd	4.3	5.9	3.3	3.1	3.4	nd					
															-		4							2.3	1							-
Water Elevation (feet)			578 R	n 580.70	590 51	579.09	579 50	581 25	580 05 A	579 10 5	മെ ദ	579 42	579 47	581 27	580.05	580.22	581 28	579 13	590 60	579.60	581 75	578 02	581.03	579.93	580,86	580.03	8 581 19	579.29	583 13	578.99	580 58	578.26
Trace Lievanon (lear)			370.0	000.70		5,3.05	373.30			373.10.3	70.02	010.42	575.47	301.21	555.00	33.00	551.25	, 0,0,10	∞0.03	5,5.00	551.75	0.0.02	551.05	0,0,00	\$30.00	, 530.00	, 551.13	V, 3.23	COO. 10	3,0.00	550.50	0.0.20
																						!										

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	MW-23	MW-23 MW-	23 MW-2	3 MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-2
DATE A	Aug-95	May-96 Jul-9	7 Feb-98	8 Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11	Apr-12	Aug-1
Benzene					nd						nd			nd			nd				nd				nd		nd		nd :		nd		nd
Toluene					nd						nd			nd			nd				i nd				nď		nď		nd		nd		nd
Ethylbanzene					nd						nď			nď			nd				nd				nd								
Xylene (sum of isomers)			i		nd						nď			nď			nd				nď				nd		nd		nď		nd		nd
Total BTEX					0						0			0			0				0				0		0		0		0		0
Naphthalene					nd						nd			nd			nd				3.6				nd								
Acenaphthylene :					nd						nd			nd			nd				nd				nd								
Acenaphthene					nd						nd			nd			nd				nd		,		nd								
Fluorene					nd						nd			nd			nd				nd				nď		nd		nd		nd		nd
Phenanthrene					nd						nď			nď			nd				nd				nď		nd		nd	:	nd		nd
Anthracene					nd						na			nd			nd				nd				nď		nd		nd		nd		j nd
luoranthene					nd						nd			nd			nď				nd				nď		nd		nd		nd		nd
Pyrene					. nd						nd			nd			nď	:			nd				nď		nd		nd	- 1	nd		nd
Benzo(a)Anthracene					. nd						nd			nd			nď				nď				nd								
Chrysene					nd						nd			nd			nď				nď				nd		nd		nd	- 1	nd		nd
Benzo(b)Fluoranthene				1	nď						nd			nd			nď				na				nd								
Benzo(k)Fluoranthene					nd						nd			nd			nd				nd				nd								
Benzo(a)Pyrene					nd						nd			nd			nd				nd				nd								
Indeno(1,2,3-cd)Pyrene					nd						nď			nd			nd				nd				nd								
Dibenzo(a,h)Anthracene					nd						nd			nd			nd				nd				nd								
Benzo(g,h,i)Perylene					nd			'			nd :			nd			nd				nd				nd								
2-Methylnaphthalene											nd :			nd			nd				nd				nd		nd		nd		nd	1	nd
Total PAHs					0						0			0			0				3.6				0		0		0		0		0
Cyanide, total (Exygen/ Test Amer	rica)				480	658	469	654	480	425	728	356	620	729	587	446	437	274											299	307	360	1 200	221
Cyanide, total (Clarkson Univ.)										-2-	. = 0				301	493	560	359	325	267	321	326	374	252	344	276	320	277	598	307	300	220	330
yanide, free (Exygen/ Test Ameri	rica)			;	nď	nd	nd	nd	nd	12	10	nd	15	6	5	9	5	57	323	201	321	320	3/4	232	344	2/0	320	211	nd		,	2.4	
cyanide, free (Clarkson Univ.)	-							· · · -	-	-					nd	nd	nd	nď	nd	nd	nd	nd	nď	3.2	11.7	nd	nd	nd	nd	Ü	4	2.4	nd
																					.10		110	J.2	11.7	,10	110	nu	1				
Vater Elevation (feet)					578.66	578.30	577.40	577.58	578.69	577.83	577.18	578.11	577.40	577.29	578.54	577.83	577.91	578.61	577.44	578.19	577.63	578.95	577.19	578,37	577.83	578.16	577.95	578.44	577.53	580.42	577.09	578.03	576.7
																		i															

