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GROUNDWATER MONITORING AND NAPL SEPARATION/HOT WATER GENERATION/GROUNDWATER TREATMENT SYSTEM STATUS REPORT JANUARY 2011 – March 2011 (QUARTERLY MONITORING EVENT)

JENNISON WRIGHT SUPERFUND SITE
900 WEST 22ND STREET
GRANITE CITY, ILLINOIS

PREPARED FOR:

Ms. Erin Rednour
Illinois Environmental Protection Agency
Bureau of Land
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

LPC No. 1190400008-Madison
Jennison Wright/Granite City
Superfund/Technical

PREPARED BY:

BODINE ENVIRONMENTAL SERVICES, INC.
5350 EAST FIREHOUSE ROAD
DECATUR, ILLINOIS 62521
(Bodine Project #119386-12)

May 2012

US EPA RECORDS CENTER REGION 5
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BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Redmediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

June 26, 2012

Ms. Erin Rednour, Project Manager
Illinois Environmental Protection Agency
Bureau of Land
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Re: Quarterly GWOU Status Report
January 2011 through March 2011
Bodine Project Number 119386

1190400008 – Madison
Jennison Wright /Granite City
Superfund/Technical

Dear Ms. Rednour:

Bodine Environmental Services, Inc. (Bodine) is pleased to provide two (2) copies of the Quarterly Groundwater Operable Unit (GWOU) Status Report for the above referenced site. This report summarizes the data and results of the GWOU operation, maintenance, sampling and analytical results for the period between January 1, 2011 and March 31, 2011.

If you have any questions, please contact the undersigned at (217)519-3955.

Respectfully submitted,

BODINE ENVIRONMENTAL SERVICES, INC.

Troy M. McFate
Senior Project Manager

Bob Bryson
Vice President of Operations

Enclosures: Quarterly GWOU Status Report – 2 Copies

Cf: Tom Campbell, Ecology & Environment Engineering, Inc., 33 West Monroe Street, Suite 550, Chicago IL 60603
Sheila A. Sullivan, M.P.H., U.S. EPA Region V, Mailcode HSRM-6J, 77 W. Jackson Blvd., Chicago, Illinois 60604-3590

(All cfs with copy of enclosure)

GROUNDWATER MONITORING
AND NAPL SEPARATION/HOT WATER GENERATION/GROUNDWATER TREATMENT SYSTEM STATUS REPORT
JANUARY 2011 – MARCH 2011
(QUARTERLY MONITORING REPORT)

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1.0 INTRODUCTION

On behalf of Illinois Environmental Protection Agency (Illinois EPA), Bodine Environmental Services, Inc. (Bodine) is submitting this Groundwater Monitoring and Non-Aqueous-Phase Liquid (NAPL) Extraction/Groundwater Treatment System (hereafter referred to as Groundwater Operable Unit[GWOU]) Status Report to the Illinois EPA to document and discuss activities completed at the former Jennison Wright NPL site (hereafter the "site") during the system operation period from January 1, 2011 through March 31, 2011. This is the first quarter monitoring event for 2011 and represents a period of three months.

In 2009, the GWOU was installed to extract NAPL and treat impacted groundwater from the former 22nd Street Lagoon area. The USEPA determined the GWOU to be substantially completed in accordance with the remedial design plans and specifications in September 2009. The GWOU was started and due to issues with scaling of the heat exchanger the system was redesigned by Ecology and Environment Engineering, Inc. (EEEI) in December of 2009. EEEI added a feed tank and changed the piping so the groundwater from the extraction wells would be treated prior to entering the heat exchanger. The GWOU continued to experience iron and calcium carbonate scaling issues so the temperature to the injection wells was lowered to 140 degrees Fahrenheit and antiscalent chemicals were utilized to improve operating time. The GWOU was determined to be Operational and Functional by the USEPA and Illinois EPA in September of 2010.

During the operation period from January 1, 2011 to March 31, 2011, the GWOU operated 83 days. The GWOU was shut down to perform cleaning activities and perform minor operation and maintenance procedures.

System operational samples are collected monthly and analyzed for 40CFR136A Method 625 semi-volatile organic compounds (SVOCs), Clean Water Method 1664 Oil and Grease (O&G), Standard Methods 2540D Total Suspended Solids (TSS), Standard Method 5210B Biochemical Oxygen Demand (BOD), and pH. Groundwater samples were not collected from select groundwater monitoring and extraction wells due to budget constraints. Approximately 360 pounds (lbs) of SVOCs were removed during this monitoring period.

2.0 GWOU SYSTEM STATUS

2.1 GWOU System Operation. The GWOU was implemented to mobilize the NAPL plume observed within the area of the 22nd Street Lagoon so that it could be collected and disposed of off-site. The layout consists of six subsurface hot water injection points and two groundwater/NAPL extraction wells. The six injection wells were placed along the approximate NAPL plume boundary and the two extraction wells were centered within the injection well locations based on capture calculations performed by EEEI. The wells are oriented to reduce travel time between injection and extraction points in order to limit heat loss in the subsurface aquifer. The extraction wells pump contaminated groundwater and NAPL from 35 feet below ground surface (bgs) to an on-site treatment building. The main components of the hot water generation system are stored in a separate room, immediately adjacent to the groundwater treatment building. Treated groundwater is discharged via underground piping to the combined sewer system collection piping located in the alley west of the site. The sewer system ultimately discharges to the Chain of Rocks Barge Canal after being processed through the GCRWWTP. All influent groundwater has NAPL removed; a portion of this water is directed to the hot water generation system which is pumped to the six subsurface injection wells. A Site Plan Map depicting the location of the wells and site layout is presented as Figure 1.

Bodine monitored the GWOU on a weekly basis. Monitoring activities on the GWOU were completed to evaluate if the system was operating efficiently, conduct any maintenance, record required operating parameters, and collect operational samples and effluent discharge samples. Copies of the Weekly Operational Logs are attached in Appendix A. The operational samples were collected on a monthly basis. The effluent samples for the GCRWWTP are collected bi-annually and submitted to the GCRWWTP.

The GWOU operated almost continuously during this quarter. The system was down for bi-weekly cleaning activities and installation of new treatment equipment. System maintenance activities this quarter consisted of the following:

- Cleaning of the heat exchanger and feed tank with a descaling acid;
- Plocher Construction installed east entrance door for the Boiler/Generator Room;
- Amsco Mechanical replaced ball valve on injection line and installed a water hammer suppressor on the potable water line;
- Pyramid Electrical installed backup float in sump to prevent flooding if Programming Logic Controller (PLC) is comprised by a electrical surge again;
- Pyramid Electrical installed Transient Voltage Surge Suppressor Receptacle for the PLC and Auto Dialer;
- The inflatable packers in Injection Wells #1 and #4 are losing air pressure, so the packers were re-inflated each site visit;
- Bodine placed directional tape on piping systems and confined space permits on the clay, carbon, influent, feed, and DNAPL/LNAPL tanks;
- Pyramid Electrical installed avocado floats in the feed and influent tanks; and
- Bodine completed miscellaneous minor repairs to the GWOU.

2.2 **GWOU System Performance.** Samples are collected monthly from four (4) locations throughout the GWOU. The locations are as follows: GWOUA (Influent prior to NAPL Separator) GWOUB (Influent after NAPL Separator), GWOUC (Influent after bag filters), and GWOUE (Effluent). The GWOUA sample is analyzed for SVOCs and O&G, the GWOUB sample is analyzed for O&G, TSS, and pH, the GWOUC sample is analyzed for O&G and TSS, and the GWOUE sample is analyzed for SVOCs, BOD, TSS, and pH. The laboratory analytical results from these sampling locations are reviewed to evaluate the efficiency of the GWOU. Specifically, during the first quarter of 2011, samples were collected on January 19 and February 16, 2011. Based on review of the analytical results, the GWOU is efficiently removing the SVOC constituents. However, the O&G analytical results indicate the NAPL separator is not efficiently removing the NAPL. The operational samples indicate the O&G concentrations increasing after the NAPL separator. The bag filters before the organoclay and the organoclay are removing a significant amount of NAPL. The bag filters are required to be changed twice a week due to binding from NAPL and other miscellaneous solids.

The GCRWWTP requests the total volume of wastewater discharged monthly for billing purposes. For the 1st quarter of 2011, the GWOU discharged 924,514 gallons of treated water to the GCRWWTP.

