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September 15, 2011

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Division of Environmental Remediation

New York State Department of Environmental Conservation

625 Broadway, 12th Floor Albany, NY 12233-7013

Re:

Franklin Cleaners Site (Site No. 1-30-050) D&B Work Assignment No. D004446-01

Quarterly Report No. 23 D&B No. 2531-03

Dear Mr. Long:

The purpose of this letter is to summarize the quarterly operation, maintenance, monitoring and sampling activities performed at the off-site Franklin Cleaners groundwater extraction and treatment system (see Attachment A, Figure 1), for the period beginning March 1, 2010 through May 31, 2010.

Operation, maintenance, monitoring and sampling activities were conducted by New York State Department of Environmental Conservation (NYSDEC) call-out contractor, Environmental Assessment and Remediations (EAR). Reporting, data management and assessment, and consulting and engineering evaluation services were performed by Dvirka and Bartilucci Consulting Engineers (D&B).

Presented below is a summary of the system operation and maintenance completed during the quarter, as well as the results of the sample analysis completed during this reporting period at the off-site Franklin Cleaners groundwater extraction and treatment Note that groundwater monitoring well sample data is discussed in the Groundwater Sampling Report No. 2. In addition, a Site Management Plan (SMP) for the off-site Franklin Cleaners groundwater extraction and treatment system is currently being drafted.

#### Groundwater Extraction and Treatment System Operation and Maintenance

During this period, extraction well EW-1 operated at an average pumping rate of 33.5 gallons per minute (gpm) and extraction well EW-2 operated at an average pumping rate of 6.1 gpm. Normalized graphs of the average flow rate for EW-1 and EW-2 since September 2006 are presented in Attachment B. Based on a review of the data, the flow rate for EW-1 continues to exhibit a slightly decreasing trend, while EW-2 exhibits a slightly increasing trend.

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Approximately 0.89 pounds of tetrachloroethene (PCE) were removed from the extracted groundwater by the treatment system during this reporting period and approximately 40.15 pounds of PCE have been removed since start-up of the treatment system in September 2003. The average PCE removal efficiency for this reporting period was greater than 99 percent. A graph of the average PCE removal rate is provided in Attachment C. Overall, the PCE removal rate is exhibiting a decreasing trend and has declined since September 2007.

Based on measurements recorded at the treatment system discharge flow meter, approximately 7,243,909 gallons of treated groundwater have been discharged to the Nassau County Department of Public Works (NCDPW) storm sewer system. Note that this volume is inconsistent with data collected from the influent flow meters for EW-1 and EW-2, which recorded a combined total flow of approximately 4,602,571 gallons of groundwater entering the treatment system. It was initially thought that this inconsistency was possibly due to either wear or fouling of the influent flow meter paddle wheels. However, as noted in Quarterly Report No. 21, cleaning of the influent flow meter paddle wheels was not effective at correcting this inconsistency. In addition, no significant wear on the paddle mechanisms was observed. It was also noted during several system monitoring events that the EW-1 flow meter was intermittently registering a flow of 0.0 gpm. As detailed in the recommendations of this and the previous quarterly reports, further diagnosis of these inconsistencies or replacement of the paddle-style flow meters with mag-style flow meters is warranted.

During this reporting period, the groundwater extraction and treatment system was operative for a total of approximately 2,100 hours and inoperative for a total of approximately 109 hours due to system alarm conditions, routine system maintenance and non-routine maintenance.

Alarm conditions responded to during this reporting period included the following:

- Alarm due to electrical problems likely caused by a storm event (one event); and
- High-high wet well condition (eight events).

Routine maintenance performed during this reporting period included the following:

• Blower maintenance conducted on March 11, and April 8, 2010.

Non-routine maintenance performed during this reporting period included the following:

- Installation of new, lockable monitoring well caps conducted on March 11, 2010;
- Replacement of influent flow sensor "T"s on the influent piping conducted on March 11, 2010;
- Diagnosis and repair of influent flow sensor paddle wheels conducted on May 13, 2010; and
- Maintenance of influent flow sensor for EW-2 and cleaning of blower inlet air screen conducted on May 28, 2010.

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A copy of the Site Activities Logs, System Monitoring Logs and a System Operations and Downtime Log for this reporting period, which includes a summary of system maintenance events and alarm responses, as prepared by EAR, is provided in Attachment D. A table summarizing the routine maintenance events completed this reporting period and the scheduled routine maintenance events for Quarter 23, is provided in Attachment E.

#### **Groundwater Extraction and Treatment System Sampling**

Groundwater samples were collected from the EW-1 and EW-2 well influent piping sample taps, as well as from the air stripper (liquid) discharge sample tap, at a frequency of twice per month during each of the 3 months comprising this reporting period. The samples collected through the April 29, 2010 sampling event were analyzed for VOCs by United States Environmental Protection Agency (USEPA) SW-846 Method 8260, while the samples collected on each succeeding sampling date were analyzed for VOCs by USEPA 40 CFR Method 624. Note that the change in the VOC analytical method from Method 8260 to Method 624, was approved by the NYSDEC as a means to reduce the overall sample analysis costs due to the smaller list of reported compounds under Method 624. In addition, the samples collected from the air stripper discharge sample tap were analyzed for iron and manganese utilizing USEPA SW-846 Method 6010 and for pH utilizing USEPA SW-846 Method 9040. Note that a field reading for pH is also collected from the air stripper effluent and the wet well sump to supplement the laboratory analytical pH results.

The analytical results of samples collected from the system influent are compared to the NYSDEC Class GA Groundwater Standards and Guidance Values, and the analytical results of samples collected from the air stripper discharge are compared to the site-specific NYSDEC State Pollutant Discharge Elimination System (SPDES) permit equivalency effluent limitations. Analytical results are presented in Attachment F.

Based on the analytical results, extraction well EW-1 exhibited concentrations of PCE above its NYSDEC Class GA Standard of 5.0 micrograms per liter (ug/l) in groundwater ranging in concentration from 11.0 ug/l to a maximum of 16.0 ug/l detected on March 4 and May 13, 2010. Extraction well EW-2 exhibited concentrations of PCE above its NYSDEC Class GA Standard of 5.0 ug/l ranging in concentration from 47.0 ug/l to a maximum of 76.0 ug/l detected on May 28, 2010. Based on the maximum concentrations detected and extraction well flow rates for EW-1 (34.4 gpm) and EW-2 (6.4 gpm), extraction well pump EW-1 is removing PCE at a rate of 2.76 x 10<sup>-4</sup> pounds per hour (lb/hr) and extraction well pump EW-2 is removing PCE at a rate of 2.18 x 10<sup>-4</sup> lb/hr.

The laboratory discharge sample results for the period exhibited VOCs and metals concentrations below the effluent limitations. Laboratory analyzed pH values were within the site-specific effluent range of 6.5 to 8.5; however, the pH field screening reading collected from the wet well on April 30, 2010 (6.44) exhibited a pH value slightly below the site specific effluent range of 6.5 to 8.5.

A summary of the extraction and treatment system performance results since September 2007 is provided in Attachment G.

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In addition, vapor phase samples were collected from the two carbon adsorption unit influent and effluent sample taps at a general frequency of once per week. Each sample was collected by filling a Tedlar bag directly from each of the influent and effluent sample taps located on the two carbon adsorption units. The samples were screened using a calibrated, hand-held photoionization detector (PID).

During this reporting period, PID readings collected from both carbon vessels were reported as 0.0 parts per million (ppm) for both the influent and effluent vapor samples at each carbon adsorption unit during six out of the thirteen sampling events. Exceedances of the NYSDEC site-specific effluent limit of 1.0 ppm for total VOCs at the carbon vessel outlet was reported for both carbon vessels during the remaining seven monitoring events. The effluent exceedances detected at carbon vessel number 1 ranged from a low of 1.1 ppm reported on April 8, 2010 to a high of 5.4 ppm reported on March 26, 2010, while the effluent exceedances detected at carbon vessel number 2 ranged from a low of 1.2 ppm reported on April 15, 2010 to a high of 2.7 ppm reported on March 26, 2010. The NYSDEC was immediately notified of the PID reading exceedances upon review of the data. In addition, and as recommended below, EAR's sample technicians should notify the NYSDEC and D&B if an effluent exceedance is noted during future monitoring events.

It should also be noted that based on the maximum influent PCE mass flow rates for EW-1 and EW-2, the carbon vessels are being loaded at a rate of 4.94 x 10<sup>-4</sup> lb/hr and given an average blower flow rate of 630 cubic feet per minute (ft³/min), this equates to a maximum air concentration of 0.03 ppm. The elevated PID readings noted above may indicate that the granular activated carbon (GAC) has been exhausted and, as recommended below, it may be warranted to collect an air sample for laboratory analysis from each carbon vessel effluent sample tap to determine if the carbon vessels need to be serviced.

#### **Data Validation**

All samples collected this reporting period have been analyzed by Test America Laboratories (TAL), Shelton, CT. The biweekly system samples were analyzed for VOCs. In addition, the effluent sample (AS-1) was analyzed for iron, manganese and pH. The data packages submitted to TAL have been reviewed for completeness and compliance with the NYSDEC Analytical Services Protocol (ASP) Quality Assurance/Quality Control (QA/QC) requirements. All sample results have been deemed valid and usable for environmental assessment purposes.

Data Validation Checklists are presented in Attachment H.

#### **Findings**

Based on the results of the performance monitoring conducted during this reporting period, D&B offers the following findings:

• The analytical results of the system influent samples show that groundwater extraction wells EW-1 and EW-2 continue to capture VOC-contaminated groundwater at an average combined total flow rate of 39.6 gpm, which is greater than the minimum required pumping rate of 20 gpm, as specified in the December 2000 Groundwater Extraction and Treatment System Design Report.

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- Inconsistencies were again noted between the influent total gallons pumped for EW-1 and EW-2 and the treatment system discharge total gallons pumped. Note that the influent flow meters were replaced on January 21, 2010; however, the meters continue to intermittently malfunction. In addition, non-routine cleaning and maintenance of the flow meters does not appear to be an effective remedy.
- The recurring high-high wet well condition continues to be the most frequent alarm condition, causing a majority of the total system downtime since start-up.
- The laboratory and field screening of the effluent water continues to detect intermittently low pH values below the site specific effluent range of 6.5 to 8.5.
- Based on the influent mass loading rate and the blower air flow rate, the carbon vessels are currently being loaded at a maximum rate of approximately 4.94 x 10<sup>-4</sup> lb/hr. Given an average blower flow rate of 630 ft<sup>3</sup>/min, this equates to a maximum influent air concentration of 0.03 ppm.
- The PID readings collected from the carbon vessel effluent sample taps intermittently exhibit total VOCs greater than the site specific effluent limit of 1.0 ppm.
- A new DER-10 document, dated May 2010, has been implemented since the March 1998 ROD was issued.
- The toxicity data, cleanup levels and remedial action objectives, as defined in the March 1998 ROD, remain unchanged.