DATE Aug-95 May-96 Jul-97 Feb-98 Jun-99 Apr-00	V-01 SW-01 SW-0	1 SW-01 SW-01 SW-01 SW	SW-01 SW-01 SV	V-01 SW-01	SW-01 SW-01	SW-01	SW-01 S	SW-01 SW	V-01 SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	SW-01 SV	-01 SW	-01 SW-0	1 SW-01	SW-01	SW-01	SW-01	SW-01	SW-01	sw-01
Toluene	r-00 Apr-01 Jul-0	Feb-98 Jun-99 Apr-00 Apr	Jul-01 Nov-01 Ap	r-02 Jun-02	Nov-02 Apr-03	Jul-03	Nov-03 N	Mar-04 Jun	n-04 Nov-04	Apr-05				Apr-07			-08 Apr-0							
Toluene	! == ===	! -				- 4																		1
Ethylbenzene nd Xylene (sum of isomers) nd Total BTEX 0 Naphthalene nd Acenaphthylene nd Acenaphthene nd Fluorene nd Phenanthrene nd Anthracene nd Fluoranthene nd Pyrene nd Benzo(a)Anthracene nd Chrysene nd Benzo(b)Fluoranthene nd Benzo(a)Pyrene nd Indeno(1,2,3-d)Pyrene nd Dibenzo(a,h)Anthracene nd Benzo(g,h,i)Perylene nd 2-Methylnaphthalene nd Total PAHs 0 Cyanide, total (Exygen/ Test Amenca) 12.2 Cyanide, free (Exygen/ Test Amenca) 12.2	nd nd			nd no nd 2	no na	no	nd	0.44 n		nd	nd	nd	nď	nd		d n		nď	nď	nď	nd	0.15	nd	nd
Xylene (sum of isomers) nd Total BTEX 0 Naphthalene nd Acenaphthylene nd Acenaphthene nd Fluorene nd Phenanthrene nd Anthracene nd Fluoranthene nd Pyrene nd Benzo(a)Anthracene nd Chrysene nd Benzo(b)Fluoranthene nd Benzo(s)Fluoranthene nd Benzo(a)Pyrene nd Indeno(1, 2,3-cd)Pyrene nd Obenzo(a, h)Anthracene nd Benzo(s, h,i)Perylene nd 2-Methylnaphthalene nd Total PAHs 0 Cyanide, total (Clarkson Univ.) 12.2 Cyanide, free (Exygen/ Test Amenca) 12.2	nd nd		nd nd r	· .	nd nd	nd			nd nd	nd	0.47	nd	nd	nd		d n		nd	nď	nd	nd	0.22	nd	nd
Total BTEX 0 Naphthalene	nd nd	: "		nd nd nd nd	nd nd	nd	nd		nd nd	nd	nd	nd	0.23	nd .		d n	nd nd	nd	nd	nd ,	nd	0.6	nď	nď
Naphthalene nd Acenaphthylene nd Acenaphthylene nd Fluorene nd Phenanthrene nd Anthracene nd Fluoranthene nd Pyrene nd Benzo(a)Anthracene nd Benzo(b)Fluoranthene nd Benzo(b)Fluoranthene nd Benzo(b)Fluoranthene nd Benzo(b)Fluoranthene nd Benzo(b)Fluoranthene nd Benzo(a)Pyrene nd Indeno(1,2,3-cd)Pyrene nd Indeno(1,2,3-cd)Pyrene nd Dibenzo(a,h)Anthracene nd Benzo(b,h)Perylene nd Cydniaphthalene Total PAHs 0 1 Cyanide, total (Exygen/ Test Amenca) 12.2 Cyanide, total (Clarkson Univ.) Cyanide, free (Exygen/ Test Amenca)	0 0		0 0	nd nd กว่	nd nd 0 0	nd n	nd O		nd nd	nd	nd 0.47	nď	nd	nd ¦		d n		nd	nd	nd	nd	0.54	nď	nd
Acenaphthylene	0 0	:	i		0 0	J	o	0.82	0 0	U	0.47	0	0.23	0) (0	0	0	0	0	1.51	0	0