2.3 **Contaminant Mass Removal.** Influent groundwater samples were collected prior to treatment activities (activated carbon) at the sampling port of influent (GWOUA) from extraction wells (EW01 and EW02) to determine the SVOC loading to the treatment system. The influent samples were collected on January 19 and February 16, 2011. These samples are used to determine the mass of SVOCs removed from the groundwater by the system and to estimate the treatment system efficiency (Table 2). The associated laboratory analytical reports are presented in Appendix B.

Total mass removal was calculated using the average total SVOC concentrations (10,339 µg/l [Table 1]) detected in the influent (GWOUA) samples minus the average total SVOC concentrations (205 µg/l [Table 2]) in the effluent (GWOUE) and the total average flow rate (50,400 gallons per day) of the system. The average flow rate was determined by utilizing 35 gpm as the average flow rate. Therefore, the total SVOC mass removed from the site during the first quarter of 2011 is approximately 360 lbs.

In addition, the total SVOC loading of the system and the SVOC concentration present in the effluent sample were used to determine the SVOC removal efficiency of the system. Based on the average total SVOC concentration (10,339 µg/l) in the influent samples and the average effluent SVOC concentration of 205 µg/l, the system is currently removing approximately 98% of the SVOCs entering the system. Therefore, the activated carbon treatment performance is acceptable. The mass removal data is presented on Table 3. A time versus mass removal graph is included in Appendix C.

3.0 GROUNDWATER MONITORING ACTIVITIES

The monitoring plan for the Remedial Action consists of sampling select monitoring wells at the site. The monitoring wells to be sampled were determined by Ecology and Environment in the Remedial Design for this site and are listed in the Operation & Maintenance Plan. There are ten (10) monitoring wells selected for quarterly monitoring and an additional twelve (12) monitoring wells selected for annual monitoring. Due to budget constraints, groundwater monitoring activities were not performed for the first quarter monitoring period of 2011.

3.1 Hydrogeology and System Influence. Due to budget constraints, hydrogeology and system influence activities were not performed for the first quarter monitoring period of 2011.

3.2 Groundwater Quality. Due to budget constraints, groundwater monitoring activities were not performed for the first quarter monitoring period of 2011.

4.0 CONCLUSIONS AND RECOMENDATIONS

Based on the data generated during the operating period from January 1, 2011 through March 31, 2011 the following conclusions are presented.

- The GWOU operated within acceptable levels as determined by effluent sampling results. Approximately 360 lbs of VOC/SVOC contaminant mass was removed from the groundwater during the first quarter of 2011.

- The water treatment chemicals continue to improve the operating time before the GWOU has to be shut down to chemically remove iron and calcium carbonate scale from the heat exchanger tubes.

- The NAPL separator is not efficiently removing the NAPL entering the treatment system. The system operational samples indicate more O&G after the NAPL separator than what is entering the NAPL separator. In addition, the influent tank and bag filters are covered with NAPL.

- It was determined after the PLC failed after an electrical surge, that an extra float was needed in the sump to prevent a discharge of contaminated water outside the building. This float was installed during this operating period.

- The original floats in the influent and feed tanks were not performing well in the harsh environments inside the tanks, so avocado floats were installed in the tanks. The avocado floats perform better in harsh environments.

- The packers in Injection Wells #1 and #4 continue to lose pressure over the course of a week. The packers in these wells should be removed and checked in the near future.

5.0 LIMITATIONS OF INVESTIGATION

This report was prepared under constraints of cost, time and scope, and reflects a limited assessment and evaluation based on data collected at discrete locations on or near the site. Conditions may vary across the site. The assessment was performed using the degree of care and skill ordinarily exercised, under similar circumstances, by professional consultants practicing in this or similar localities. No other warranty or guarantee, expressed or implied, is made as to the conclusions and professional advice included in this report.

The findings of this report are valid as of the present date of the assessment. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control.

The interpretations and conclusions contained in this report are based upon the result of independent laboratory tests and analysis intended to detect the presence and/or concentrations of certain chemical constituents in samples taken from the subject property. Bodine has no control over such testing and analysis and therefore, disclaims any responsibility for any errors and omissions arising there from.

TABLES

Table 1
IEPA - Jennison Wright Summary of VOCs and SVOCs Detected in System Influent
1st Quarter 2011

	ROD Proposed Cleanup Objectives	IEPA TACO Class I Groundwater Cleanup Objectives				
Date			1/19/2011		2/16/2011	
Sample ID Number			QC Flag	GWOUA (01192011)	QC Flag	GWOUA (02162011)
Units	µg/l	µg/l		µg/l		µg/l
Volatiles						
Benzene	10	5		**46**		NS
Toluene		1000		73		NS
Ethylbenzene		700		85		NS
Semi-Volatiles						
2,4-Dimethylphenol	200	140		**410**		**470**
2-Methylphenol	500	350		320		300
3&4 Methylphenol				610		640
Acenaphthene	---	420		**590**		**420**
Acenaphthylene	---	210	J	23	J	16
Anthracene	---	2100		140		61
Benzo(a)anthracene	0.13	0.13		**110**	J	**29**
Benzo(a)pyrene	---	0.2		**67**	J	**16**
Benzo(b)fluoranthene	0.18	0.18		**76**	J	**19**
Benzo(ghi)perylene	---	210	J	27		ND
Benzo(k)fluoranthene	0.4	0.17		**50**		ND
Chrysene	4	1.5		**85**	J	**28**
Dibenzofuran	---	7		410		270
Fluoranthene	---	280		**490**		170
Fluorene	---	280		**480**		**280**
Indeno(1,2,3-c,d)pyrene	---	0.43	J	**26**		ND
Naphthalene	400	140		**6100**		**5000**
Pentachlorophenol	1	1	J	**140**		**240**
Phenanthrene	---	210		1300		500
Phenol	---	100	J	60	J	51
Pyrene	---	210		**330**		120
		Total VOCs &SVOCs		**12048**		**8630**
		Quarterly VOC & SVOC Average		**10339**		

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - Analyte NOT DETECTED at or above the reporting limit.
N/A - Not Applicable
NS - Not Sampled
Value exceeds TACO Class I Groundwater Remediation Objective or ROD Cleanup Objective
Denotes compounds where the values have been obtained from IEPA's Toxiticy Assessment Unit, Remediation Objectives for Non-TACO Compounds, 3/14/11.

Table 2
IEPA - Jennison Wright Summary of Semi-Volatile Organic Compounds Detected in System Effluent
1st Quarter 2011

	GCRWWTP Daily Discharge Limitations				
Date		1/19/2011		2/16/2011	
Sample ID Number		QC Flag	GWOUE (01192011)	QC Flag	GWOUE (02162011)
Units	µg/l		µg/l		µg/l
Semi-Volatiles					
2,4-Dimethylphenol	---		48		41
2-Methylphenol	---		47		85
3 & 4 Methylphenol	---		13		64
Acenaphthene	---		21		47
Acenaphthylene	---		ND		ND
Anthracene	---		ND		ND
Benzo(a)anthracene	---		ND		ND
Benzo(a)pyrene	---		ND		ND
Benzo(b)fluoranthene	---		ND		ND
Benzo(ghi)perylene	---		ND		ND
Benzo(k)fluoranthene	---		ND		ND
bis(2-Ethylhexyl) phthalate	---		ND		ND
Chrysene	---		ND		ND
Dibenzofuran	---		ND		ND
Fluoranthene	---		ND		ND
Fluorene	---	J	1.5		ND
Indeno(1,2,3-c.d)pyrene	---		ND		ND
Naphthalene	---	J	1.4		ND
Pentachlorophenol	---		ND	J	39
Phenanthrene	---		ND		ND
Phenol	---	J	2.7		ND
Pyrene	---		ND		ND
	Total SVOCs		**134.6**		**276**
	Quarterly Average		**205**		

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - Analyte NOT DETECTED at or above the reporting limit.
N/A - Not Applicable
Value exceeds GCRWWTP Daily Discharge Limitation

Table 3
Mass Removal
NAPL Seperation/Hot Water Generation/Groundwater Treatment System
Jennison Wright NPL Site
Granite City, Illinois
Project Number 119386-12

	Date	Total VOC/SVOC	Flow		Total VOC/SVOC Mass Removed per Day				Length of Quarter	Total Mass per Quarter	Cumulative Mass Removed
Sample ID	Units	µg/l	GPD	Liters per Day	µg	mg	kg	lbs	Days Operating	lbs	lbs
GWOUE	10/1-12/31/2010	9019	50400	190784.7547	1720687703	1720688	1.720688	3.785513	84	317.9830875	317.9830875
	01/01/-03/31/11	10339.00	50400	190784.7547	1972523579	1972524	1.972524	4.339552	83	360.1828055	678.165893