#### Recommendations

Based on the results of performance monitoring conducted during this reporting period, D&B offers the following recommendations:

- Continue operation of the groundwater extraction and treatment system to minimize downgradient migration of PCE, currently being captured by the system
- It is recommended that the NYSDEC call-out contractor diagnose the inconsistencies noted between the influent and effluent flow meters or replace the paddle-style flow meters with mag-style flow meters.
- It is recommended that the NYSDEC call-out contractor diagnose the recurring high-high wet well conditions.
- Due to low pH results detected at the air stripper effluent, it is recommended to continue the field monitoring of the influent and effluent pH and closely monitor the results. If field monitoring effluent pH values are consistently detected outside of the effluent limit range of 6.5 to 8.5, it may be warranted to perform a post-treatment pH adjustment of the effluent water.

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• Due to the intermittent elevated PID readings detected at the carbon adsorption vessel effluent sample taps, it is recommended that a vapor sample be collected and laboratory analyzed via Method TO-15 at each carbon vessel effluent sample tap, in order to determine the actual VOC concentrations in the effluent vapor and to determine whether a carbon change-out is warranted at this time.

Please do not hesitate to contact me at (516) 364-9890, Ext. 3094, if you have any questions.

Very truly yours,

Stephen Tauss Project Manager

SET/LP/OI(t)j

Attachments

cc: J. Trad (NYSDEC)

J. Multari (Molloy College)

J. Neri (H2M)

R. Walka (D&B)

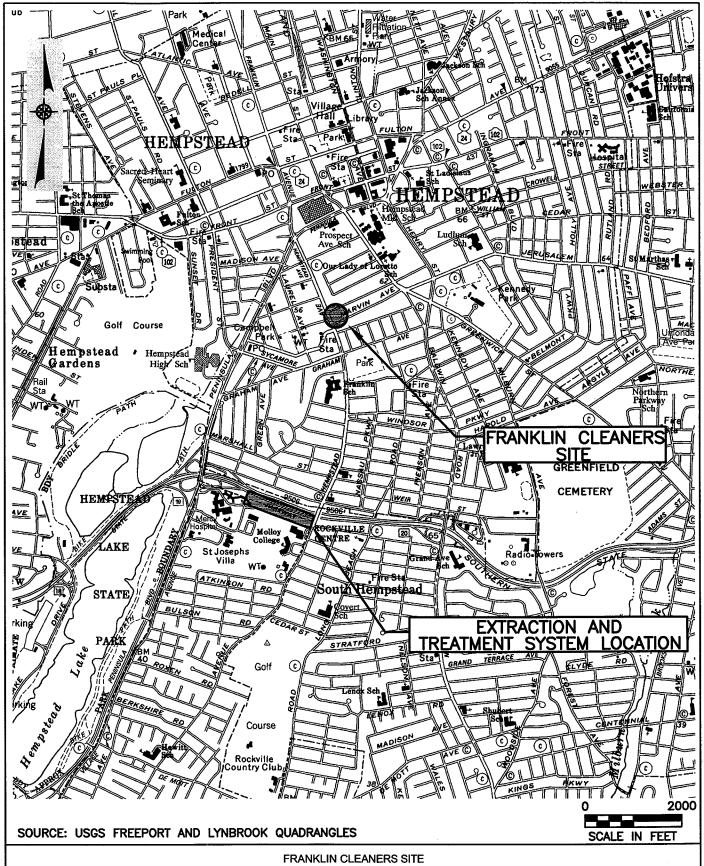
F. DeVita (D&B)

P. Martorano (D&B)

♦2531\SET031011PL\_23.DOC(R01)

## ATTACHMENT A

**FIGURES** 



FRANKLIN CLEANERS SITE VILLAGE OF HEMPSTEAD, NEW YORK

Dvirka and

A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

**Bartilucci** 

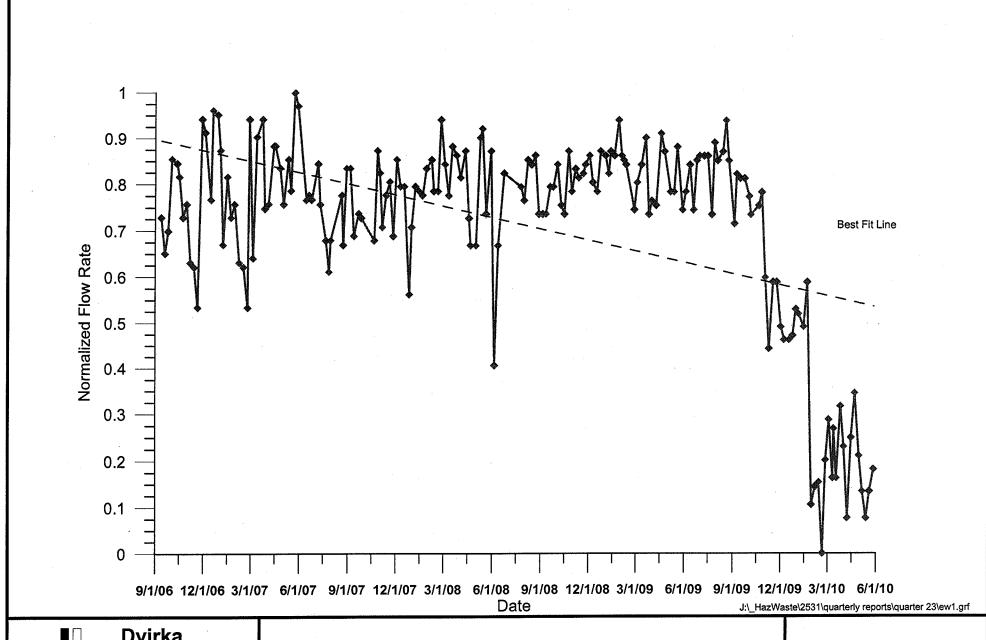
CONSULTING ENGINEERS



FIGURE 1

## ATTACHMENT B

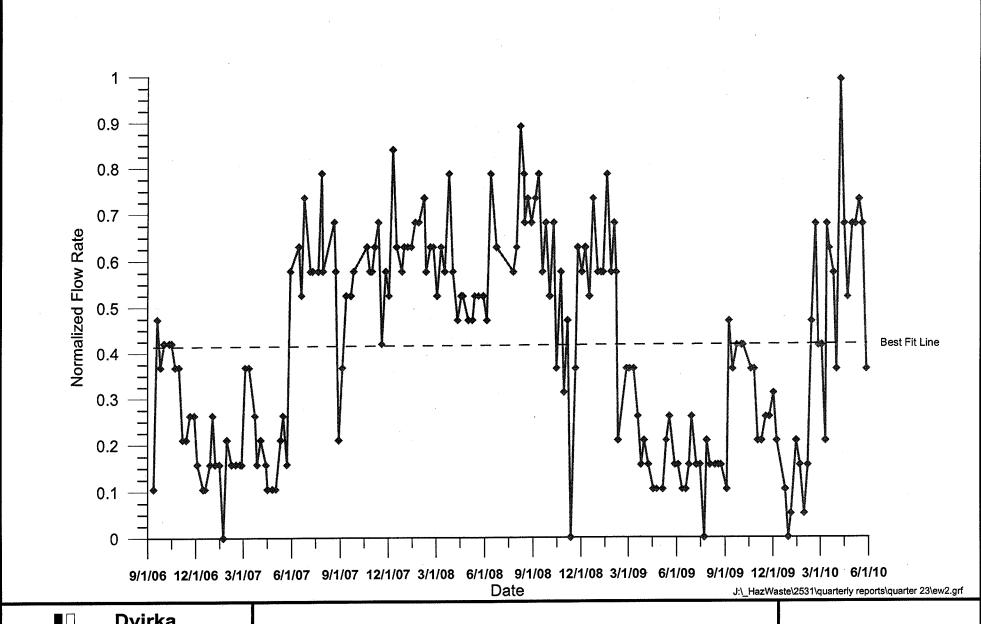
# NORMALIZED EXTRACTION WELL FLOW RATE GRAPHS



Dvirka and Bartilucci CONSULTING ENGINEERS A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Franklin Cleaners Site
NYSDEC Contract No. D004446 / Site No. 1-30-050
Flow Rate in Extraction Well EW-1

Attachment B



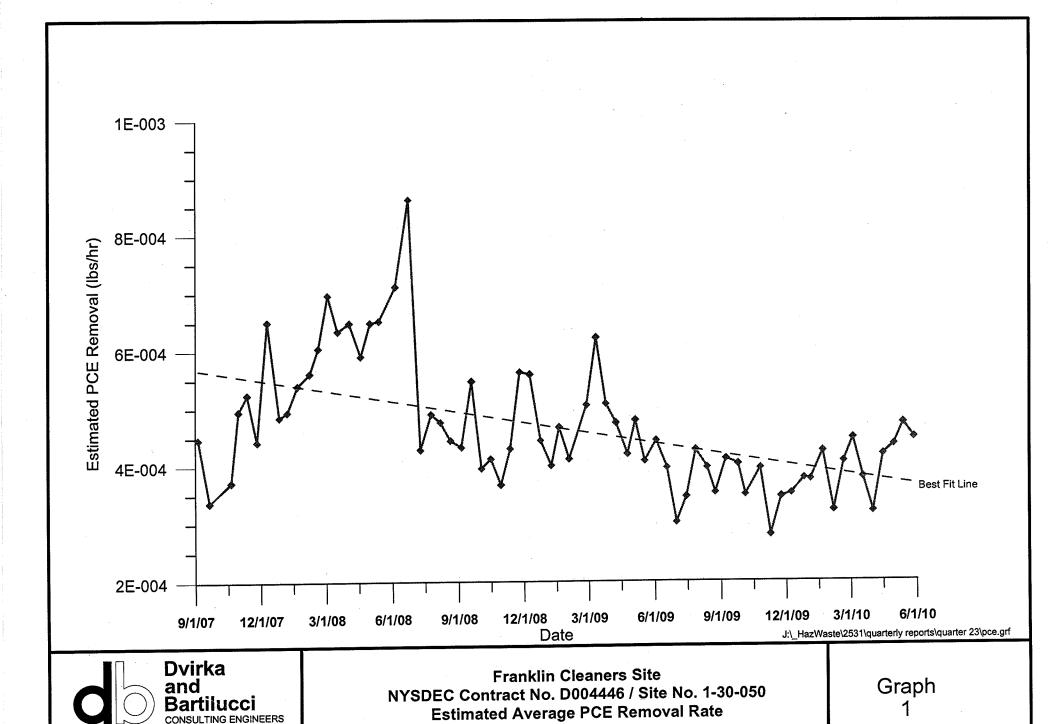
Dvirka and **Bartilucci** A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Franklin Cleaners Site NYSDEC Contract No. D004446 / Site No. 1-30-050 Flow Rate in Extraction Well EW-2

Attachment B

## ATTACHMENT C

## AVERAGE PCE REMOVAL RATE GRAPH



## ATTACHMENT D

SITE LOGS

	DATE/TIN	ME ON-SITE	TIME OFFSITE		REASON FOR SIT	TE VISIT (CHECK BOX BELOW)
KS,KH + PL	2/24/10	0200	1430		Monitoring	Maintenance
				X	Sampling	Other (Provide Description)
					Alarm Response	
Description: GWS- F		0				
KS. PB 4KH	2/25/10	0130	1500	X	Monitoring	Maintenance
				X	Sampling	Other (Provide Description)
				V -		
Description: CONTINO	E GWS	+ borg	Lthrough Syst		Alarm Response	
Description: CONTINO		1100 + borg		E In	Alarm Response	Maintenance
	5 GWS			E In	Alarm Response	Maintenance
				E In	Alarm Response SV+ECK.  Monitoring	