Acenaphthene	nd 29	, ne	29 nd r	nd nd	1.6 ! nd	n d	nd	nd o	nd nd	nd	nd	32	nď	nd	2	3 n	ı nd	nď	nď	nd				
Fluorene	nd nd	n	nd nd r	nd nd	nd nd	nd	nd	nd n	nd nd	nd	nď ;	nd	nd	nd	r			nd			nd	nd	nd	nd
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Benzo(a)Anthracene nd Chrysene nd Benzo(b)Fluoranthene nd Benzo(a)Pyrene nd Benzo(a)Pyrene nd Indeno(1,2,3-d)Pyrene nd Dibenzo(a,h)Anthracene nd Benzo(g,h,i)Perylene nd 2-Methylnaphthalene Total PAHs Cyanide, total (Exygen/ Test Amenca) 12.2 Cyanide, total (Clarkson Univ.) Cyanide, free (Exygen/ Test Amenca)	nd nd	, no	nd nd r	nd nd	nd nd	nd	nd		nd nd	nd	0.5	nd	nd	nd				nď	nd	nd	nd	nd nd	nd	' nd
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Benzo(k)Fluoranthene	nd nd	; no	nd nd r	nd nd	nd nd	nd	nd	nd n	nd nd	nd	nď	nd	nd :	nd				nď	nd	nď	nd			nd
Benzo(a)Pyrene	nd nd	i no	nd nd r	nd nd	nd nd	nd	nd	nd n	nd nd	nd	nd	nd	nd	nď	r			nď	nď	nd	nd	nd nd	no no	nd
Indeno(1,2,3-cd)Pyrene	nd nd	ne	nd nd r	nd nd	nd nd	nd	nd	nd n	nd nd	nd	nd	nd	nd	nd			nd	nd	nd	nď	nd	nd	nd	nd
Dibenzo(a,h)Anthracene nd Benzo(g,h)Perylene nd 2-Methylnaphthalene Total PAHs 0 ! Cyanide, total (Exygen/ Test Amenca) 12.2 Cyanide, total (Clarkson Univ.) Cyanide, free (Exygen/ Test Amenca)	nd nd	n	nd nd r	nd nd	nd nd	nd	nd	nd n	nd nd	nd	nd	nď	nd	nd		d n	nd	nd	nd	nď	nd	nď	nď	nd
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2-Methylnaphthalene Total PAHs Cyanide, total (Exygen/ Test America) Cyanide, total (Clarkson Univ.) Cyanide, free (Exygen/ Test America)	nd nd	ne	nd nd r	nd nd	nd nd	nd	nd	nd n	nd nd	nd	nd	nď	nď	nd '			i nd	nd	nd	nd	nd	nd	nd	nd
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Cyanide, total (Clarkson Univ.) Cyanide, free (Exygen/ Test America)	0 4	!	4 0	0 0	1.6 0	0	0	0 (0 0	0	0.9	32	0	0		3 0	0	0	0	0	0	0	0	0
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Cyanide, free (Exygen/ Test America)	21 55	2	55 35	8 405	21 13	88	36	989 4		9										12.6	30.3	11	16	96
	nd 16	_	18 -4 -	-4 20		40			16 53	10	5	4	24	nd	1	4 5	25	23	3.6					- 1
ayamaa, naa taamaan omis,	па 18	i no	io na r	nd 29	6 nd	10	nd	86 (6 19	nd										nď	6	nd	1.5	21
	1	!	-		i			98.1 n	nd nd	3,2	2.4	2.3	2.4	5	,	đ n	i nd	nd	2.6					
Water Elevation (feet) 579.80 580.40	0.40 580.10 580.00	579.80 580.40 580.	80.00 580.10 58 ⁻	1.00 579.60	579.80 580.70	581.40	582.00 5	82.30 580	0.60 581.30	581.30	579.90	581.60	580.20	582.80	58	.57 581	.80 581.5	5 580,83	582.25	580.19	580.19	580.19	581.6	580.6