Notes

GPD = gallons per day
µg = micrograms
mg = milligrams
kg = kilograms
lbs = pounds

FIGURES

NORTHING	EASTING	ELEV	GW ELEV	DESCRIPTION
774383.7539	2300318.9120	420.18	------	SanMH (1)
743845.5700	2300381.0400	419.94	------	SanMH (2)
744412.4363	2300636.4460	423.84	408.50	MW-1D
744416.4053	2300643.5200	424.53	408.43	MW-1S
744306.1795	2301171.8130	419.06	408.17	MW-2S
743892.5907	2300346.4530	422.35	407.70	MW-3D
743901.0383	2300347.4690	422.01	407.60	MW-3S
743711.9657	2300351.7460	423.97	407.42	MW-4S
743718.2157	2300835.6610	423.04	407.58	MW-5D
743737.5956	2300876.5300	424.51	407.85	MW-5S
743627.8992	2300598.7900	422.58	407.45	MW-6D
743637.4674	2300595.2490	422.79	407.47	MW-6M
743282.8685	2300403.4950	424.57	407.10	MW-8D
743388.5336	2300360.5540	420.89	407.22	MW-8M (Rev)
743313.3911	2300364.2690	421.66	407.09	MW-8S (Rev)
743274.0245	2300539.7490	424.36	------	MW-9D (ABANDONED)
743235.8218	2300534.8410	424.49	------	MW-9M (ABANDONED)
743253.5051	2300560.6190	424.65	------	MW-9S (ABANDONED)
743033.1724	2300358.5300	423.70	407.86	MW-10S
742911.7757	2300386.7790	424.86	406.74	MW-11M
742856.3616	2300356.0170	425.23	406.65	MW-11S
744295.8401	2301083.3210	419.72	408.46	MW-12S
744074.3720	2301047.2850	424.84	408.16	MW-13S
743891.3005	2300913.3190	424.58	407.86	MW-14S
743884.5337	2300804.6830	423.54	407.83	MW-15S
743758.1875	2300661.4250	423.70	407.60	MW-16S
743598.0714	2300694.9060	422.87	407.44	MW-17S
743545.7756	2300614.7610	423.54	407.37	MW-18S
743031.6142	2300438.5320	424.46	406.83	MW-19S
743771.3062	2300821.7630	422.18	408.05	MW-20D
743681.7644	2300791.7520	421.83	408.48	MW-21D
743744.4962	2300880.4200	422.70	408.38	MW-22D
743660.6288	2300843.3210	422.41	408.58	MW-23D
743747.1600	2300850.6000	421.68	------	EW-1
743687.1600	2300820.6000	421.96	------	EW-2
743796.5500	2300804.9900	422.45	------	HVI-1
743746.1600	2300775.6000	421.38	------	HVI-2
743668.1600	2300755.6000	421.38	------	HVI-3
743625.1600	2300865.6000	422.03	------	HVI-4
743698.1600	2300900.6000	422.40	------	HVI-5
743756.5800	2300914.9100	422.73	------	HVI-6

BASE CAD DRAWINGS AND ELEVATIONS WERE CREATED BY JUNEAU ASSOCIATES, INC. P.C.

ELEVATIONS AND COORDINATES SHOWN ON MONITORING WELLS ARE TAKEN ON THE NORTH SIDE OF THE INNER CASING

BODINE ENVIRONMENTAL SERVICES, INC.
5350 EAST FIREHOUSE ROAD
DECATUR, ILLINOIS 62521

REVISION #	DATE	DESCRIPTION	DRAWN BY / CHECKED	SCALE	FIGURE
			BODINE PROJECT #	DATE	

APPENDIX A

Weekly Operations Logs

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bading 118007
Site Location: 800 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, DESI
CC: Tom Campbell, BEEI
Treatment Plant File

Date: 1/10/11

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

A1) Combined Extraction Flowrate: 50 gpm
A2) Recirculation Flowrate: ~~54~~ 4 gpm
A3) Calculated Effluent Flowrate: 41 ~~46.5~~ gpm

Number of HWI Wells Operating: 6
Recirculation Pump Running: M-B / M-A
Effluent Pump Running: M-B / M-B

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EWW-1 (M-1)
Flow: 25 gpm
Operating Status: hand / off / auto
Temperature: 62 °F

B2) EWW-2 (M-2)
Flow: 25 gpm
Operating Status: hand / off / auto
Temperature: 62 °F

B3) HWI-1
Flow: 6.7 gpm
Operating Status: On / Off
Packer Pressure: 3 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B4) HWI-2
Flow: 6.7 gpm
Operating Status: On / Off
Packer Pressure: 15 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B5) HWI-3
Flow: 6.7 gpm
Operating Status: On / Off
Packer Pressure: 16 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B6) HWI-4
Flow: 6.7 gpm
Operating Status: On / Off
Packer Pressure: 4 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B7) HWI-5
Flow: 6.7 gpm
Operating Status: On / Off
Packer Pressure: 12 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B8) HWI-6
Flow: 6.7 gpm
Operating Status: On / Off
Packer Pressure: 7 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps

Recirc Pump (M-3)	Operating Status	hand / off / auto	
Recirc Pump (M-4)	Operating Status	hand / off / auto	
	Pressure	16	psi
Effluent Pump (M-5)	Operating Status	hand / off / auto	
Effluent Pump (M-6)	Operating Status	hand / off / auto	
	Pressure	45	psi
Heat Exchanger Pump	Operating Status	hand / off / auto	
	Pressure	45/65	psi
Steam pressure	0.5		

2) Thermometers

From Feed Tank	70.1 °F
IN Heat Exchanger	131.7 °F
OUT Heat Exchanger	150.9 °F
To Wellfield	142.1 °F

3) Pressure

Before Clay	37 psi	Before Carbon	35 psi
After Clay	38 psi	After Carbon	35 psi
Differential	1 psi	Differential	0 psi

4) Effluent Totalizer

Meter Reading	309450 gallons
Time Read	10.4

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of debris	Yes / No
	Empty sump	Yes / No
2) Vapor Phase Blower	Operating Correctly?	Yes / No
4) Building Exhaust Fan	Operating Correctly?	Yes / No
5) Building Louver	Clear of debris	Yes / No
7) Piping and Valves	Intact	Yes / No
8) Building Interior Lights	Operational?	Yes / No
9) Building Exterior Lights	Operational?	Yes / No
10) Building Temperature		72 °F
11) Outdoor Temperature		20 °F
12) DNAPL Solenoid	Status	hand / off / auto
13) Potable Water Solenoid	Status	hand / off / auto

General Comments

E. SAMPLE COLLECTION DATA Events Sample Collected Elimination-Date,Frequency GWOUA0000

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Date: 1/10/11

Operator: Josh Turner

Signature:

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	1/10/2011	116.10	17.79
MW5D	1/10/2011	81.60	16.56
MW20D	1/10/2011	91.60	18.55
MW21D	1/10/2011	89.10	20.66
MW22D	1/10/2011	122.10	18.05
MW23D	1/10/2011	116.10	18.03

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ 30' BGS for MW 5D,5S,20D-23D
LNAPL present from 17.46 to 20.66 in MW21D
Boiler Temperature @ 140 (F) Steam Pressure @ .5

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 118337
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 1-13-2011

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

	B4	After			
A1) Combined Extraction Flowrate	25.6	50.2	gpm	Number of HWI Wells Operating	6
A2) Recirculation Flowrate	19	40.7	gpm	Recirculation Pump Running	M-3 / (M-4)
A3) Calculated Effluent Flowrate	6.6	9.5	gpm	Effluent Pump Running	M-5 / (M-6)

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: 65 °F

B2) EW02 (M-2)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: 66 °F

B3) HWI-1
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 5 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B4) HWI-2
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: 15 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B5) HWI-3
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 16 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B6) HWI-4
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: 5 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B7) HWI-5
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 14 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B8) HWI-6
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: 4 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps

Recirc. Pump (M-3)	Operating Status	hand / off / (auto)	
Recirc. Pump (M-4)	Operating Status	hand / off / (auto)	
	Pressure	48	psi
Effluent Pump (M-5)	Operating Status	hand / off / auto	
Effluent Pump (M-6)	Operating Status	hand / off / auto	
	Pressure	46	psi
Heat Exchanger Pump	Operating Status	hand / off / (auto)	
	Pressure	43/63	psi