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE		REASON FOR SI	TE VIS	SIT (CHECK BOX BELOW)
KS.	1015 3/11/10	1545	X	Monitoring	X	Maintenance
KH, PL	1015 3/11/10	1545		Sampling	X	Other (Provide Description)
				Alarm Response		
Description: KS-Sile	check, monitor	PH.		<u>=</u>		
DIWISON EW. PM.	-1 + EW-2, Loc	ATE PTW WEILS	ON	SS RECORD	TW	Flow Senor T's. D+DTW as per
PC .	3-13-10 /6301h	1830/86		Monitoring		Maintenance
				Sampling		Other (Provide Description)
Description: RESPOND TO	PROJ- MANAGER	CALL: Upon 1	ARR	Alarm Response	- ŏj	ORRATING; ORBBERN (SEC
Description: RESPOND TO SYSTEM DID S CHECK THAT		CALL: Upon 1 White on S HEAVY WIND	ARR ITE + M	TURC SYS PUE EC PAIN ACCI	- Of F.C.	OFRATING; PROBLEM (SER
Description: RESPOND TO SYSTEM DID S CHECK THAT	PROJ- MANAGER Stut Down 3x - 4 TIMES	CALL: Upon 1 White on S HEAVY WIND	ARR ITE + M	NURC SYS DUE EC PAIN AU I	FC	Maintenance
Description: RESPOND TO SYSTEM DID S CHECK THAT		CALL: Upon A White on S HEAVY WIND	ARR ITE + R	TURC SYS PUE EC PAIN ACCI	Ec.	

	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SIT	E VISIT (CHECK BOX BELOW)
PL	3/17/10 1030	1130	Monitoring	Maintenance
			Sampling	Other (Provide Description)
			Alarm Response	
	to system shows the ell Hi-alorna contact the ellistic 11.00	tdown (called i	1330,11/16/10)	
K3	3/18/10 0930	1130	Monitoring	Maintenance
	1		Sampling	Other (Provide Description)
			Alarm Response	
		111.5	I I	T 1
KS	3/18/10 1300	1415	Monitoring	Maintenance
KS	3/18/10 1300	1415	Sampling	Maintenance Other (Provide Description)
	3/18/10 1300 t/ Pump down		Sampling  Alarm Response	

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR SIT	E VISIT (CHECK BOX BELOW)
KH	3-20-10 /300	1400	Monitoring	Maintenance
			Sampling	Other (Provide Description)
			Alarm Response	
Wetwill alarm, E	WI UnderVigillar, Re.	sel VFD, Punithdo	in we furll, Rosterle	b Spta
K5	3/26/10 0940	1230	Monitoring	Maintenance
			Sampling	Other (Provide Description)
			Alarm Response	
K5	4/1/10 0945	1214		Maintenance
				Other (Provide Description)
			Alarm Response	
Description: System	Site Check & Bi	-WEEKIY SAIM	pling.	

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FOR S	SITE VISIT (CHECK BOX BELOW)
KS	4/8/16 1000	1215	✓ Monitoring	Maintenance
			Sampling	Other (Provide Description)
			Alarm Response	
KS	41510 0930	1300	✓ Monitoring	Maintenance
KS	41510 0930	1300		Maintenance Other (Provide Description)
			Sampling  Alarm Response	
	Running upon ar edion of AIR St	MADED FROM A	Sampling  Alarm Response  One, weekly site  Smu 6 + Asmu	Other (Provide Description)
Description: System 1 Sampling, Colle	Surming upon Ar HON ST AIR ST	ORYS	Alarm Response  One, weekly site  Smus 6 + Asmu	Other (Provide Description)  check, Bi-Weekly  7.
Description: System 1 Sampling, Colle	Running upon ar edion of AIR St	MADED FROM A	Sampling  Alarm Response  One, weekly site  Smu 6 + Asmu	Other (Provide Description) echeck, Bi-WEEKly v7.

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	REASON FO	R SITE VISIT (CHECK BOX BELOW)
KS 0936	4/22/10 0930	1230	✓ Monitoring	Maintenance
			Sampling	Other (Provide Description)
	Bite check + >		Alarm Respons	e Property MAINTENANCE
(S,ES	43010 1045		Monitoring	Maintenance
			✓ Sampling	→ Other (Provide Description)
			Alarm Response	Charat Veyl 1.72
escription. WEEKI	y site check, 7	BI Weekly - Sr		
		31 Weekly - St		
	5 4 10 0950		amping. Wo	3 Problems.  Maintenance
25		1045	Monitoring Sampling  √ Alarm Response	Maintenance Other (Provide Description)

PERSONNEL ON-SITE	DATE/TIME ON-SITE TIME OFFSITE			REASON FOR SITE VISIT (CHECK BOX BELOW)			
KS	5/6/10 1000	(360	V	Monitoring		Maintenance	
				Sampling	A	Other (Provide Description)	
				Alarm Response	00	operty maintenance	
	gite check-monit			Joans one	P.F.		
ρL.	2/14/	1//2-	_	I		1	
ES	3/14/10	1430	<del> </del> ~	Monitoring	╀	Maintenance	
F 3				Sampling Alarm Response	╀	Other (Provide Description)	
PL	5/12/16			Monitoring	T	Maintenance	
ES	0930		$\sim$	Sampling	T	Other (Provide Description)	
				Alarm Response			
Description:	MW SAMPling upon Arrival,	WW HH WLARM.	Pu	mpeddown, r	est	arted	

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE		REASON FOR S	ITE VISIT (CHECK BOX BELOW)
KS	5/13/10 1230	1500	V	Monitoring	√ Maintenance
			X	Sampling	Other (Provide Description)
				Alarm Response	
Plow SENSON PAddle Wheel	z not work s. Replaced	Ing-Shot Sys	tem	Down to	Check + Cleans upon Departure,
PC	5/17/10 1100	1215	T	Monitoring	Maintenance
				Sampling	Other (Provide Description)
			0	Alarm Response	
	eldoun, resta		Tv	Waster store	T./ Iu
K5	5/20/10 0945	1300		Monitoring	
			$\vdash$	Sampling	Other (Provide Description)
<b>D</b>				Alarm Response	mini property
Description: WEEKIY	one onece,				

	DATE/TIME ON-SITE	TIME OFFSITE		REASON FOR S	ITE VIS	IT (CHECK BOX BELOW)
a. K5	5/28/10 09/50	1230	X	Monitoring	×	Maintenance
			Q.	Sampling		Other (Provide Description)
				Alarm Response		
Description: 스를 기	inlet are ac	reen, Flow Se	2712	for Indending	KNA	WCE EW-Z.
WEEKLY SHED	veck BI-WE	thy samples.				
•		ę				
KS.	6/2/10 1240	11415		Monitoring		Maintenance
	क्षा करिया हो है कि को प्रस्ति कर को कि	en and the second of the secon		Sampling	IX	Other (Provide Description)
THE CHARLES OF THE PROPERTY OF	A STATE OF THE PROPERTY OF THE	THE RESERVE OF THE PROPERTY OF	-	Alarm Response		THE CONTRACTOR OF THE CONTRACT
IN CYTE LIBITAR ENGLE					man, who di	21 browning
						Giunt-No Call-From
K3	6/3/10/0900	1260 ·		Monitoring		Maintenance
K3					X	
K3 VERROW TECK	6/3/10 0900	1260 ·	X	Monitoring Sampling Alarm Response	×	Maintenance Other (Provide Description)
K3 VERROW TECK	6/3/10 0900	1260 .	X	Monitoring Sampling Alarm Response	×	Maintenance Other (Provide Description)
K3 VERROW TECK	6/3/10 0900	1260 ·	X	Monitoring Sampling Alarm Response	×	Maintenance Other (Provide Description)
K3 VERKZOW TECK	6/3/10 0900	1260 ·	X	Monitoring Sampling Alarm Response	×	Maintenance Other (Provide Description)
K3 VERTZON TECK	6/3/10 0900	1260 ·	X	Monitoring Sampling Alarm Response	×	Maintenance Other (Provide Description)

	DATE/TIME ON-SITE	TIME OFFSITE		REASON FOR SI	ITE VIS	IT (CHECK BOX BELOW)
KS	6/7/00 1315	11400		Monitoring		Maintenance
				Sampling	K	Other (Provide Description)
				Alarm Response	Ck	phone lone repai
escription: SET RIA	Enter -					
LS.	6/10/10 0915	1230	×	Monitoring		Maintenance
	£ 5		¥	Sampling		Other (Provide Description)
				Alarm Response		
		i weeky San	James Comment	And the second s		A STATE OF THE STA
			The second of th			
	G-12-16 1345	1445	The second of th	Monitoring		Maintenance
			To found to		100000	
KI	G-12-16 1345	1975		Monitoring Sampling Alarm Response		Maintenance Other (Provide Description)
Description:	G-12-16 1345	1975		Monitoring Sampling Alarm Response		Maintenance Other (Provide Description)
Description: System down do to	6-12-16 1345 Nigh Water in Met	Mrll. Pumpob down		Monitoring Sampling Alarm Response		Maintenance Other (Provide Description)
Description: System down du to Utalize [1544]	6-12-16 1345 Nigh Water in Met	Mrll. Pumpob down		Monitoring Sampling Alarm Response		Maintenance Other (Provide Description)
Description: System down do to	G-12-16 1345	Mrll. Pumpob down		Monitoring Sampling Alarm Response		Maintenance Other (Provide Description)

PERSONNEL ON-SITE	DATE/TIN	ME ON-SITE	TIME OFFSITE		REASON FOR SI	TE VIS	SIT (CHECK BOX BELOW)
K	6-16-10	1200	13/5		Monitoring		Maintenance
and principles to the principles of the second and an extension of the second and an extension and the second a		Pillonel to constructive et airpoi trouve e case no na entre a se	The state of the s		Sampling		Other (Provide Description)
		**************************************	en de de la companya	X	Alarm Response		and the second
Systemdown @ c	,600 do.	10 HBV O	wet hell-total zary	375	7682		
							and grass them a common the delication of the de
K5	6/17/16	0945	1500	K	Monitoring	<	Maintenance
KS KH	6/17/10		1500		Monitoring Sampling		Maintenance Other (Provide Description)
Nescription: KS: WES	6/17/10 -Kdu sate	ones check	1430 Orobertyman	dena	Sampling Alarm Response		
K. S.	6/17/10 -Kdu sate	ones check	1430 Orobertyman	dena	Sampling Alarm Response		Other (Provide Description)
Description: KS: WEE WITH Adjusti	ally site ng ww itor Fla	chack, 1 - Float ntswitch	1430 Property moin switches, , Adjust Flor	dena	Sampling Alarm Response  NCE, Blower  offches,		Other (Provide Description)