SW-02 SW-02		SW-02	SW-02	SW-02 \$	SW-02	SW-02	SW-02 (SW-02	SW-02	3W-02 S		SW-02 SI	SW-02 SV	SW-02 SV	SW-02 SW	SW-02 SW	SW-02 SW-02	-02 SW-02		SW-02 SW-02	02 SW-02	2 SW-02	SW-02	2 SW-02	2 SW-02	CD-MS C	. CD-WIS	CU-MS	CU-WIS	SWA	CUANS	_
DATE Aug-	Aug-95 May-96	May-96 Jul-97 Feb-98 Jun-99 Apr-00 Apr-01 Jul-01 Nov-01 Apr-02 Jun-02 Nov-02	Jun-99	Apr-00 ,	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02 h	40v-02 A	Apr-03 Ju	Jul-03 No	Nov-03 Ma	Mar-04 Jur	Jun-04 No	Nov-04 Apr	Apr-05 JuH05		Apr-06 · Aug	Aug-06 Apr-07	37 Aug-07							Apr-11				
,																																
Benzene		pu	р	Q	2	92	P	1.2	Б	ы	ы	Pu	nd E	nd Pr	nd Pr	nd br	nd nd	2 nd		nd nd	Dny	20	Б	ы	ы	P	Б	2	þ	2	pu	
Toluene		ы	2	· · · ·	2	2	2	0.25	Б	5	p	пď	nd Pu	nd L	nd n	L Pu	pu pu	pu pu				'n	В	ē	0.23	0.18	7.2	<u>p</u>	1	2	2	
Ethylbenzene		Б	р В	15	믿	20	p	ß	둳	p	P.	Į.	nd L	nd n	nd n	nd nd	lờ nơ		nd nd	pu pu		P	Б	Б	Ы	2	pu	þ	pu	2	2	
Xylene (sum of isomers)		P	<u>P</u>	24	Б	20	ng	5	밑	Б	pu	pu	pu	nd n	nd n	nd Pi	nd nd		Pu Pu	pu . pı		P	DI	2	Ъ	2	0	þ	2	? 2	2	
Total BTEX		0	0	23	4	0	0	1.45	- 0	0	0	0	0	0	0							٥	0	0	0.23	0.18	7.2		2 0	. 0	2 0	
Naphthalene		90	pu	9	5	2	g	2	12	P	90	72	20	2	2		200	7	7			ě	7	7	7	7	7	7	1	•		
Acenaphthylene		υ	p	2	Б	2	P	2	.	2		10					500					5 2	? ?	2 2	2	2 3	2	2 7	2 7	2	2	
Acenaphthene		20	20	2	Б	힏	20	ይ	72	Б		2										? ?	? ?	2 7	2 2	2 2	2	2 7	2	2 7	2	
Fluorene		nď	ы	ы	2	90	Б	2	Æ	P	2	pu							,			2	? ?	2 2	2 2	2 2	ğ <u>ş</u>	2	2 2	2	2 3	
Phenanthrene		ng	ы	Б	2	ъ	рg	ጀ	10	20	2	5					=					2	2	2	0.72	? 2	2 2	2 2	2 2	2 2	2 2	
Anthracene		pu	Б	5	20	20	Б	2	Б	P	pu	pu	n P	nd L	u pu	N bu	Pr.	5		pu p		2	2	Б	'n	9	0.19	þ	P	2	2	
Fluoranthene		Б	Б	Б	- P	Б	P	2	힏	9	pu	pu	nd I	pu L	nd br	nd bn	pu					2	2	P	1.2	2	0.63	2	1.5	2 2	5 0	
Pyrens		pu	Б	5	Б	0,77	ы	2	-P2	пď	Б	12	nd	nd r	nd	nd br	Pd nd	P.		,		2	2	2	7	2	0.55	2	0.92	2	0.33	