Steam PSI 1

2) Thermometers

From Feed Tank	66.9	°F
IN Heat Exchanger	126.3	°F
OUT Heat Exchanger	144.8	°F
To Wellfield	139.8	°F

3) Pressure

Before Clay	38 psi	Before Carbon	36 psi
After Clay	36 psi	After Carbon	36 psi
Differential	~ psi	Differential	0 psi

4) Effluent Totalizer

Meter Reading	3125110	gallons
Time Read	10:37 AM	

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		68 °F
11) Outdoor Temperature		7 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Date: 1-13-2011

Operator:

Signature:

TABL

OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 1-18-11

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

A1) Combined Extraction Flowrate	48.0 gpm	Number of HWI Wells Operating	6
A2) Recirculation Flowrate	42.7 gpm	Recirculation Pump Running	M-3 / (M-4)
A3) Calculated Effluent Flowrate	5.3 gpm	Effluent Pump Running	(M-5) / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: ____ °F

B2) EW02 (M-2)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: ____ °F

B3) HWI-1
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B4) HWI-2
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B5) HWI-3
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B6) HWI-4
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B7) HWI-5
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B8) HWI-6
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

Comments/Notes: CLEANED SYSTEM

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / auto
	Recirc. Pump (M-4)	Operating Status	hand / off / auto
		Pressure	50 psi
	Effluent Pump (M-5)	Operating Status	hand / off / auto
	Effluent Pump (M-6)	Operating Status	hand / off / auto
		Pressure	49 psi
	Heat Exchanger Pump	Operating Status	hand / off / auto
		Pressure	42 and 46 psi
	Heat Exchanger Steam Pressure		1 psi
2) Thermometers		From Feed Tank	42.6 °F
		IN Heat Exchanger	126.1 °F
		OUT Heat Exchanger	159.2 °F
		To Wellfield	142.7 °F

3) Pressure	Before Clay	42 psi	Before Carbon	39 psi
	After Clay	40 psi	After Carbon	39 psi
	Differential	2 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	3183900 gallons
	Time Read	1645

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	Yes / No
	Empty sump	Yes / No
3) Vapor Phase Blower	Operating Correctly?	Yes / No
4) Building Exhaust Fan	Operating Correctly?	Yes / No
5) Building Louver	Clear of debris	Yes / No
7) Piping and valves	Inspect	Yes / No
8) Building Interior Lights	Operational?	Yes / No
9) Building Exterior Lights	Operational?	Yes / No
10) Building Temperature		72 °F
11) Outdoor Temperature		49 °F
12) DNAPL Solenoid	Status	hand / off / auto
13) Potable Water Solenoid	Status	hand / off / auto

General Comments

AN310 - 30 gal

BIOLITE - 51 gal

AN45 - 11.5 gal

Date: 1-18-11

Operator: BRETT BAKER

Signature: [signature]

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFato, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 1/20/11

On arrival was GWOU operating? Yes / No

reset per Brett.

A. GWOU FLOW

A1) Combined Extraction Flowrate 50.4 gpm
A2) Recirculation Flowrate BEFORE 25 / AFTER 2 gpm
A3) Calculated Effluent Flowrate 4 gpm

Number of HWI Wells Operating 6
Recirculation Pump Running M-3 / M-4
Effluent Pump Running M-5 / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / auto
Temperature: — °F
Flow: 25 gpm

B2) EW02 (M-2)
Operating Status: hand / off / auto
Temperature: — °F
Flow: 25 gpm

B3) HWI-1
Operating Status: On / Off
Packer Pressure: — psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F
Flow: 4.7 gpm

B4) HWI-2
Operating Status: On / Off
Packer Pressure: — psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F
Flow: 4.7 gpm

B5) HWI-3
Operating Status: On / Off
Packer Pressure: — psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F
Flow: 4.7 gpm

B6) HWI-4
Operating Status: On / Off
Packer Pressure: — psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F
Flow: 4.7 gpm

B7) HWI-5
Operating Status: On / Off
Packer Pressure: — psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F
Flow: 4.7 gpm

B8) HWI-6
Operating Status: On / Off
Packer Pressure: — psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F
Flow: 4.7 gpm

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	50 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	50 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	28 / 44 psi
	Heat Exchanger Steam Pressure		1 psi
2) Thermometers		From Feed Tank	54.3 °F
		IN Heat Exchanger	~~144.2~~ 155 °F
		OUT Heat Exchanger	~~125~~ 176 °F
		To Wellfield	~~142~~ 152 °F

3) Pressure	Before Clay	20 psi	Before Carbon	15 psi
	After Clay	17 psi	After Carbon	15 psi
	Differential	3 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	3191040 gallons
	Time Read	4:30 pm

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		73 °F
11) Outdoor Temperature		22 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

BIOCIDE 5 gal

AN 400 11.5 gal

AN 300 28 gal

Date: 1/20/11

Operator: Jason Mayer

Signature: [signature]

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Boding 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 1-24-10

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

	B4	After	
A1) Combined Extraction Flowrate	10.53	51.5	gpm
A2) Recirculation Flowrate	37.2	42.0	gpm
A3) Calculated Effluent Flowrate	3.33	9.5	gpm

Number of HWI Wells Operating: 6
Recirculation Pump Running: (M-3) / M-4
Effluent Pump Running: (M-5) / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: 67° °F

B2) EW02 (M-2)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: 59° °F

B3) HWI-1
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 5 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B4) HWI-2
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 15 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B5) HWI-3
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 16 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B6) HWI-4
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 5 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B7) HWI-5
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 14 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B8) HWI-6
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 0 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	21 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	48 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	46/66 psi
	Heat Exchanger Steam Pressure		1 psi
2) Thermometers		From Feed Tank	67.6 °F
		IN Heat Exchanger	127.0 °F
		OUT Heat Exchanger	139.2 °F
		To Wellfield	134.9 °F

3) Pressure	Before Clay	43 psi	Before Carbon	35 psi
	After Clay	39 psi	After Carbon	38 psi
	Differential	4 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	3212240 gallons
	Time Read	10:30

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		78 °F
11) Outdoor Temperature		34 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

AN 400 11.5 G

Biocide 5.1 G

AN 310 22 G AN 750 10 G

Date: 1-24-10

Operator:

Signature: Donald S Ace

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	01/24/01	117° F	18.18
MW5D		83.2 F	16.9
MW20D		94.5 F	18.89
MW21D		88.9 F	17.8 oil / 21.1 water
MW22D		122.1 F	18.41
MW23D		113.6 F	18.38

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ 30' BGS for MW 5D,5S,20D-23D
LNAPL present from
Boiler Temperature @ 140 (F) Steam Pressure @ .5

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 1/27/11

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

	Before / After filter change	
A1) Combined Extraction Flowrate	47.5 / 50	gpm
A2) Recirculation Flowrate	27.5 / 40	gpm
A3) Calculated Effluent Flowrate	10	gpm

Number of HWI Wells Operating: 6

Recirculation Pump Running: (M-3) / M-4

Effluent Pump Running: M-5 / (M-6)

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: ___ °F

B2) EW02 (M-2)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: ___ °F

B3) HWI-1
Operating Status: On / Off
Flow: 4.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B4) HWI-2
Operating Status: On / Off
Flow: 4.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B5) HWI-3
Operating Status: On / Off
Flow: 4.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B6) HWI-4
Operating Status: On / Off
Flow: 4.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B7) HWI-5
Operating Status: On / Off
Flow: 4.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B8) HWI-6
Operating Status: On / Off
Flow: 4.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	18 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	48 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	46 / 42 psi
	Heat Exchanger Steam Pressure		2 psi
2) Thermometers		From Feed Tank	47.1 °F
		IN Heat Exchanger	128.6 °F
		OUT Heat Exchanger	144.1 °F
		To Wellfield	138.3 °F

3) Pressure	Before Clay	22 psi	Before Carbon	18 psi
	After Clay	19 psi	After Carbon	18 psi
	Differential	3 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	3252780 gallons
	Time Read	4:30 pm

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		72 °F
11) Outdoor Temperature		38 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

BIOCIDE: 49 gal

AN400: 21 gal

AN310: 47 gal

Date: 1/27/11

Operator: Jason Mayer

Signature: [signature]

E. SAMPLE COLLECTION DATA

Example Sample Designation <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Date: 2/3/11