PERSONNEL ON-SITE	DATE/TIME ON-SITE	TIME OFFSITE	NO DESCRIPTION OF THE PERSON O	REASON FOR S	ITE VIS	IT (CHECK BOX BELOW)
KS	0630 6/25/10	0930	X	Monitoring		Maintenance
			X	Sampling		Other (Provide Description
			X	Alarm Response	せ	3 HH/WW
	and marriage is a id a small	eekly site che	and the state of t	and the second s		The second had tree to
PL/RBA	0900 6/25/10	1445		Monitoring		Maintenance
				Sampling	Ż	Other (Provide Description
				Alarm Response		
K5	7/1/10@ 1000	1/3/5	K	Monitoring		Maintenance
	•			Sampling		Other (Provide Description
				Alarm Response		Commission of the Commission o
Description: WEEKLY	side check to	properly manne	W. J. S.	ucrosyste	em h	est running

	The state of the s	3131EM MONITORING L			
DATE	2/19/10 KS	2-25-10 KS	3/4/10 KS	3/11/10 KS	V
TIME	08/5	1220	11100	1015	
EW-1					``
Flow Rate (gpm)	31.4	33.5	34.4	33.	
Total Flow (gal)	00881470@0850	01169118@1308	01494925@1107	01824832@1047	
Influent pH (grab sample field reading)	7.86	5.52	6.62	7.23	
VFD Operating Frequency (Hz)	60.0	80.0	80.0	80.0	
Pump Runtime (hrs @ time)	450244000840	4517172@1305	45 3377 9€ 1105	4550544@ 1044	
Bicycle Pump Pressure Reading (psi)	<del></del>				
Water Column Above Pump (ft H <sub>2</sub> O)(psi x 2.31)			_	1	
Routine Sampling Performed (YES/NO)	YES@ 0923	NO	YES @ 1132.	ИО	
Flow Rate (gpm)	6.3	5.8	5.8	5.4	
Total Flow (gal)	10980385@0850	11029477@1308	11030281@1108	11086245@1047	
Influent pH (grab sample field reading)	8.09	5,35	7.70	7.13	
VFD Operating Frequency (Hz)	60.0	80.0	80.0	60.0	
Pump Runtime (hrs @ time)	2632420@0840	2647159€ 1305	2663769€105	2680534@1044	
Bicycle Pump Pressure Reading (psi)			-		
Water Column Above Pump (ft H <sub>2</sub> O)(psi x 2.31)	-		-		
Routine Sampling Performed (YES/NO)	YES @ 0933	NO	YES @ 145	No	
ir Stripper	*				
Sump Level (inches)	Griek	6 inch	beich	EINCL	
Effluent pH (grab sample field reading)	7,97	6.94	7,69	7,62	
Fresh Air Inlet Vacuum (in H <sub>2</sub> O)	1.5	1,5	1,5	1.5	
Blower Suction (in H <sub>2</sub> O)	91	21	2	al	
Blower Discharge (in H <sub>2</sub> O)	24	24	24,5	25	
Blower Runtime (hrs @ time)	3388825@0840	34 63 574 @ 1305	3426185€ 1105	3436950€1044	
Routine Sampling Performed (YES/NO)	YES@ 0944	100	YES @ 1211	-NO	

		STSTEM MUNITURING L	00		
DATE	24940 KS	21/25/10 KS	3/4/10 KS	31110 KS	
TIME	0815	1300	1100	1015	
Vapor Phase Carbon					
Lead/Lag Unit					
Lead pressure Inlet/Outlet (psi)	24/19	24/19	24.5/19	25/19	
Lead Total VOC Conc. Inlet/Outlet (ppm)	0.0/0.0	0.0/0.0	0.0 /0.0	0,0/0,0	
Lag pressure Inlet/Outlet (psi)	9/8	9/8	9/8	9/6.5	
Lag Total VOC Conc. Inlet/Outlet (ppm)	5.2/4.3	0.0/0.0	0,0/0,0	0.0 /0.0	
Exhaust Flow Rate (scfm)	610	610	620'	620	
Exhaust Temperature (°F)	80°	80°	810	810	
Wet Well					
Pump No. 1 Runtime (hrs)	155044@0840	155785@1305	15 6632 € 1106	157501@1045	
Pump No. 2 Runtime (hrs)	151376 R0840	151904@ 1305	152494 @ 1106		
Wet Well pH (grab sample field reading)	7.10	6.65	7.79	7,80	
Valve Vault					
Pump No. 1 Operating Pressure (psi)	9	9	9	9	
Pump No. 1 Flow Rate (gpm)	65	67	65	65	
Pump No. 2 Operating Pressure (psi)	10	10	10	10	
Pump No. 2 Flow Rate (gpm)	68	70	70	69	
Flow Meter Vault					
Total Flow (gallons @ time)	34268526@6915	34776787€1320	3535770E1124	39544643@1130	
Jet Pump					
Line Pressure (psi)	-6	-0	-0	-0	

#### COMMENTS

2-19-10	YSIR95 + PID 11. EW-2 PLOW SENSOR NOT VECOMERY ON ARRIVAL, WORKING NOVEMHI OPON DEMATTURE.
	Plan Sensor not recording upon Arrival @ 1100 - Fixed - check@ 1140, 1220 - Not conning - Fixed
	EACH TIME - Running upon departure, YSI-R-95 - PID-11
2 25	10 YSI-R97 + PID-1/2
3-11-10	VST- 890, PIDI

		SISIEM MUNITURING L	.00	#CCO
DATE	3-13-10 BC	3/18/10 KS	326/10 0940	4/1/10 0945
TIME	1630	0930	KS	KS
EW-1				
Flow Rate (gpm)	34,2	33.1	34,7	33.8
Total Flow (gal)	01921506@1701	026268702099	8 6238817201101	0266948201632
Influent pH (grab sample field reading)		7.18	5.64	5,83
VFD Operating Frequency (Hz)	80	80	80	80,0
Pump Runtime (hrs @ time)	4555535@ 1717	4560932@6944	4579376@1100	45 93727 € 1020
Bicycle Pump Pressure Reading (psi)			-	
Water Column Above Pump (ft H <sub>2</sub> O)(psi x 2.31)				
Routine Sampling Performed (YES/NO)	No	VES @ 1011	NO	YES@1106
EW-2				
Flow Rate (gpm)	6-3	6.2	6.1	5,7
Total Flow (gal)	11104041@[70]	1112331480948	11188158@ 1101	11238811@1037
Influent pH (grab sample field reading)		9.77	5.23	5.48
VFD Operating Frequency (Hz)	60	60	60	60.0
Pump Runtime (hrs @ time)	2685526 @ 1718	26969722@0944	2769367@1100	2723718@1021
Bicycle Pump Pressure Reading (psi)				
-Water Column Above Pump (ft.H <sub>2</sub> O)(psi x 2.31)		_		_
Routine Sampling Performed (YES/NO)	No	YES@ 1019	00	YES @ 1114
Air Stripper				
Sump Level (inches)		6	6	6
Effluent pH (grab sample field reading)		1175	6.27	7,12
Fresh Air Inlet Vacuum (in H <sub>2</sub> O)	1.5	1.5	1.5	1,5
Blower Suction (in H <sub>2</sub> O)	80	20	20	20
Blower Discharge (in H <sub>2</sub> O)		24	24	25
Blower Runtime (hrs @ time)	344/985 @ 1719	3447480@ 0944	3465940@ 1100	3486291@1020
Routine Sampling Performed (YES/NO)	No	YES @ 1031	NO	XES @ 1124

		SYSTEM MONITORING L	UG	*5
DATE	3-13-10 BC	3/18/10 RS	326 10 KS	41110 6945
TIME	1630	0930	6948	1 KS
Vapor Phase Carbon		76		
Lead/Lag Unit				
Lead pressure Inlet/Outlet (psi)	23/19 1/20	24/19	24/19	25/19
Lead Total VOC Conc. Inlet/Outlet (ppm)		0.0 /0.0	6.6 /5.4	0.0 /0.0
Lag pressure Inlet/Outlet (psi)	9/6"Hso	9. / 6.5	9/6	9/6'
Lag Total VOC Conc. Inlet/Outlet (ppm)	11	000/00	2.7 / 2.7	0.0 /0.0
Exhaust Flow Rate (scfm)	620	620	620	620
Exhaust Temperature (°F)	76°F	81°F	80°	81°
Wet Well	4			
Pump No. 1 Runtime (hrs)	157760/17/6	158642@6945	159662@ 1100	15 9756@ 1031
Pump No. 2 Runtime (hrs)	153257 1716	153447 @0945	154107@ 1100	154615 @1031
Wet Well pH (grab sample field reading)	LONE	13.59	6.49	7.33
Valve Vault				
Pump No. 1 Operating Pressure (psi)		10	9	9
Pump No. 1 Flow Rate (gpm)		67	66	64
Pump No. 2 Operating Pressure (psi)		11	9	16
Pump No. 2 Flow Rate (gpm)		68	67	70
Flow Meter Vault				
Total Flow (gallons @ time)	3619675@1505	36310389€ 1003	36962667e 1115	37471358@1042
Jet Pump	- 7			*
Line Pressure (psi)	0	0	0	0

Line ( recent (per)					
COMMENTS	an toward	$\circ$	011		
3-13-10 RESPOND TO A	LARON CALL	: SYS POWER	SHUT DOWN	MOMENTARILY	3X while on STE
3-18-10 YSI - R-96 + PID-11	4	7	X = 1		
3-26-10 Ysi-R-97 + PID-11	- No problem	5 .	1		-
4 1-10 VSI 0-98 1 DTD 11	410) 00-1015N	a C			

		3131EM MONTONING L	-		
DATE	4/8/10 KS	4/15/10 KS	4/22/10 KS	4/30/10 KS.ES	5/6/10 KS
TIME	1000	0930	0820	1045	(000
EW-1					
Flow Rate (gpm)	32.2 gpm	34.6	35.0	33.6.	32.8
Total Flow (gal)	0299820@ 10/7	6 332.890601118	03621208@113	6399808181212	64267080@10
Influent pH (grab sample field reading)	5.85	5.86	5.88	5.55	5.62
VFD Operating Frequency (Hz)	80.0 Hz	80.0 Hz	80,0 Hz	80.0 Hz	80.0 Hz
Pump Runtime (hrs @ time)	4610501@ 1015	462732201115	464223101128	4161483@1200	4675249 @ 1040
Bicycle Pump Pressure Reading (psi)					
Water Column Above Pump (ft H <sub>2</sub> O)(psi-x-2.31)					
Routine Sampling Performed (YES/NO)	No	YES@ 1148	NO	YES @ 1233	no
EW-2					
Flow Rate (gpm)	6.9 spm	6.3	6.0	6.3	6.3
Total Flow (gal)	112983070 1017	1135782201118	11410666 @1131	11478793@1202	11527318@1043
Influent pH (grab sample field reading)	5,53	6.56	5.40	5-38	5.31
VFD Operating Frequency (Hz)	60.0 Hz	60,0 Hz	60.0 Hz	60.0 Hz	60.0 Hz
Pump Runtime (hrs @ time)	2340492 € 1015	2157313@1115	2772222@1128	2791475€1200	2805240@ 1640
Bicycle Pump Pressure Reading (psi)					
Water Column Above Pump (ft H <sub>2</sub> O)(psi x-2.31)		·—			
Routine Sampling Performed (YES/NO)	NO	YES @ 1158	NO	YES€ 1292	NO
Air Stripper					
Sump Level (inches)	6"	6"	6"	6"	6"
Effluent pH (grab sample field reading)	7.14	7.07	6.98	6,28	6.50
Fresh Air Inlet Vacuum (in H <sub>2</sub> O)	1.5	1,5	1.5	1.5	3 Before /15 Af
Blower Suction (in H <sub>2</sub> O)	21	20.5	20,5	21	21 /
Blower Discharge (in H <sub>2</sub> O)	24	25	24	24	22.5
Blower Runtime (hrs @ time)	3497065@ 1015	3513886€ 1115	3528826@1128	3548619€ 1200	3561853@1040
Routine Sampling Performed (YES/NO)	NO	YES @ 1212	NO	Ye5@ 1253	