Benzo(a)Anthracene		P	2	믿	Б	힏	Б	20	밑	g	Б	2	nd I	nd r	n bn	uq pu	Pd pd	PI I	Pu Dq	pu p		Б	pu	5	0.49		1.5	2	2	2	0.26	
Chrysene		pu	2	P	Б	2	Б	2	밑	9	Р	ž.	nd	nd r	nd br	nd hd	pu uq	P.	Pu Dq	pu pi		pu	5	p	0.85		1.2	2	þ	2	030	
Benzo(b)Fluoranthene		Б	Б	Б	Б	Б	2	5	. <u>19</u>	2	2	PL	Pr.	nd	u pu	pu pu	pu p	D.	Pu p	Pi Pi		ы	pu	Б	1.2	'n	1.3	Б	1.7	2	2	
Benzo(k)Fluoranthene		pu	Б	9	Б	Б	믿	Б	핕	P	pu	pu	Pu L	nd n	u pu	pu pu	Pu Dd	P.	pu p	pu p		pu	p	pu	9	2	1.2	2	2	2	2	
Benzo(e)Pyrene		ď	ы	9	Б	ē	5	2	2	Б	2	pq	Pu	nd r	u pu			P.				P	2	2	0.63	10	1		2 2	? ?	2	
Indeno(1,2,3-cd)Pyrene		ρυ	ы	9	Б	Б	5	9	20	Б	pu	pu	pu	nd r	nd Pu	nd hr	pu pu	Pu L				Б	p	2	9	2			2	2	2	
Dibenzo(a,h)Anthracene		Б	9	P.	2	рц	9	Б	Б	p	pu	DQ.	P	Pa Pa	n br	pu pu	pu pi	Pu II		p p		В	Б	, 6	2	100		! 2	2	2	? ?	
Benzo(g,h,ı)Perylene		pu	Б	2	ng	힏	9	믿	5	ğ	ng	nd	Pu	nd L	n br	nd ne	pu pu	nd				Б	2	P	0.55	20	1.5		2	2	2	
2-Methylnaphthalene					10	р	Þ	2	Б	pu	nd.	ng	P	nd br	u pu	nd hr	pu pu	F				Б	P	2	20	100	2		2	2	? ?	
Total PAHs		0	0	0	0	0.77	0	0	0	0	0	0	0	0	0	0	0 0					0.94	0	0	6.74	0	11.77	0	3.82	! 0	1.39	
Cvanide, total (Exygen/ Test America)		, , , , , ,		380	5	2	7	130	7	1440	1	5	٤	٥			,															
Code company company			!		į	2		3		2							2										369	<u>P</u>	93	45	4	_
Cyanide, lotal (Clarkson Univ.)															100	50 nd	o, ud	3	Pu ng	Pl Pl		98	98	16	141	4.4						
Cyanide, free (Exygen/Test Amenca)	_			111	Б	g	Б	16	pu	42	Б	Pu	nd	20	nd 1	12 nd	φ	-									Б	9	11	1	Б	
Cyanide, free (Clarkson Univ.)													-	19.2	nd 6	6.2 nd	od nd		3 nd	9.8		50.7	10.1	2	3.0	10						
Water Elevation (feet, approximate)			580.3	580.3 580.9 580.6	580.6	580.5 580.6 581.5 580.1 580.3	580.6	581.5	580.1		581,1 5	581.8 54	582.4 58	582.7 58	581.0 58	581.7 581	581.7 580.3	.3 582.0		580.6 583.2	2 ;	ı	I	ı	I	I	1	I	1	ı	I	