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

A1) Combined Extraction Flowrate	BA 46.5 gpm	Number of HWI Wells Operating	6
A2) Recirculation Flowrate	40 gpm	Recirculation Pump Running	M-3 / M-4
A3) Calculated Effluent Flowrate	6.5 gpm	Effluent Pump Running	M-5 / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)	Operating Status	hand / off / auto	B2) EW02 (M-2)	Operating Status	hand / off / auto
Flow 25 gpm	Temperature	°F	Flow 25 gpm	Temperature	°F
B3) HWI-1	Operating Status	On / Off	B4) HWI-2	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F
B5) HWI-3	Operating Status	On / Off	B6) HWI-4	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F
B7) HWI-5	Operating Status	On / Off	B8) HWI-6	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	50 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	45 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	44/62 psi
	Heat Exchanger Steam Pressure		2 psi
2) Thermometers		From Feed Tank	69.9 °F
		IN Heat Exchanger	124.1 °F
		OUT Heat Exchanger	140.5 °F
		To Wellfield	137.8 °F

3) Pressure	Before Clay	32 psi	Before Carbon	30 psi
	After Clay	32 psi	After Carbon	30 psi
	Differential	0 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	~~[illegible]~~ 3321400 gallons
	Time Read	4:50 pm

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		69 °F
11) Outdoor Temperature		21 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

BIOCIDE : 47 gal

AN400 : 49 gal

AN310 : 49 gal

Date: 2/3/11

Operator: Jason Clay

Signature: [illegible]

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 2-7-11

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

A1) Combined Extraction Flowrate	51.3 / ~~49.0~~ 56.2 gpm	Number of HWI Wells Operating: 6
A2) Recirculation Flowrate	40.4 / 43.6 gpm	Recirculation Pump Running: (M-3) / M-4
A3) Calculated Effluent Flowrate	10.9 / 12.6 gpm	Effluent Pump Running: (M-5) / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / (auto)
Flow: _____ gpm
Temperature: 68 °F

B2) EW02 (M-2)
Operating Status: hand / off / (auto)
Flow: _____ gpm
Temperature: 68 °F

B3) HWI-1
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 15 Filled to 15 psi
Temperature: Low _____ °F; Med _____ °F; High _____ °F

B4) HWI-2
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 15 psi
Temperature: Low _____ °F; Med _____ °F; High _____ °F

B5) HWI-3
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 16 psi
Temperature: Low _____ °F; Med _____ °F; High _____ °F

B6) HWI-4
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 14 Filled to 15 psi
Temperature: Low _____ °F; Med _____ °F; High _____ °F

B7) HWI-5
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 14 psi
Temperature: Low _____ °F; Med _____ °F; High _____ °F

B8) HWI-6
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 2 Filled to 10 psi
Temperature: Low _____ °F; Med _____ °F; High _____ °F

Comments/Notes: [illegible]

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	21 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	48 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	45/64 psi
	Heat Exchanger Steam Pressure		2 psi
2) Thermometers		From Feed Tank	69.9 °F
		IN Heat Exchanger	126.1 °F
		OUT Heat Exchanger	139.2 °F
		To Wellfield	135.5 °F

3) Pressure	Before Clay	37 psi	Before Carbon	35 psi
	After Clay	36 psi	After Carbon	35 psi
	Differential	1 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	3364560 gallons
	Time Read	9:43 Am

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		67 °F
11) Outdoor Temperature		30 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

400 / 40 bal . Biocide / 45.5 gal 6.5 extra

790 / 48 bal

310 / 41 in process Dam 71 extra

Date: 2-7-11

Operator:

Signature: Donald B Abbe

E. SAMPLE COLLECTION DATA

Example Sample Designation <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	2-7-11	116.1 F	18.35
MW5D	2-7-11	96 F	17.12
MW20D	2-7-11	97 F	19.07
MW21D	2-7-11	89.1 F	17.99 2.13
MW22D	2-7-11	123 F	18.59
MW23D	2-7-11	117 F	18.55

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ 30' BGS for MW 5D,5S,20D-23D
LNAPL present from
Boiler Temperature @ 140 (F) Steam Pressure @ .5

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 2/10/11

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

B4 / After

A1) Combined Extraction Flowrate 48.5 / 47 gpm
A2) Recirculation Flowrate 42 / 43 gpm
A3) Calculated Effluent Flowrate 6.5 / 4 gpm

Number of HWI Wells Operating 6
Recirculation Pump Running (M-3) / M-4
Effluent Pump Running (M-5) / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1) Operating Status hand / off / (auto)
Flow 25 gpm
Temperature °F

B2) EW02 (M-2) Operating Status hand / off / (auto)
Flow 25 gpm
Temperature °F

B3) HWI-1 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure psi
Temperature Low °F
Med °F
High °F

B4) HWI-2 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure psi
Temperature Low °F
Med °F
High °F

B5) HWI-3 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure psi
Temperature Low °F
Med °F
High °F

B6) HWI-4 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure psi
Temperature Low °F
Med °F
High °F

B7) HWI-5 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure psi
Temperature Low °F
Med °F
High °F

B8) HWI-6 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure psi
Temperature Low °F
Med °F
High °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	19 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	45 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	45/65 psi
	Heat Exchanger Steam Pressure		1.5 psi
2) Thermometers		From Feed Tank	70.3 °F
		IN Heat Exchanger	124.3 °F
		OUT Heat Exchanger	137.4 °F
		To Wellfield	134.2 °F

3) Pressure	Before Clay	35 psi	Before Carbon	32 psi
	After Clay	33 psi	After Carbon	31 psi
	Differential	2 psi	Differential	1 psi

4) Effluent Totalizer	Meter Reading	3400910 gallons
	Time Read	4:30 pm

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		67 °F
11) Outdoor Temperature		34 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

BIOCIDE 44.5 gal

AN 400 31.5 gal

AN 310 35 gal

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Date: 2/10/11

Operator: Jason Morgan

Signature: J Morgan

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 2/14/11

B/4 / AFTER

On arrival was GWOU operating? (Yes) No

A. GWOU FLOW

A1) Combined Extraction Flowrate	49 / 49 gpm	Number of HWI Wells Operating	6
A2) Recirculation Flowrate	30 / 41 gpm	Recirculation Pump Running	(M-3) / M-4
A3) Calculated Effluent Flowrate	11 / 8 gpm	Effluent Pump Running	~~M-5~~ / (M-6)

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)	Operating Status	hand / off / (auto)	B2) EW02 (M-2)	Operating Status	hand / off / (auto)
Flow 25 gpm	Temperature	— °F	Flow 25 gpm	Temperature	— °F
B3) HWI-1	Operating Status	On / Off	B4) HWI-2	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F
B5) HWI-3	Operating Status	On / Off	B6) HWI-4	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F
B7) HWI-5	Operating Status	On / Off	B8) HWI-6	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / auto
	Recirc. Pump (M-4)	Operating Status	hand / off / auto
		Pressure	19 psi
	Effluent Pump (M-5)	Operating Status	hand / off / auto
	Effluent Pump (M-6)	Operating Status	hand / off / auto
		Pressure	46 psi
	Heat Exchanger Pump	Operating Status	hand / off / auto
		Pressure	44/46 psi
	Heat Exchanger Steam Pressure		1.5 psi
2) Thermometers		From Feed Tank	71.6 °F
		IN Heat Exchanger	126.1 °F
		OUT Heat Exchanger	138.2 °F
		To Wellfield	135 °F

3) Pressure	Before Clay	35 psi	Before Carbon	32 psi
	After Clay	33 psi	After Carbon	32 psi
	Differential	2 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	3444660 gallons
	Time Read	4:40 pm

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmdoyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	Yes / No
	Empty sump	Yes / No
3) Vapor Phase Blower	Operating Correctly?	Yes / No
4) Building Exhaust Fan	Operating Correctly?	Yes / No
5) Building Louver	Clear of debris	Yes / No
7) Piping and valves	Inspect	Yes / No
8) Building Interior Lights	Operational?	Yes / No
9) Building Exterior Lights	Operational?	Yes / No
10) Building Temperature		79 °F
11) Outdoor Temperature		55 °F
12) DNAPL Solenoid	Status	hand / off / auto
13) Potable Water Solenoid	Status	hand / off / auto

General Comments

B10 42.5 gal

AN400 22.5 gal

AN310 27.5 gal

Date: 2/14/11

Operator: J Asan Mayer

Signature: J Mayer

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 02-18-2011 (FRIDAY)