		SYSTEM MONITORING	LUG		
DATE	4/8/10 KS	4/15/10 KS	4/22/10 KS	4/30/10 KS,ES	KS 5/6/10
TIME	1000	0930	0930	1045	1000
/apor Phase Carbon					
Lead/Lag Unit					
Lead pressure Inlet/Outlet (psi)	24 /19	25/19	24/19	24/19	22.5/18
Lead Total VOC Conc. Inlet/Outlet (ppm)	0.8/1.1	1,3/1.3 ppm	00/00	0.0 /6.0	0.8 /0.6
Lag pressure Inlet/Outlet (psi)	9/6	9/6	8/7	9/6	8 /6
Lag Total VOC Conc. Inlet/Outlet (ppm)	1.1 /1.4	1.3/1.2 ppm	0.0/0.0	0.0 /0.0	6.2/0.2
Exhaust Flow Rate (scfm)	620	640	620	620'	600
Exhaust Temperature (°F)	870	80°	81°	80°	85°
Vet Well					
Pump No. 1 Runtime (hrs)	16 0669 @ 1016	161570€ 1116	162381 @1129	163430€1201	164187@1040
Pump No. 2 Runtime (hrs)	155198@1016	155778@1116	156291@1129	156954 @1201	157421@1040
Wet Well pH (grab sample field reading)	7.35	7,32	7,12	6.44	6.86.
alve Vault					
Pump No. 1 Operating Pressure (psi)	10	9	9.5	10.2	10
Pump No. 1 Flow Rate (gpm)	66	66	67	64	65
Pump No. 2 Operating Pressure (psi)	10	9	9.5	10.2	10
Pump No. 2 Flow Rate (gpm)	68	66	75	67	68
low Meter Vault			300		
Total Flow (gallons @ time)	38063 860@ 1030	38658458 @ 1/30	39184729 @1/38	39868436@ 1219	40359218@ 1104
et Pump					
Line Pressure (psi)	0	0	0	6	6

#### COMMENTS

4/8/0	VSI R-98	PID-16	bo problems
4/15/10	VSI R.98	PID-16	No problems.
4/22/10	Y51 R-98	PID-16	NO Problems
4/30/10	V51 R-97	777-11	wo pro blems.
5/6/10	451-R-97.	N-OID-1	leafs + Debre Blocking Fresh AIR Inlet - Cleaned im groved pressure.

	7	SYSTEM MONITORING L	OG .
DATE	5/13/10 KS	5/20/10 KS	5/28/10 KS
TIME	1230	0945	0950
EW-1			
Flow Rate (gpm)	32.2	32.8	33.3
Total Flow (gal)	64586917@1227	6489 64340095	
Influent pH (grab sample field reading)	5.64	5,79	6.09
VFD Operating Frequency (Hz)	80.0 Hz	80.0 Hz	80.0 Hz
Pump Runtime (hrs @ time)	4691349€1253	47675620095	4726827@1033
Bicycle Pump Pressure Reading (psi)			
Water Column Above Pump (ft H <sub>2</sub> O)(psi x 2.31)			
Routine Sampling Performed (YES/NO)	YES@ 1321	NO _	YES- 1100
EW-2			
Flow Rate (gpm)	* 6.4	6.3	5.7.
Total Flow (gal)	¥11571641@1303	11627439 €095	7 11628498@1036
Influent pH (grab sample field reading)	5.29	5,39	5.49
VFD Operating Frequency (Hz)	60,0 HZ	60.0 Hz	60.0 Hz
Pump Runtime (hrs @ time)	2821340€1257	2837554@ 6954	28568100 1033
Bicycle Pump Pressure Reading (psi)			
Water Column Above Pump (ft H <sub>2</sub> O)(psi x 2.31)		_	
Routine Sampling Performed (YES/NO)	Yes@ 1337	NO	YES@ 1120
Air Stripper			
Sump Level (inches)	6	6"	6"
Effluent pH (grab sample field reading)	6.55	6.58	6.89
Fresh Air Inlet Vacuum (in H <sub>2</sub> O)	1.5	2	5-After dealing
Blower Suction (in H <sub>2</sub> O)	20.5	21	21.5
Blower Discharge (in H <sub>z</sub> O)	25	24	21
Blower Runtime (hrs @ time)	35 77961 enst	3594182@095S	3613447 € 1033
Routine Sampling Performed (YES/NO)	YES@ 1350	NO	YES @ 1135

		SYSTEM MONITORING L	.OG	
DATE	KS 5 13 10	Sladio KS	5 28 10 KS	
TIME	1230	0945	0950	
Vapor Phase Carbon				
Lead/Lag Unit				
Lead pressure Inlet/Outlet (psi)	25/20	24/19	21/17	
Lead Total VOC Conc. Inlet/Outlet (ppm)	22/2.2	1.1/1.2	1.0/1.0	
Lag pressure Inlet/Outlet (psi)	19/7	9/6	8/6	
Lag Total VOC Conc. Inlet/Outlet (ppm)	2.4/2.5	1.2/1.6	1.0/1.5	
Exhaust Flow Rate (scfm)	120	620	580	
Exhaust Temperature (°F)	81°	80°	84°	
Wet Well				
Pump No. 1 Runtime (hrs)	165673 @ 1254	165955 € 0955	167012 @ 1034	
Pump No. 2 Runtime (hrs)	15796901254	158532 € 0955	159195 @1034	
Wet Well pH (grab sample field reading)	6.81	6.76.	7.28	
Valve Vault				
Pump No. 1 Operating Pressure (psi)	16	2	1.4 081	
Pump No. 1 Flow Rate (gpm)	65 gpm	65 gpm	66 apm	
Pump No. 2 Operating Pressure (psi)	10	1.9	1,2 051	
Pump No. 2 Flow Rate (gpm)	69 apm	70 apm	67 com	
Flow Meter Vault	3,4	0	7.	
Total Flow (gallons @ time)	40932142@1317	41509722@102	7 42195019@ 1052	
Jet Pump				
Line Pressure (psi)	0	0	0	

#### COMMENTS

#EWZ- Flow Senor Notworking on Arrival- Totalizer recorded Before shirt down, @1400.

5/13/10 GPM'S After Clanking 6.4 Totalizer of EWZ @restart 11571077 @1428.

\$/20/10- WW DUMA psis were low-contect PM- no other indication of a problem.

5/28/10-Totalizer Reading Recorded @ Shirt down for maintenals, Thief screen & Flow Sensor EU

## FRANKLIN CLEANERS SITE, NYSDEC SITE NO. 1-30-050 SYSTEM OPERATIONS AND DOWNTIME SHEET

SHUT-OFF DATE/TIME	RESTART DATE/TIME	CAUSE	ACTIONS TAKEN	TOTALIZER READING
4/8/10 1057	4810 1146	Blower	STANDARd. ON/Off.	@ Shut Down 38065534@ 1100
	4/17/10 0817	ww/	1 0 1 D	<b>38770828</b> 38771496
1-21-10 0449	4-21-10/021	WWH	Pumo W-W down Rester System	39097273
5/4/10 0510	5/4/10 1005	HH/WW Alarm 3	Pump down wet well down RESTART & MONHOR	40183821
5/12/10 1230 Am	5/12/10 1000	Alman 3	Recharted	4688655
1	111	F/S		40934516
5/28/10 1145	5/28/10@ 12/5	MAINLENBUCE	Flow Sensor EW-Z clethy In let screen.	42198402
6/2/18 1239	6/2/10 @ 1340	? SUSTEMAN	running / Phonelinedown/restart.	42603820
		-3-		
				51.00

CONFOR Phonespore.

## ATTACHMENT E

## ROUTINE MAINTENANCE SCHEDULE

# FRANKLIN CLEANERS SITE NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050 SUMMARY OF MAINTENANCE ACTIVITIES

	3/1/2010	4/1/2010	5/1/2010	6/1/2010	7/1/2010	8/1/2010
Activity	23rd Qtr	23rd Qtr	23rd Qtr	24th Qtr	24th Qtr	24th Qtr
Blower Maintenance	3/11/10	4/8/10				
Air Stripper Maintenance						
GAC Removal and Replacement						
Wet Well Pumps Maintenance						