Appendix B

Annual Site Inspection Form

Annual Site Inspection Form

Mineral Springs Road Former MGP

or blue stained soil observed.

Inspection by:Thomas P. Clark, P.E.	Affiliation: AECOM Environment, Inc.
Signature:	Date: April 19, 2012 (Inspection date)
orginature.	
ASPHALT CAP SOUTH OF BUILDING #3 (B3SAC)	CLAY CAP BEHIND BUILDING #14 (CC)
Cracks or ruts? Yes No	Animal dens ? Yes No
Erosion at edges ? Yes No	Erosion ? Yes No
Blue-stained soil ? Yes No	Trees ? Yes No
Comments:	Blue-stained soil ? Yes No
Significant settlement and cracking observed in sev	reral Comments:
locations. Seal missing from some previously seale	d cracks. Cap surface intact. No animal burrows or stained soil. No sink holes.
ASPHALT CAP EAST OF BUILDING #3 (B3EAC)	
	EASTERN DRAINAGE DITCH (EDD)
Cracks or ruts ? Yes No	
Erosion at edges ? Yes No	Animal dens ? Yes (No)
Blue-stained soil ? Yes No	Erosion ? Yes No
Comments:	Trees? Yes (No)
Cap in good condition. Previously sealed cracks into	act. Blue-stained soil? Yes No
A few minor new cracks. No significant ponding.	Hydrocarbon sheen ? Yes No
	Inadequate Signage ? Yes No
ASPHALT CAP NORTH OF EASTERN SWALE (ES)	VAC) Trash / Debris ? Yes No
	Comments:
Cracks or ruts? Yes No	Ditch in good condition. No sheen or erosion noted. Warning
Erosion at edges? Yes No	signs in place. No woody plants near clay portion of cap.
Blue-stained soil ? Yes No	
Comments:	BACKFILLED EXCAVATIONS (NTBE, CTBE, ETBE, SETLE)
Cap in good condition. Crack sealing in good conditi	ion.
	Excessive settlement ? Yes No
	Ponding of surface water? Yes No
ASPHALT CAP SOUTH OF EASTERN SWALE (ESS	SAC) Tar boils? Yes No
_	Blue-stained soil ? Yes No
Cracks or ruts? Yes No	Comments:
Erosion at edges ? Yes No	No settlement, erosion, blue soil, or seeps observed.
Blue-stained soil ? Yes No	
Comments:	
Cap in good condition. No significant cracking.	CLASS D STREAM
	Hydrocarbon sheen ? Yes No
HDPE/SOIL CAP IN EASTERN SWALE (ESHC)	Comments:
	No sheen or erosion observed.
Cracks or ruts? Yes No	
Erosion at edges ? Yes No	
Blue-stained soil ? Yes (No)	SITE FENCE
Comments:	Damage / Holes ? Yes (No)
Cap in good condition. No ponding after heavy rai	
HDPE drainage pipe visible at end of drainage dite	
	The lence is intact along the property line in all locations.

Appendix C

Photographs

PHOTOGRAPHIC LOG

Client Name:

National Fuel Gas Distribution Corp.

Site Location:

365 Mineral Springs Road, Buffalo, New York

Project No. 60137322

Photo No.

Date:

1 4/19/12

Direction Photo Taken:

Looking East

Description:

Eastern Swale HDPE Cap. No issues identified.



Photo No.

Date:

4/26/11

Direction Photo Taken:

Looking South

Description:

Eastern Drainage Ditch. No issues identified.



PHOTOGRAPHIC LOG

Client Name:

National Fuel Gas Distribution Corp.

Site Location:

365 Mineral Springs Road, Buffalo, New York

Project No. 60137322

Photo No. 3

Date: 4/19/12

Direction Photo Taken:

Looking East

Description:

Eastern Swale South Asphalt Cap. No issues identified.



Photo No. 4

Date:

4/19/12

Direction Photo Taken:

Facing East.

Description:

Fence by Clay Cap. No issues identified.



PHOTOGRAPHIC LOG

Client Name:

National Fuel Gas Distribution Corp.

Site Location:

365 Mineral Springs Road, Buffalo, New York

Project No. 60137322

Photo No. 5

Date: 4/19/12

Direction Photo Taken:

Facing South.

Description:

Building 3 South Asphalt Cap. Note required repairs.



PHOTOGRAPHIC LOG

Client Name:

Photo No.

National Fuel Gas Distribution Corp. Date:

Site Location:

365 Mineral Springs Road, Buffalo, New York

Project No. 60137322

6 11/2/12 **Direction Photo** Taken:

Facing South.

Description:

Building 3 South Asphalt Cap. Note repaired area.