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

A1) Combined Extraction Flowrate	51 gpm	Number of HWI Wells Operating	6
A2) Recirculation Flowrate	42 gpm	Recirculation Pump Running	M-3 / (M-4)
A3) Calculated Effluent Flowrate	41.0 / 10.5 gpm	Effluent Pump Running	(M-5) / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1) — Operating Status: hand / off / (auto)
Flow: 24.5 gpm — Temperature: 66° °F

B2) EW02 (M-2) — Operating Status: hand / off / (auto)
Flow: 24.5 gpm — Temperature: 58° °F

B3) HWI-1 — Operating Status: (On) / Off
Flow: 7 gpm — Packer Pressure: 6 psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B4) HWI-2 — Operating Status: (On) / Off
Flow: 7 gpm — Packer Pressure: psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B5) HWI-3 — Operating Status: (On) / Off
Flow: 7 gpm — Packer Pressure: psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B6) HWI-4 — Operating Status: (On) / Off
Flow: 7 gpm — Packer Pressure: psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B7) HWI-5 — Operating Status: (On) / Off
Flow: 7 gpm — Packer Pressure: psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B8) HWI-6 — Operating Status: (On) / Off
Flow: 7 gpm — Packer Pressure: psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

Comments/Notes: PACKER #1 - NOT HOLDING AIR PRESSURE
Packer #4 - WILL ONLY HOLD 5.0 PSI.
Boiler Blow Down / TP, Bottom & Relief VALVE SIGHT GLASS

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / auto
	Recirc. Pump (M-4)	Operating Status	hand / off / auto
		Pressure	49.0 psi
	Effluent Pump (M-5)	Operating Status	hand / off / auto
	Effluent Pump (M-6)	Operating Status	hand / off / auto
		Pressure	48.0 psi
	Heat Exchanger Pump	Operating Status	hand / off / auto
		Pressure	43/59 16 diff psi
	Heat Exchanger Steam Pressure		0.5 psi
2) Thermometers		From Feed Tank	71.2 °F
		IN Heat Exchanger	143.2 °F
		OUT Heat Exchanger	151.7 °F
		To Wellfield	143 °F

3) Pressure	Before Clay	40 psi	Before Carbon	40 psi
	After Clay	40 psi	After Carbon	40 psi
	Differential	∅ psi	Differential	∅ psi

4) Effluent Totalizer	Meter Reading 8:20 A.M.	3,471,470 gallons
	Time Read	10:56 PM

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	Yes / No
	Empty sump	Yes / No
3) Vapor Phase Blower	Operating Correctly?	Yes / No
4) Building Exhaust Fan	Operating Correctly?	Yes / No
5) Building Louver	Clear of debris	Yes / No
7) Piping and valves	Inspect	Yes / No
8) Building Interior Lights	Operational?	Yes / No
9) Building Exterior Lights	Operational?	Yes / No
10) Building Temperature		74 °F
11) Outdoor Temperature		48 °F
12) DNAPL Solenoid	Status	hand / off / auto
13) Potable Water Solenoid	Status	hand / off / auto

General Comments 8:30AM

AN 400 15.5 GALLONS

AN 310 41.0 GALLONS

AN 750 - 25 GALLONS

~~AN~~ BIOCIDE - 42.0 GALLONS

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA003009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Collected Samples on 02/16/11

Date: 02/18/11 FRIDAY

Operator: RICK EVEY

Signature: [signature]

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	2/18/11	117.2	18.14
MW5D		87.2	16.93
MW20D		97.2	18.87
MW21D		97.6	17.82 → 20.89
MW22D		122.1	18.42
MW23D	↓	115.9	18.35

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ 30' BGS for MW 5D,5S,20D-23D
LNAPL present from
Boiler Temperature @ 140 (F) Steam Pressure @ .5

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Date: 2/24/11

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

A1) Combined Extraction Flowrate 52 gpm
A2) Recirculation Flowrate 41 gpm
A3) Calculated Effluent Flowrate 11 gpm

Number of HWI Wells Operating 6
Recirculation Pump Running M-3 / M-4
Effluent Pump Running M-5 / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1) Operating Status hand / off / auto
Flow 25 gpm
Temperature ____ °F

B2) EW02 (M-2) Operating Status hand / off / auto
Flow 25 gpm
Temperature ____ °F

B3) HWI-1 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure ____ psi
Temperature Low ____ °F
Med ____ °F
High ____ °F

B4) HWI-2 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure ____ psi
Temperature Low ____ °F
Med ____ °F
High ____ °F

B5) HWI-3 Operating Status On / Off
Flow 6.7 gpm
Packer Pressure ____ psi
Temperature Low ____ °F
Med ____ °F
High ____ °F

B6) HWI-4 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure ____ psi
Temperature Low ____ °F
Med ____ °F
High ____ °F

B7) HWI-5 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure ____ psi
Temperature Low ____ °F
Med ____ °F
High ____ °F

B8) HWI-6 Operating Status On / Off
Flow 4.7 gpm
Packer Pressure ____ psi
Temperature Low ____ °F
Med ____ °F
High ____ °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / auto
	Recirc. Pump (M-4)	Operating Status	hand / off / auto
		Pressure	112 psi
	Effluent Pump (M-5)	Operating Status	hand / off / auto
	Effluent Pump (M-6)	Operating Status	hand / off / auto
		Pressure	46 psi
	Heat Exchanger Pump	Operating Status	hand / off / auto
		Pressure	45/62 psi
	Heat Exchanger Steam Pressure		2 psi psi
2) Thermometers		From Feed Tank	69.9 °F
		IN Heat Exchanger	125 °F
		OUT Heat Exchanger	138.5 °F
		To Wellfield	137.1 °F

3) Pressure	Before Clay	39 psi	Before Carbon	36 psi
	After Clay	38 psi	After Carbon	36 psi
	Differential	1 psi	Differential	— psi

4) Effluent Totalizer	Meter Reading	3554100 gallons
	Time Read	5:00pm

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	Yes / No
	Empty sump	Yes / No
3) Vapor Phase Blower	Operating Correctly?	Yes / No
4) Building Exhaust Fan	Operating Correctly?	Yes / No
5) Building Louver	Clear of debris	Yes / No
7) Piping and valves	Inspect	Yes / No
8) Building Interior Lights	Operational?	Yes / No
9) Building Exterior Lights	Operational?	Yes / No
10) Building Temperature		65 °F
11) Outdoor Temperature		37 °F
12) DNAPL Solenoid	Status	hand / off / auto
13) Potable Water Solenoid	Status	hand / off / auto

General Comments

AN 310 - 50 gal

BIO - 39.5 gal

AN 40 47.5 gal

Date: 2/24/11

Operator: Jason Wagner

Signature: [signature]

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 3/3/101

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

	Bf	After	
A1) Combined Extraction Flowrate	51.2	52	gpm
A2) Recirculation Flowrate	39.3	42.5	gpm
A3) Calculated Effluent Flowrate	11.9	9.5	gpm

Number of HWI Wells Operating: 6
Recirculation Pump Running: M-3 / M-4
Effluent Pump Running: M-5 / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / auto
Flow: 25 gpm
Temperature: ___ °F

B2) EW02 (M-2)
Operating Status: hand / off / auto
Flow: 25 gpm
Temperature: ___ °F

B3) HWI-1
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B4) HWI-2
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B5) HWI-3
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B6) HWI-4
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B7) HWI-5
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

B8) HWI-6
Operating Status: On / Off
Flow: 6.7 gpm
Packer Pressure: ___ psi
Temperature: Low ___ °F, Med ___ °F, High ___ °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	20 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	49 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	46 / 65 psi
	Heat Exchanger Steam Pressure		1.5 psi
2) Thermometers		From Feed Tank	71.9 °F
		IN Heat Exchanger	132.2 °F
		OUT Heat Exchanger	147.2 °F
		To Wellfield	139.1 °F

3) Pressure	Before Clay	38 psi	Before Carbon	35 psi
	After Clay	36 psi	After Carbon	35 psi
	Differential	2 psi	Differential	— psi

4) Effluent Totalizer	Meter Reading	3633 700 gallons
	Time Read	

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		77 °F
11) Outdoor Temperature		64 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

B10 - 37.5gal

AN400 - 31.5

AN310 - 37gal

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Date: 3/3/11

Operator: Jason Mayer

Signature: [signature]

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 3-7-11

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

	B4	After	
A1) Combined Extraction Flowrate	33.2	45.6	gpm
A2) Recirculation Flowrate	27.7	38.6	gpm
A3) Calculated Effluent Flowrate	5.5	7	gpm

Number of HWI Wells Operating: 6
Recirculation Pump Running: (M-3) / M-4
Effluent Pump Running: M-5 / (M-6)