##/##/##	Activity Completed
	Activity to Complete

## ATTACHMENT F

# ANALYTICAL RESULTS

# FRANKLIN CLEANERS SITE NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050 RESULTS OF ANALYSIS OF EW-1 INFLUENT

	SYSTEM INFLUENT							
SAMPLE ID	(EW-1)	ANYONEO OLAGO OA ODOLINIDIALATED						
SAMPLE	WATER	NYSDEC CLASS GA GROUNDWATER						
DATE OF	3/4/2010	3/18/2010	4/1/2010	4/15/2010	4/30/2010	5/13/2010	5/28/2010	STANDARDS AND GUIDANCE VALUES
COLLECTED	EAR							
UNITS	(ug/L)							
VOCs	(49,2)	(49,2)	(49/2)	(49,2)	(49/2)	(49,2)	(49/2)	( \( \mathref{a} \mathref{g}  - \rangle \)
Dichlorodifluoromethane	U	U	U	U	U	U	U	5 ST
Chloromethane	Ü	Ü	Ü	Ü	Ü	Ü	Ü	
Vinyl chloride	Ü	Ü	Ü	Ü	Ü	Ü	Ü	2 ST
Bromomethane	Ü	Ü	Ŭ	Ŭ	Ŭ	Ü	Ü	5 ST
Chloroethane	Ü	Ü	Ü	ŭ	Ü	0.48 J	Ü	5 ST
Trichlorofluoromethane	Ü	Ü	Ü	Ŭ	Ŭ	U	Ü	5 ST
1,1-Dichloroethene	Ü	Ü	Ū	ŭ	Ŭ	Ü	Ü	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	Ü	Ü	Ü	Ü	Ü			5 ST
Acetone	Ü	Ü	Ŭ	1.3 J	Ŭ			50 GV
Carbon disulfide	Ü	Ü	Ü	IJ	Ü			60 GV
Methyl acetate	Ü	Ü	Ŭ	Ü	Ŭ			
Methylene chloride	Ü	Ü	Ü	Ü	Ü	U	U	5 ST
trans 1,2-Dichloroethene	Ü	l ü	Ü	Ü	Ü	Ü	U	5 ST
Methyl-tert butyl ether	0.22 J	Ü	Ü	0.21 J	Ü			10 GV
1,1-Dichloroethane	U	Ü	Ŭ	0.21 0	Ŭ	U	U	5 ST
cis-1,2-Dichloroethene	Ü	Ü	Ü	Ü	Ü			5 ST
2-Butanone	Ü	Ü	Ü	Ü	Ü			50 GV
Chloroform	Ü	Ü	Ŭ	Ü	Ŭ	0.13 J	0.19 J	7 ST
1,1,1-Trichloroethane	Ü	Ü	Ü	Ü	Ü	U	U	5 ST
Cyclohexane	Ŭ	Ü	Ŭ	Ü	Ŭ			
Carbon tetrachloride	Ü	Ü	Ü	ŭ	Ü	U	U	5 ST
Benzene	Ü	Ü	Ŭ	Ŭ	Ŭ			1 ST
1,2-Dichloroethane	Ü	Ü	Ŭ	Ŭ	Ü	U	U	0.6 ST
Trichloroethene	Ü	Ü	Ü	Ü	Ü	Ü	Ü	5 ST
Methylcyclohexane	Ü	Ü	Ü	Ŭ	Ü			=
1,2-Dichloropropane	Ü	Ü	Ū	Ü	Ū	U	U	1 ST
Bromodichloromethane	Ü	Ü	Ū	Ü	Ū	Ü	Ü	50 GV
cis-1,3-Dichloropropene	Ü	Ü	Ū	Ü	Ū	Ü	Ü	0.4 ST
4-Methyl-2-pentanone	Ü	Ü	Ü	Ü	Ü			
Toluene	U	U	U	U	U			5 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U	1 ST
Tetrachloroethene	16	14	11	14	15	16	14	5 ST
2-Hexanone	U	U	U	U	U			50 GV
Dibromochloromethane	U	U	U	U	U	U	U	50 GV
1,2-Dibromoethane	U	U	U	U	U			5 ST
Chlorobenzene	U	U	U	U	U	U	U	5 ST
Ethylbenzene	U	U	U	U	U			5 ST
Xylene (total)	U	U	U	U	U			5 ST
Styrene	U	U	U	U	U			5 ST
Bromoform	U	U	U	U	U	U	U	50 GV
Isopropylbenzene	U	U	U	U	U			5 ST
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	U	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	U	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	U	3 ST
1,2-Dibromo-3-chloropropane	U	U	U	U	U			0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U			5 ST
1,2,4-Trimethylbenzene	U	U	U	1.7 J	U			5 ST
Napthalene	U	U	U	1.0 J	U			10 GV
Methyl Ethyl Ketone	U	U	U	U	U			50 GV
2-Chloroethyl vinyl ether						U	U	5 ST

NOTES: ABBREVIATIONS:

Concentration exceeds NYSDEC Class GA Groundwater Standards or Guidance Values ug/L = Micrograms per liter
--: Not established

ST: Standard Value GV: Guidance Value

#### FRANKLIN CLEANERS SITE NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050 RESULTS OF ANALYSIS OF EW-2 INFLUENT

	SYSTEM INFLUENT							
SAMPLE ID	(EW-2)	NYSDEC CLASS GA						
SAMPLE TYPE	WATER	GROUNDWATER						
DATE OF COLLECTION	3/4/2010	3/18/2010	4/1/2010	4/15/2010	4/30/2010	5/13/2010	5/28/2010	STANDARDS AND
COLLECTED BY	EAR	GUIDANCE VALUES						
UNITS	(ug/L)							
VOCs	\ \ \ \ /	( )	( )	( )	( )	( )	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Dichlorodifluoromethane	U	U	U	U	U	U	U	5 ST
Chloromethane	U	U	U	U	U	0.29 J	0.19 J	
Vinyl chloride	Ü	Ü	Ü	U	Ü	U	U	2 ST
Bromomethane	Ü	Ü	Ü	Ü	Ü	Ü	Ü	5 ST
Chloroethane	Ū	Ü	Ü	Ü	Ü	Ü	Ü	5 ST
Trichlorofluoromethane	Ü	Ü	Ü	Ü	Ü	Ü	Ü	5 ST
1,1-Dichloroethene	Ü	Ü	Ü	Ü	Ü	0.36 J	0.35 J	5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	Ū	Ü	Ü	Ü	Ü			5 ST
Acetone	Ü	22	Ü	Ü	Ü			50 GV
Carbon disulfide	Ū	U	Ü	Ü	Ü			60 GV
Methyl acetate	Ü	Ü	Ü	Ü	Ü			
Methylene chloride	l ü	Ü	Ü	Ü	Ü	U	U	5 ST
trans 1,2-Dichloroethene	Ü	Ü	Ü	U	Ü	U	Ü	5 ST
Methyl-tert butyl ether	0.6 J	0.63 J	0.6 J	0.59 J	0.54 J			10 GV
1,1-Dichloroethane	U.0.0	U.03 3	U.0 3	0.59 J U	U.54 3	0.12 J	0.18 J	5 ST
cis-1,2-Dichloroethene	Ü	Ü	Ü	U	Ü			5 ST
2-Butanone	Ü	Ü	Ü	U	Ü			50 GV
Chloroform	Ü	U	U	U	Ü	0.18 J	0.21 J	7 ST
1,1,1-Trichloroethane	Ü	Ü	Ü	U	Ü	U U	U U	5 ST
Cyclohexane	Ü	U	Ü	U	Ü			
Carbon tetrachloride	Ü	Ü	Ü	Ü	Ü	U	U	5 ST
Benzene	Ü	U	U	U	Ü			1 ST
1,2-Dichloroethane	Ü	Ü	Ü	U	Ü	U	U	0.6 ST
Trichloroethene	Ŭ	Ü	Ü	U	Ü	Ü	Ü	5 ST
Methylcyclohexane	l ŭ	Ü	Ü	Ü	Ü			
1,2-Dichloropropane	Ŭ	Ü	Ü	U	Ü	U	U	1 ST
Bromodichloromethane	l ü	U	U	U	Ü	U	Ü	50 GV
cis-1,3-Dichloropropene	Ŭ	Ü	Ü	Ü	Ü	Ü	Ü	0.4 ST
4-Methyl-2-pentanone	Ü	Ü	Ü	U	Ü			
Toluene	Ü	U	U	U	Ü			5 ST
trans-1,3-Dichloropropene	Ü	U	U	U	Ü	U	U	0.4 ST
1,1,2-Trichloroethane	l ü	Ü	Ü	Ü	Ü	Ü	Ü	1 ST
Tetrachloroethene	60	48	47	58	59	68	76	5 ST
2-Hexanone	U	U	U	U	U			50 GV
Dibromochloromethane	l ü	Ü	Ü	Ü	Ü	U	U	50 GV
1,2-Dibromoethane	Ü	Ü	Ü	Ü	Ü			5 ST
Chlorobenzene	l ü	Ü	Ü	Ü	Ü	U	U	5 ST
Ethylbenzene	Ü	Ü	Ü	Ü	Ü			5 ST
Xylene (total)	Ü	Ü	Ü	Ü	Ü			5 ST
Styrene	l ü	Ü	Ü	Ü	Ü			5 ST
Bromoform	Ü	Ü	Ü	Ü	Ü	U	U	50 GV
Isopropylbenzene	Ŭ	Ü	Ü	U	Ü			5 ST
1,1,2,2-Tetrachloroethane	Ü	Ü	Ü	U	Ü	U	U	5 ST
1,3-Dichlorobenzene	Ü	U	U	U	Ü	U	Ü	3 ST
1,4-Dichlorobenzene	l ü	Ü	Ü	U	Ü	U	Ü	3 ST
1,2-Dichlorobenzene	Ü	Ü	U	U	Ü	U	Ü	3 ST
1,2-Dibromo-3-chloropropane	Ü	U	U	U	U			0.04 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	 		5 ST
1,2,4-Trimethylbenzene	l ü	U	U	0.98 J	U	 		5 ST
Napthalene	Ü	Ü	U	0.34 J	U			10 GV
Methyl Ethyl Ketone	Ü	57	U	0.54 J	Ü			50 GV
2-Chloroethyl vinyl ether						U	U	5 ST
Z OTHOTOGUTYI VIITYI GUTET						U	ı	JOI

NOTES:

Concentration exceeds

NYSDEC Class GA

ABBREVIATIONS:

QUALIFIERS:

ug/L = Micrograms per liter

ST: Standard Value U: Compound analyzed for but not detected

--: Not established

GV: Guidance Value J: Compound found at a concentration below CRDL, value estimated

# FRANKLIN CLEANERS SITE NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050 RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT FOR VOCS

	SYSTEM	SYSTEM	SYSTEM	SYSTEM	SYSTEM	SYSTEM	SYSTEM	EFFLUENT	
SAMPLE ID			EFFLUENT (AS-1)			EFFLUENT (AS-1)		LIMITATIONS	NYSDEC CLASS GA
SAMPLE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	Limitizationo	GROUNDWATER
DATE OF	3/4/2010	3/18/2010	4/1/2010	4/15/2010	4/30/2010	5/13/2010	5/28/2010		STANDARDS AND
COLLECTED	EAR	EAR	EAR	EAR	EAR	EAR	EAR		GUIDANCE VALUES
UNITS	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
Dichlorodifluoromethane	U	U	U	U	U U	U	U U	(Gg/ L)	5 ST
Chloromethane	Ü	Ü	Ü	Ü	Ü	0.16 J	0.14 J		
Vinyl chloride	Ü	Ü	Ü	Ü	Ü	U	U		2 ST
Bromomethane	Ü	Ü	Ü	Ü	Ü	Ü	Ü		5 ST
Chloroethane	U	l ü	l ü	Ü	Ü	U	U		5 ST
Trichlorofluoromethane	Ü	l U	l ü	Ü	U	U	U		5 ST
1,1-Dichloroethene	U	l ü	l ü	Ü	Ü	U	U		5 ST
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	Ü	U	U			5 ST
	U	l U	U	1 J	U				50 GV
Acetone	_			_	~				
Carbon disulfide	U	U	U	U	U				60 GV
Methyl acetate	U	U	U	U	U				 CT
Methylene chloride	U	U	U	U	U	U	U		5 ST
trans 1,2-Dichloroethene	U	U	U	U	U	U	U		5 ST
Methyl-tert butyl ether	U	U	U	U	U				10 GV
1,1-Dichloroethane	U	U	U	U	U	U	U	10	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U			10	5 ST
2-Butanone	U	U	U	U	U				50 GV
Chloroform	U	U	U	U	U	U	U		7 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	U	10	5 ST
Cyclohexane	U	U	U	U	U				
Carbon tetrachloride	U	U	U	U	U	U	U		5 ST
Benzene	U	U	U	U	U				1 ST
1,2-Dichloroethane	U	U	U	U	U	U	U		0.6 ST
Trichloroethene	U	U	U	U	U	U	U	10	5 ST
Methylcyclohexane	U	U	U	U	U				
1,2-Dichloropropane	U	U	U	U	U	U	U		1 ST
Bromodichloromethane	U	U	U	U	U	U	U		50 GV
cis-1,3-Dichloropropene	U	U	U	U	U	U	U		0.4 ST
4-Methyl-2-pentanone	U	U	U	U	U				
Toluene	U	U	U	U	U				5 ST
trans-1,3-Dichloropropene	U	U	U	U	U	U	U		0.4 ST
1,1,2-Trichloroethane	U	U	U	U	U	U	U		1 ST
Tetrachloroethene	Ü	Ü	Ü	Ü	Ü	0.52 J	0.97 J	5	5 ST
2-Hexanone	Ü	Ü	Ü	Ü	Ü				50 GV
Dibromochloromethane	U	U	U	U	U	U	U		50 GV
1,2-Dibromoethane	U	U	U	U	U				5 ST
Chlorobenzene	Ü	Ü	Ü	Ü	Ü	U	U		5 ST
Ethylbenzene	Ü	Ü	Ü	Ü	Ü				5 ST
Xylene (total)	Ü	Ü	Ü	Ü	Ü				5 ST
Styrene	Ü	Ü	Ü	Ü	Ü				5 ST
Bromoform	Ü	Ü	Ü	Ü	Ü	U	U		50 GV
Isopropylbenzene	Ü	Ü	Ü	Ü	Ü				5 ST
1,1,2,2-Tetrachloroethane	Ü	Ü	l ü	Ü	Ü	U	U		5 ST
1,3-Dichlorobenzene	Ŭ	l ü	l ŭ	Ü	Ü	Ü	Ü		3 ST
1,4-Dichlorobenzene	U	l U	l ü	Ü	U	U	U		3 ST
1,2-Dichlorobenzene	U	l ü	l ü	Ü	l ü	U	U		3 ST
1,2-Dibromo-3-chloropropane	U	l U	U	U	U		-		0.04 ST
1,2,4-Trichlorobenzene	U	l U	U	Ü	U				5 ST
1,2,4-Trimethylbenzene	U	U	U	0.81 J	U				5 ST
				0.81 J		U	U		5 ST
2-Chloroethyl vinyl ether		I	ı			U	U		551