Appendix D

Institutional and Engineering Controls Certification Form



Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form

Sit	te No.	V00195	Site Details	Box 1	
Sit	te Name NF	G - Mineral Springs MGP			
Cit Co	te Address: ty/Town: We bunty: Erie te Acreage:		Zip Code: 14210		
Re	porting Perio	od: October 02, 2011 to Oc	ctober 02, 2012		
				YES	NO
1.	Is the infor	mation above correct?		\boxtimes	
	If NO, inclu	ude handwritten above or o	n a separate sheet.		
2.		or all of the site property be nendment during this Repo	een sold, subdivided, merged, or undergone a rting Period?		X
3.		been an y change of u se at CRR 375-1.11(d))?	the site during this Reporting Period		X
4.		ederal, state, and/or local pe property during this Repo	permits (e.g., building, discharge) been issued rting Period?		X
	If you ansi	wered YES to guestions 2	2 thru 4, include documentation or evidence		
			ously submitted with this certification form.		
5.	that docum		ously submitted with this certification form.		团
5.	that docum	mentation has been previo	ously submitted with this certification form.	•	☑
5.	that docum	mentation has been previo	ously submitted with this certification form.		NO NO
	Is the site of	mentation has been previo	ously submitted with this certification form.	Box 2	
6.	Is the curre	mentation has been previous currently undergoing develor develors.	ously submitted with this certification form. opment? the use(s) listed below?	Box 2	NO
6.	Is the curre Commercia Are all ICs/	ent site use consistent with the and Industrial ECs in place and functioning the ANSWER TO EITHER QUE DO NOT COMPLETE THE	ously submitted with this certification form. opment? the use(s) listed below?	Box 2 YES	NO
6.	Is the curre Commercia Are all ICs/	ent site use consistent with the and Industrial ECs in place and functioning the ANSWER TO EITHER QUE DO NOT COMPLETE THE	ously submitted with this certification form. opment? the use(s) listed below? ng as designed? UESTION 6 OR 7 IS NO, sign and date below a REST OF THIS FORM. Otherwise continue.	Box 2 YES	NO
6. 7.	Is the curre Commercia Are all ICs/	ent site use consistent with the and Industrial ECs in place and functioning the ANSWER TO EITHER QUE DO NOT COMPLETE THE	ously submitted with this certification form. opment? the use(s) listed below? ng as designed? UESTION 6 OR 7 IS NO, sign and date below a REST OF THIS FORM. Otherwise continue. e submitted along with this form to address the	Box 2 YES	NO

SITE NO. V00195 Box 3

Description of Institutional Controls

Parcel

<u>Owner</u>

Institutional Control

123.16-2-8

National Fuel Gas Distribution Corp.

Ground Water Use Restriction Landuse Restriction

Box 4

Description of Engineering Controls

Parcel

Engineering Control

123.16-2-8

Cover System

Fencing/Access Control

Engineering Control Details for Site No. V00195

Parcel: 123.16-2-8

- i. All identified capped areas shall continue to be protective of public health and the environment, and shall continue to be maintained and monitored to be consistent with industrial/commercial use.
- ii. The owner of the Property shall prohibit the Property from ever being used for purposes other than for an industrial/commercial operation, office, warehouse and garage facility and for the services associated with such use without the express written waiver of such prohibition by the Relevant Agency.
- iii. The owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Relevant Agency.

		Box 5
	Periodic Review Report (PRR) Certification Statements	
1.	I certify by checking "YES" below that:	
	 a) the Periodic Review report and all attachments were prepared under the direction of, reviewed by, the party making the certification; 	, and
	b) to the best of my knowledge and belief, the work and conclusions described in this care in accordance with the requirements of the site remedial program, and generally accordance with the information and the information	
	engineering practices; and the information presented is accurate and compete. YES	NO
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each In or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:	
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is uncha the date that the Control was put in-place, or was last approved by the Department;	nged since
	(b) nothing has occurred that would impair the ability of such Control, to protect public has the environment;	ealth and
	(c) access to the site will continue to be provided to the Department, to evaluate the renincluding access to evaluate the continued maintenance of this Control;	nedy,
	(d) nothing has occurred that would constitute a violation or failure to comply with the Si Management Plan for this Control; and	te
	(e) if a financial assurance mechanism is required by the oversight document for the site mechanism remains valid and sufficient for its intended purpose established in the document for the site mechanism.	
	VEQ	NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

X

Date

IC CERTIFICATIONS SITE NO. V00195

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

1 Tan Wesch print name	at <u> </u>	- hilliansille My 1422
am certifying as Drsignaled	np	(Owner or Remedial Party)
for the Site named in the Site Details S	Section of this form.	
Signature of Owner, Remedial Party, of Rendering Certification	or Designated Representative	

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Thomas P. Clark at 250 Apollo Dr., Chelmsford, MA 01824 print name print business address

am certifying as a Professional Engineer for the ____National Fuel Gas Distribution Company

Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE) Date