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: 70 °F

B2) EW02 (M-2)
Operating Status: hand / off / (auto)
Flow: 25 gpm
Temperature: 60 °F

B3) HWI-1
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 5 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B4) HWI-2
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 15 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B5) HWI-3
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 16 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B6) HWI-4
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 6 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B7) HWI-5
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 14 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

B8) HWI-6
Operating Status: (On) / Off
Flow: 6.7 gpm
Packer Pressure: 11 psi
Temperature: Low ___ °F; Med ___ °F; High ___ °F

Comments/Notes: upon arrival a coupler on bottom of inlet line was leaking where AN 400 is injected turned off pump and closed valve till system shutdown for repair

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	19 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	48 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	45/66 psi
	Heat Exchanger Steam Pressure		psi
2) Thermometers		From Feed Tank	70.1 °F
		IN Heat Exchanger	129 °F
		OUT Heat Exchanger	143.2 °F
		To Wellfield	134.6 °F

3) Pressure	Before Clay	38 psi	Before Carbon	35 psi
	After Clay	36 psi	After Carbon	35 psi
	Differential	2 psi	Differential	0 psi

4) Effluent Totalizer	Meter Reading	3678360 gallons
	Time Read	9:37

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		72 °F
11) Outdoor Temperature		35 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments: Biocide 35 gal / 5 Gal standby
15 standby
400 25 gal 310 30 gal in system 92 standby
7500 25.5 gal

Date: 3-7-11

Operator: D Hall

Signature: Donald R Hall

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	3-7-11	118.7 F	17.45
MW5D	3-7-11	88.6 F	16.23
MW20D	3-7-11	97.2 F	18.16
MW21D	3-7-11	90.6 F	~~oil~~ 17.15 water 19.63
MW22D	3-7-11	121.7 F	17.72
MW23D	3-7-11	117 F	17.69

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ 30' BGS for MW 5D,5S,20D-23D
LNAPL present from
Boiler Temperature @ 140 (F) Steam Pressure @ .5

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 3/10/11

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

	B4 / After		
A1) Combined Extraction Flowrate	51.1 / 51	gpm	Number of HWI Wells Operating: 6
A2) Recirculation Flowrate	39.0 / 42	gpm	Recirculation Pump Running: M-3 / M-4
A3) Calculated Effluent Flowrate	12.1 / 9	gpm	Effluent Pump Running: M-5 / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)	Operating Status	hand / off / auto	B2) EW02 (M-2)	Operating Status	hand / off / auto
Flow 25 gpm	Temperature	°F	Flow 25 gpm	Temperature	°F
B3) HWI-1	Operating Status	On / Off	B4) HWI-2	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F
B5) HWI-3	Operating Status	On / Off	B6) HWI-4	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F
B7) HWI-5	Operating Status	On / Off	B8) HWI-6	Operating Status	On / Off
Flow 6.7 gpm	Packer Pressure	psi	Flow 6.7 gpm	Packer Pressure	psi
	Temperature Low	°F		Temperature Low	°F
	Med	°F		Med	°F
	High	°F		High	°F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	50 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	47 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	43/61 psi
	Heat Exchanger Steam Pressure		2 psi
2) Thermometers		From Feed Tank	71.9 °F
		IN Heat Exchanger	130.1 °F
		OUT Heat Exchanger	142.5 °F
		To Wellfield	138.92 °F

3) Pressure	Before Clay	40 psi	Before Carbon	37 psi
	After Clay	38 psi	After Carbon	37 psi
	Differential	2 psi	Differential	— psi

4) Effluent Totalizer	Meter Reading	3709670 gallons
	Time Read	2:30pm

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
6) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		73 °F
11) Outdoor Temperature		43 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

BIO - 38 gal

AN 400 - 38 gal

AN 310 - 48.5 gal

Date: 3/10/11

Operator: Jason Mayer

Signature: J Mayer

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093039

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site.
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 03/14/2011

On arrival was GWOU operating? (Yes) / No

A. GWOU FLOW

A1) Combined Extraction Flowrate 52.2 gpm
A2) Recirculation Flowrate Before bag change 35/40.2 After bag change gpm
A3) Calculated Effluent Flowrate 41.2/10 gpm (To Field) (To Sanitary)

Number of HWI Wells Operating 6
Recirculation Pump Running (M-3) / M-4
Effluent Pump Running (M-5) / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1) Operating Status hand / off / (auto)
Flow 26.1 gpm Temperature 67° °F

B2) EW02 (M-2) Operating Status hand / off / (auto)
Flow 26.1 gpm Temperature 59° °F

B3) HWI-1 Operating Status (On) / Off
Flow 6.7 gpm Packer Pressure Ø psi
Temperature Low X °F
Med ↓ °F
High ↓ °F

B4) HWI-2 Operating Status (On) / Off
Flow 6.2 gpm Packer Pressure 14 psi
Temperature Low X °F
Med ↓ °F
High ↓ °F

B5) HWI-3 Operating Status (On) / Off
Flow 6.7 gpm Packer Pressure 14 psi
Temperature Low X °F
Med ↓ °F
High ↓ °F

B6) HWI-4 Operating Status (On) / Off
Flow 6.7 gpm Packer Pressure 5 psi
Temperature Low X °F
Med ↓ °F
High ↓ °F

B7) HWI-5 Operating Status (On) / Off
Flow 6.7 gpm Packer Pressure 14 psi
Temperature Low X °F
Med ↓ °F
High ↓ °F

B8) HWI-6 Operating Status (On) / Off
Flow 6.2 gpm Packer Pressure 14 psi
Temperature Low X °F
Med ↓ °F
High ↓ °F

Comments/Notes – Packer #1 & #4 – NOT HOLDING AIR.
– Both Blow Down TOP/BOTTOM of SIGHT GLASS.

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / (off) / auto
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	51 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / (off) / auto
		Pressure	49 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	64/44 psi
	Heat Exchanger Steam Pressure		0.5 psi
2) Thermometers		From Feed Tank	71.6 °F
		IN Heat Exchanger	131.5 °F
		OUT Heat Exchanger	151.7 °F
		To Wellfield	142.3 °F

3) Pressure		Before	After		Before	After	
	Before Clay	34	42	psi	Before Carbon	30	35 psi
	After Clay	31	39	psi	After Carbon	30	35 psi
	Differential	3	3	psi	Differential	Ø	Ø psi

4) Effluent Totalizer	Meter Reading	3,764,050 gallons
	Time Read	10.0 GPM

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No) Partial
	Pump OUT ON 03/21/2011	
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		72 °F
11) Outdoor Temperature		37 °F
12) DNAPL Solenoid	Status	hand / off / auto
13) Potable Water Solenoid	Status	hand / off / auto

General Comments: FLOW METER (INFLUENT) APPX 485GPM FOLLOWING REPAIR TO CLAY/CARBON TANKS WAS NOT FUNCTIONING. DISASSEMBLED, CLEANED AND REASSEMBLED.
AN 3104 (55GAL) AN 400 (29GAL) BIOCIDE (37GAL) AN 750C (12.5GAL)

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / (No)
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Date: 03/14/2011

Operator: Rick Every

Signature: [signature]

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	03/14/2011	117.6	17.11
MW5D		90.6	15.82
MW20D		93.6	17.00
MW21D		95.9	LNAPL 16.82 / H_2O 19.15
MW22D		119.7	17.38
MW23D		116.5	17.35

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ 30' BGS for MW 5D,5S,20D-23D
LNAPL present from 16.82 → 19.15
Boiler Temperature @ 140 (F) Steam Pressure @ .5

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 3/17/11

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

B4/ Affix

A1) Combined Extraction Flowrate	55.2 / 54 gpm	Number of HWI Wells Operating	6
A2) Recirculation Flowrate	36.8 / 41 gpm	Recirculation Pump Running	M-3 / M-4
A3) Calculated Effluent Flowrate	18.4 / 13 gpm	Effluent Pump Running	M-5 / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1) — Operating Status: hand / off / auto
Flow: ✓ gpm — Temperature: ____ °F

B2) EW02 (M-2) — Operating Status: hand / off / auto
Flow: ____ gpm — Temperature: ____ °F

B3) HWI-1 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B4) HWI-2 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B5) HWI-3 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B6) HWI-4 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B7) HWI-5 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B8) HWI-6 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