NOTES: ABBREVIATIONS QUALIFIERS:

Concentration exceeds Site Specific Effluent Limitation ug/L = Micrograms per liter
--: Not established

ST: Standard Value GV: Guidance Value U: Compound analyzed for but not detected

J: Compound found at a concentration below CRDL, value estimated

# FRANKLIN CLEANERS SITE NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050 RESULTS OF ANALYSIS OF AIR STRIPPER EFFLUENT IRON, MANGANESE AND pH

	SYSTEM							
SAMPLE ID	EFFLUENT (AS-1)	EFFLUENT						
SAMPLE TYPE	WATER	LIMITATIONS						
DATE OF COLLECTION	3/4/2010	3/18/2010	4/1/2010	4/15/2010	4/30/2010	5/13/2010	5/28/2010	LIMITATIONS
COLLECTED BY	EAR							
UNITS	(ug/L)	(ug/L)						
METALS								
Iron	85.9 J	119 J	U	U	U	173 J	U	1000
Manganese	37.0	31.5	26.0	24.7	24.9	23.8	22.2	1000
pH (S.U.)	7.25	7.17	7.23	7.09	7.18	7.18	7.23	6.5 to 8.5

#### ABBREVIATIONS: QUALIFIERS:

ug/L: Micrograms per liter

- B: Concentration is greater than the instrument detection limit (IDL) but less than the Contract Required Detection Limit (CRDL)
- U: Compound analyzed for but not detected
- J: Compound found at a concentration below CRDL, value estimated

# FRANKLIN CLEANERS SITE NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050 VAPOR PHASE SAMPLE RESULTS

	CARBON VESSEL NO. 1	CARBON VESSEL NO. 1	CARBON VESSEL NO. 2	CARBON VESSEL NO. 2
SAMPLE ID	INFLUENT	EFFLUENT	INFLUENT	EFFLUENT
SAMPLE TYPE	AIR	AIR	AIR	AIR
COLLECTED BY	EAR	EAR	EAR	EAR
UNITS	(ppm)	(ppm)	(ppm)	(ppm)
DATE OF COLLECTION	PID Reading	PID Reading	PID Reading	PID Reading
3/4/2010	0.0	0.0	0.0	0.0
3/11/2010	0.0	0.0	0.0	0.0
3/18/2010	0.0	0.0	0.0	0.0
3/26/2010	6.6	5.4	2.7	2.7
4/1/2010	0.0	0.0	0.0	0.0
4/8/2010	0.8	1.1	1.1	1.4
4/15/2010	1.3	1.3	1.3	1.2
4/22/2010	0.0	0.0	0.0	0.0
4/30/2010	0.0	0.0	0.0	0.0
5/6/2010	0.8	0.6	0.2	0.2
5/13/2010	2.2	2.2	2.4	2.5
5/20/2010	1.1	1.2	1.2	1.6
5/28/2010	1.0	1.0	1.0	1.5

#### **NOTES:**

Samples were collected by filling a Tedlar bag at each of the sampling locations. Samples were tested using a handheld photoionization detector (PID).

# ATTACHMENT G

# PERFORMANCE SUMMARY

# FRANKLIN CLEANERS SITE NYSDEC CONTRACT No. D004446 / SITE No. 1-30-050 EXTRACTION AND TREATMENT SYSTEM PERFORMANCE RESULTS

	SYSTEM INFLUENT	SYSTEM INFLUENT	SYSTEM INFLUENT	SYSTEM INFLUENT	SYSTEM EFFLUENT		ESTIMATED	ESTIMATED	ESTIMATED
	(EW-1) AVERAGE	(EW-1) PCE	(EW-2) AVERAGE	(EW-2) PCE	(AS-1) PCE	PCE REMOVAL	AVERAGE PCE	SYSTEM	CUMULATIVE PCE
DATE OF SAMPLE	EXTRACTION RATE	CONCENTRATION	EXTRACTION RATE	CONCENTRATION	CONCENTRATION	EFFICIENCY	REMOVAL RATE(3)	RUNTIME	REMOVAL
COLLECTION	(gpm)	(ug/l)	(gpm)	(ug/l)	(ug/l)	(%)	(lb/hr)	(hr)	(lbs)
9/5/2007	40.0	14	6.3	53	< 0.5	93.07	4.48E-04	112	29.83
9/21/2007	39.0	9 J	6.3	51	< 0.5	99.06	3.37E-04	359	29.95
10/21/2007	38.4	10	6.1	59	< 0.5	99.18	3.73E-04	484	30.13
10/31/2007	39.9	14	5.9	73	< 0.5	99.40	4.95E-04	233	30.25
11/12/2007	39.4	15 B	5.7	80 B	< 0.5	99.46	5.24E-04	289	30.40
11/26/2007	38.5	13	6.0	64	< 0.5	99.32	4.43E-04	407	30.58 (1)
12/10/2007 12/27/2007	40.6 40.3	16	6.5	100	< 0.5	99.50 99.37	6.51E-04 4.85E-04	217 348	30.72
1/7/2008	40.4	13 12	6.1 6.7	73 75	< 0.5 < 0.5	99.37	4.85E-04 4.94E-04	265	30.89 31.02
1/21/2008	38.3	14	6.3	86	< 0.5	99.42	5.40E-04	327	31.20
2/7/2008	40.7	15	6.3	81	< 0.5	99.44	5.61E-04	379	31.41
2/19/2008	39.0	16	6.5	90	< 0.5	99.46	6.05E-04	524	31.73 (1)
3/3/2008	40.1	20	5.9	100	< 0.5	99.58	6.97E-04	60	31.77
3/17/2008	40.5	16	6.2	100	< 0.5	99.51	6.35E-04	317	31.97
4/2/2008	39.8	17	6.2	100	< 0.5	99.52	6.49E-04	374	32.21
4/18/2008	38.9	16	6.5	86	< 0.5	99.45	5.92E-04	371	32.43
5/1/2008	38.3	19	6.4	89	< 0.5	99.51	6.50E-04	280	32.62
5/13/2008	40.9	17	6.4	95	< 0.5	99.51	6.53E-04	716	33.08 <sup>(1)</sup>
6/5/2008	38.6	20	6.5	100	< 0.5	99.54	7.12E-04	110	33.16
6/23/2008	39.9	24	5.9	130	< 0.5	99.66	8.64E-04	247	33.37
7/10/2008	39.8	12	6.0	64	< 0.5	99.31	4.30E-04	394	33.54
7/25/2008	39.6	14	6.0	71	< 0.5	99.39	4.91E-04	327	33.70
8/7/2008	40.2	14	5.9	66	< 0.5	99.38	4.77E-04	279	33.84
8/21/2008	40.3	13	6.0	61	< 0.5	99.33	4.46E-04	510	34.06 (1)
9/5/2008	39.0	13	6.0	60	< 0.5	99.31	4.34E-04	110	34.11
9/19/2008	39.6	15	6.1	82	< 0.5	99.44	5.48E-04	327	34.29
10/3/2008	40.1	12	6.1	51	< 0.5	99.23	3.97E-04	338	34.43
10/16/2008	39.0	11	6.2	64	< 0.5	99.25	4.14E-04	311	34.55
10/30/2008 11/12/2008	39.5 39.8	12 12	5.8 6.0	45 64	< 0.5 < 0.5	99.21 99.30	3.68E-04 4.31E-04	248 312	34.65 34.78
11/25/2008	39.9	16	6.1	80	< 0.5	99.46	5.64E-04	430	35.02 <sup>(1)</sup>
12/9/2008	39.7	16	6.2	78	< 0.5	99.45	5.60E-04	207	35.14
12/24/2008	40.4	13	6.4	57	< 0.5	99.28	4.46E-04	300	35.27
1/8/2009	39.9	12	6.1	53	< 0.5	99.24	4.02E-04	361	35.42
1/19/2009	40.3	14	6.1	61	< 0.5	99.35	4.69E-04	269	35.54
2/2/2009	40.3	12	6.1	56	< 0.5	99.26	4.13E-04	323	35.68
2/26/2009	39.1	16	5.6	69	< 0.5	99.45	5.07E-04	581	35.97 <sup>(1)</sup>
3/11/2009	40.1	18	5.7	92	< 0.5	99.54	6.24E-04	253	36.13
3/25/2009	39.0	16	5.3	74	< 0.5	99.48	5.09E-04	335	36.30
4/8/2009	39.2	16	5.3	61	< 0.5	99.44	4.76E-04	334	36.46
4/24/2009	40.4	13	5.2	61	< 0.5	99.38	4.22E-04	277	36.58
5/5/2009	39.5	16	5.2	63	< 0.5	99.46	4.81E-04	186	36.67
5/18/2009	40.5	13	5.5	53	< 0.5	99.33	4.10E-04	554	36.89 (1)
6/3/2009	39.5	15	5.3	56	< 0.5	99.40	4.45E-04	65	36.92
6/18/2009 7/1/2009	39.1	13	5.2	55	< 0.5	99.35 99.09	3.98E-04 3.02E-04	326 308	37.05
7/1/2009	40.3 40.3	<u>8</u> 11	5.5 5.3	48 47	< 0.5 < 0.5	99.09	3.02E-04 3.47E-04	308 144	37.14 37.19
7/15/2009	40.6	13	5.4	61	< 0.5	99.23	4.29E-04	458	37.19
8/13/2009	40.6	13	5.4	51	< 0.5	99.33	4.29E-04 3.98E-04	382	37.54
8/24/2009	40.2	11	5.3	50	< 0.5	99.25	3.54E-04	449	37.70 <sup>(1)</sup>
9/8/2009	39.9	13	5.8	53	< 0.5	99.30	4.14E-04	141	37.76
9/25/2009	39.8	12	5.8	57	< 0.5	99.28	4.05E-04	412	37.76
10/5/2009	39.0	10	5.8	54	< 0.5	99.17	3.50E-04	241	38.01
10/26/2009	39.5	12	5.7	56	< 0.5	99.17	3.97E-04	495	38.21
11/9/2009	36.0	8	5.4	48	< 0.5	99.03	2.79E-04	324	38.30
11/24/2009	37.5	11	5.4	51	< 0.5	99.03	3.47E-04	502	38.47 <sup>(1)</sup>
12/8/2009	36.2	11	5.5	50	< 0.5 < 0.5	99.21	3.47E-04 3.53E-04	172	38.53
		13		50 55		99.23		307	
12/26/2009	36.3	13	5.2	55 54	< 0.5	99.31	3.80E-04 3.77E-04	256	38.65
1/4/2010 1/21/2010	36.8 37.5	14	5.1 5.3	62	< 0.5 < 0.5	99.38	4.27E-04	408	38.75 38.92
2/5/2010	37.5	14	5.3	62 47	< 0.5 < 0.5	99.38	4.27E-04 3.22E-04	408 343	38.92
2/5/2010	32.9 31.4	15	6.3	55	< 0.5 0.82	99.18	3.22E-04 4.09E-04	343 564	39.03
3/4/2010	34.4	16	5.8	60	< 0.5	99.35 99.19	4.50E-04	251	39.38
3/18/2010	33.1	14	6.2	48	< 0.5		3.81E-04	104	39.42
4/1/2010	33.8	11	5.7	47	< 0.5	99.11	3.20E-04	328	39.52
4/15/2010	34.0	14	6.3	58	< 0.5	99.25	4.21E-04	336	39.66
4/30/2010	33.6	15	6.3	59	< 0.5	99.28	4.39E-04	342	39.81
5/13/2010	32.2	16	6.4	68	0.52	99.30	4.76E-04	299	39.95
5/28/2010	33.3	14	5.7	76	0.97	98.77	4.50E-04	440	40.15

NOTES: ABBREVIATIONS:

#### QUALIFIERS:

J: Compound found at a concentration below CRDL, value estimated B: Compound detected in method blank as well as the sample, value estimated

Estimated through the end of the reporting period.

 Performance results for the reporting period are shaded.

 Mass removal rate(lb/hr) = flow(gpm)\*concentration(ug/l)\*3.79(liters/gallon)\*1E-6(g/ug)\*2.2E-3(lb/g)\*60(min/hr)

 Here the reporting period are shaded.

 Which is a game to gallon a gallon gallon

# ATTACHMENT H

## DATA VALIDATION CHECKLISTS

Project Name:	Franklin Cleaners aka Hempstead
Project Number:	2531-03
Sample Date(s):	March 4, 2010
Matrix/Number	Water/3
of Samples:	Trip Blank/0
Analyzing	TestAmerica Laboratories, Shelton, CT
Laboratory:	
Analyses:	Volatile Organic Compounds (VOCs): USEPA SW846 Method 8260B  Metals: Iron and manganese by USEPA SW846 Method 6010B
Laboratory Report No:	220-11604 Date:3/12/2010

# ORGANIC ANALYSES VOCS

	Rep	orted	1 .	rmance eptable	Not	
	No	Yes	No	Yes	Required	
1. Holding times		X		X		
2. Blanks						
A. Method blanks		X	X			
B. Trip blanks					X	
C. Field blanks					Х	
3. Laboratory Control Sample (LCS) %R		X	X			
4. Surrogate spike recoveries		X	1	Х		
5. Field duplicates RPD					X	

VOCs - volatile organic compounds %R - percent recovery

#### Comments:

Performance was acceptable with the following exceptions:

- 2. Based on laboratory qualifiers, acetone was detected in the method blank. Acetone was qualified as non-detect (U) in all samples.
- 3. Based on laboratory qualifiers, the %R was outside the QC limit for acetone in the LCS associated with all samples. It was not detected in the samples and therefore did not impact the usability of the reported sample result.

<sup>%</sup>D - percent difference %RSD - percent relative standard deviation

RRF - relative response factor RPD - relative percent difference

## **INORGANIC ANALYSES**

### **METALS**

	Repo	orted	ì	mance ptable	Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Preparation and calibration blanks					X
B. Field blanks					Х
3. Field duplicates RPD					X

%R - percent recovery

%D - percent difference

RPD - relative percent difference

## Comments:

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 4/27/2010
VALIDATION PERFORMED BY SIGNATURE:	le-Rr

Project Name:	Franklin Cleaners aka Hem	ostead
Project Number:	2531-03	
Sample Date(s):	March 18, 2010	
Matrix/Number	Water/3 (EW-1, EW-2 and	AS)
of Samples:	Trip Blank/0	·
Analyzing Laboratory:	TestAmerica Laboratories,	Shelton, CT
Analyses:		ds (VOCs): USEPA SW846 Method 8260B by USEPA SW846 Method 6010
Laboratory Report No:	220-11738	Date:3/30/2010

# ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks				-	X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds

RPD - relative percent difference

#### Comments:

Performance was acceptable.

### **INORGANIC ANALYSES**

#### Metals

	Rep	orted	Performance Acceptable		Not
	No	Yes	No	Yes	Required
Holding times		X		X	
2. Blanks				·	
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Field duplicates RPD					X

<sup>%</sup>R - percent recovery

RPD - relative percent difference

#### Comments:

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 7/8/2010
VALIDATION PERFORMED BY SIGNATURE:	la ~ 2~

<sup>%</sup>R - percent recovery

Project Name:	Franklin Cleaners aka He	mpstead
Project Number:	2531-03	
Sample Date(s):	April 1, 2010	
Matrix/Number of Samples:	Water/ 3 (EW-1, EW-2 and Trip Blank/0	nd AS)
Analyzing Laboratory:	TestAmerica Laboratories	s, Shelton, CT
Analyses:		unds (VOCs): USEPA SW846 Method 8260B ese by USEPA SW846 Method 6010
Laboratory Report No:	220-11845	Date:4/13/2010

# ORGANIC ANALYSES

VUUS
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	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X	X		
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds

%R - percent recovery

RPD - relative percent difference

#### Comments:

Performance was acceptable with the following exception:

3. Based on laboratory qualifiers, the %R was outside the QC limit for dibromochloromethane and bromoform in the LCS associated with all samples. It was not detected in the samples and therefore did not impact the usability of the reported sample result.

#### **INORGANIC ANALYSES**

#### Metals

,	Rep	orted	Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Field duplicates RPD					X

%R - percent recovery

RPD - relative percent difference

#### Comments:

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 7/8/2010
VALIDATION PERFORMED BY SIGNATURE:	12-R

Project Name:	Franklin Cleaners aka	Hempstead
Project Number:	2531-03	
Sample Date(s):	April 15, 2010	
Matrix/Number of Samples:	Water/ 3 (EW-1, EW-2 Trip Blank/0	and AS)
Analyzing Laboratory:	TestAmerica Laborato	ries, Shelton, CT
Analyses:		bounds (VOCs): USEPA SW846 Method 8260B anese by USEPA SW846 Method 6010
Laboratory Report No:	220-11962	Date:4/28/2010

### **ORGANIC ANALYSES**

#### **VOCS**

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X	X		
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds

%R - percent recovery

RPD - relative percent difference

#### Comments:

Performance was acceptable with the following exception:

3. Based on laboratory qualifiers, the %R was outside the QC limit for methyl acetate in the LCS associated with all samples. It was not detected in the samples and therefore did not impact the usability of the reported sample result.

#### **INORGANIC ANALYSES**

#### **Metals**

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Field duplicates RPD					X

%R - percent recovery

RPD - relative percent difference

#### Comments:

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 7/8/2010
VALIDATION PERFORMED BY SIGNATURE:	elli - a

Project Name:	Franklin Cleaners aka Hempstead
Project Number:	2531-03
Sample Date(s):	April 30, 2010
Matrix/Number	Water/3 (EW-1, EW-2 and AS)
of Samples:	Trip Blank/0
Analyzing	TarkAmania I alamania Clarka CVP
Laboratory:	TestAmerica Laboratories, Shelton, CT
Analyses:	Volatile Organic Compounds (VOCs): USEPA SW846 Method 8260B  Metals: Iron and manganese by USEPA SW846 Method 6010
Laboratory Report No:	220-12095 Date:5/11/2010

# ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X	·	X	•
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds

%R - percent recovery

RPD - relative percent difference

#### Comments:

Performance was acceptable.

## **INORGANIC ANALYSES**

#### Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		Х		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					Х
3. Laboratory Control Sample (LCS) %R		X		X	٠.
4. Field duplicates RPD			1		Х

%R - percent recovery

RPD - relative percent difference

#### Comments:

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 7/8/2010
VALIDATION PERFORMED BY SIGNATURE:	200 2 2

Project Name:	Franklin Cleaners aka Hemp	ostead	
Project Number:	2531-03		
Sample Date(s):	May 13, 2010		
Matrix/Number	Water/3 (EW-1, EW-2 and	AS)	
of Samples:	Trip Blank/0		
Analyzing Laboratory:	TestAmerica Laboratories,	Shelton, CT	
Analyses:		ds (VOCs): 40 CFR Part 136 method 624 by USEPA SW846 Method 6010B	,
Laboratory Report No:	220-12202	Date:05/27/2010	

# ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks		***************************************			
A. Method blanks		X		X	
B. Trip blanks					X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					X

VOCs - volatile organic compounds

%R - percent recovery

RPD - relative percent difference

Comments:

Performance was acceptable.

### **INORGANIC ANALYSES**

#### Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Field duplicates RPD					X

%R - percent recovery

RPD - relative percent difference

**Comments**:

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 11/16/2010	
VALIDATION PERFORMED BY SIGNATURE:	10-2-	

Project Name:	Franklin Cleaners aka Hemp	ostead		
Project Number:	2531-03			
Sample Date(s):	May 28, 2010			
Matrix/Number	Water/3 (EW-1, EW-2 and	AS)		
of Samples:	Trip Blank/0			
Analyzing	T	The second secon		
Laboratory:	TestAmerica Laboratories, Shelton, CT			
Analyses:		ls (VOCs): 40 CFR Part 136 method 624 by USEPA SW846 Method 6010B		
Laboratory Report No:	220-12355	Date:06/16/2010		

# ORGANIC ANALYSES VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		-112-1-11			X
C. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X	
4. Surrogate spike recoveries		X		X	
5. Field duplicates RPD					. X

VOCs - volatile organic compounds

%R - percent recovery

RPD - relative percent difference

Comments:

Performance was acceptable.

#### **INORGANIC ANALYSES**

#### Metals

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		. X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks					X
3. Laboratory Control Sample (LCS) %R		X		X.	
4. Field duplicates RPD					X

%R - percent recovery

RPD - relative percent difference

Comments:

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 11/16/2010
VALIDATION PERFORMED BY SIGNATURE:	12-R