Comments/Notes ____

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / auto
	Recirc. Pump (M-4)	Operating Status	hand / off / auto
		Pressure	21 psi
	Effluent Pump (M-5)	Operating Status	hand / off / auto
	Effluent Pump (M-6)	Operating Status	hand / off / auto
		Pressure	46 psi
	Heat Exchanger Pump	Operating Status	hand / off / auto
		Pressure	45/65 psi
	Heat Exchanger Steam Pressure		1.5 psi
2) Thermometers		From Feed Tank	73.4 °F
		IN Heat Exchanger	132.9 °F
		OUT Heat Exchanger	149 °F
		To Wellfield	141.4 °F

3) Pressure	Before Clay	36 psi	Before Carbon	31 psi
	After Clay	32 psi	After Carbon	32 psi
	Differential	4 psi	Differential	-1 psi

4) Effluent Totalizer	Meter Reading	3806490 gallons
	Time Read	3:00pm

E. SAMPLE COLLECTION DATA

Example Sample Designation. <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	Yes / No
	Empty sump	Yes / No
3) Vapor Phase Blower	Operating Correctly?	Yes / No
4) Building Exhaust Fan	Operating Correctly?	Yes / No
5) Building Louver	Clear of debris	Yes / No
7) Piping and valves	Inspect	Yes / No
8) Building Interior Lights	Operational?	Yes / No
9) Building Exterior Lights	Operational?	Yes / No
10) Building Temperature		86 °F
11) Outdoor Temperature		81 °F
12) DNAPL Solenoid	Status	hand / off / auto
13) Potable Water Solenoid	Status	hand / off / auto

General Comments

BIO - 35.5gal

AN400 - 21gal

AN310 - 30gal

Date: 3/17/11

Operator: Jason Mayer

Signature: [illegible]

TABLE 2
OPERATIONS LOG

Site Name: Jonnison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 03/22/11

On arrival was GWOU operating? Yes / No
Restarted @ APPX 12:00 P.M.

A. GWOU FLOW

A1) Combined Extraction Flowrate (Prior to clean 03/21/11 52.0)	50.2 gpm		Number of HWI Wells Operating	6
A2) Recirculation Flowrate (30.5)	40.2 gpm		Recirculation Pump Running	M-3 / M-4
A3) Calculated Effluent Flowrate (10/38.0)	10.0 / 42.5 gpm		Effluent Pump Running	M-5 / M-6

SANITARY field

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)	Operating Status	hand / off / auto	B2) EW02 (M-2)	Operating Status	hand / off / auto
Flow	Temperature	66° °F	Flow	Temperature	60° °F
25.1 gpm	42.5 Flow Meter OUT Feed Tank	47.5 Flow meter IN SANITARY	25.1 gpm		
B3) HWI-1	Operating Status	On / Off	B4) HWI-2	Operating Status	On / Off
Flow	Packer Pressure	6 psi	Flow	Packer Pressure	12 psi
7 gpm	Temperature Low	X °F	7 gpm	Temperature Low	X °F
	Med	↓ °F		Med	↓ °F
	High	↓ °F		High	↓ °F
B5) HWI-3	Operating Status	On / Off	B6) HWI-4	Operating Status	On / Off
Flow	Packer Pressure	14 psi	Flow	Packer Pressure	5 psi
7 gpm	Temperature Low	X °F	7 gpm	Temperature Low	X °F
	Med	↓ °F		Med	↓ °F
	High	↓ °F		High	↓ °F
B7) HWI-5	Operating Status	On / Off	B8) HWI-6	Operating Status	On / Off
Flow	Packer Pressure	13 psi	Flow	Packer Pressure	13 psi
7 gpm	Temperature Low	X °F	7 gpm	Temperature Low	X °F
	Med	↓ °F		Med	↓ °F
	High	↓ °F		High	↓ °F

Comments/Notes: BOILER BLOW DOWN COMPLETED @ 1:35 P.M. TIGHTENED COUPLING ON EFFLUENT PIPING (10" HDPE - EXTRACTION PIPE) - NO LEAKS. backwashed clay 3-21-11 CARBON 3-22-11

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / auto
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	52 psi
	Effluent Pump (M-5)	Operating Status	hand / off / auto
	Effluent Pump (M-6)	Operating Status	hand / off / auto
	0.5 - 3/21/11	Pressure	48 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
	45/66 - 3/21/11	Pressure	43/60 psi
	Heat Exchanger Steam Pressure		0.5 psi
2) Thermometers		From Feed Tank	60.6 °F
		IN Heat Exchanger	153.0 °F
		OUT Heat Exchanger	170.4 °F
		To Wellfield	151.7 °F

		3/21/11		3/21/11 33	
3) Pressure	Before Clay	40	41 psi	Before Carbon	40 psi
	After Clay	35	41 psi	After Carbon 33	46 psi
	Differential	5	0 psi	Differential	0 0 psi

		3/21/11		
4) Effluent Totalizer	Meter Reading	3,858,290	3,859,510	gallons
	Time Read	10.0GPM.	10.0 GPM	

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No	
	Empty sump	(Yes) / No	
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No	
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No	
5) Building Louver	Clear of debris	(Yes) / No	
7) Piping and valves	Inspect	(Yes) / No	
8) Building Interior Lights	Operational?	(Yes) / No	
9) Building Exterior Lights	Operational?	(Yes) / No	
10) Building Temperature		78 °F	
11) Outdoor Temperature		70 °F	
12) DNAPL Solenoid	Status	hand / (off) / auto	
13) Potable Water Solenoid	Status	hand / off / (auto)	

General Comments BICIDE - 30GAL.

AN 400 - 11.5 GAL, AN 7500 - 0

AN 300 - 50.0GAL / 55 GAL ON RESERVE,

ADDED ANTIFREEZE TO GENERATOR. LI ~~WATER~~ COOLANT

LIGHT WAS LIT

Date: 03/22/11

Operator: R. D. Every

Signature:

E. SAMPLE COLLECTION DATA

Example Sample Designation. <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / (No)
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	03/22/11	117.0	17.21
MW5D		100.1	15.47
MW20D		111.9	17.30
MW21D		99.9	16.37 / 18.77
MW22D		120.9	16.98
MW23D		120.1	17.10

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ ~~30'~~ 35' BGS for MW 5D, 5S, 20D-23D (30')
LNAPL present from
Boiler Temperature @ 140 (F) Steam Pressure @ .5

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site.
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Date: 3/24/11

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

	Bf / After	
A1) Combined Extraction Flowrate	50 / 51	gpm
A2) Recirculation Flowrate	33.1 / 42	gpm
A3) Calculated Effluent Flowrate	16.9 / 9	gpm

Number of HWI Wells Operating: 6
Recirculation Pump Running: M-3 / M-4
Effluent Pump Running: M-5 / M-6

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1)
Flow ____ gpm
Operating Status: hand / off / auto
Temperature ____ °F

B2) EW02 (M-2)
Flow ____ gpm
Operating Status: hand / off / auto
Temperature ____ °F

B3) HWI-1
Flow 4.7 gpm
Operating Status: On / Off
Packer Pressure ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B4) HWI-2
Flow 4.7 gpm
Operating Status: On / Off
Packer Pressure ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B5) HWI-3
Flow 4.7 gpm
Operating Status: On / Off
Packer Pressure ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B6) HWI-4
Flow 4.7 gpm
Operating Status: On / Off
Packer Pressure ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B7) HWI-5
Flow 4.7 gpm
Operating Status: On / Off
Packer Pressure ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

B8) HWI-6
Flow 4.7 gpm
Operating Status: On / Off
Packer Pressure ____ psi
Temperature: Low ____ °F; Med ____ °F; High ____ °F

Comments/Notes

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)
	Recirc. Pump (M-4)	Operating Status	hand / off / (auto)
		Pressure	51 psi
	Effluent Pump (M-5)	Operating Status	hand / off / (auto)
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)
		Pressure	49 psi
	Heat Exchanger Pump	Operating Status	hand / off / (auto)
		Pressure	44/42 psi
	Heat Exchanger Steam Pressure		1 psi
2) Thermometers		From Feed Tank	72.3 °F
		IN Heat Exchanger	132.4 °F
		OUT Heat Exchanger	142.5 °F
		To Wellfield	141 °F

3) Pressure	Before Clay	29 psi	Before Carbon	26 psi
	After Clay	28 psi	After Carbon	26 psi
	Differential	-1 psi	Differential	— psi

4) Effluent Totalizer	Meter Reading	3889130 gallons
	Time Read	4:50pm

E. SAMPLE COLLECTION DATA

Example Sample Designation: <Location><Date_mmddyy> GWOUA093009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / No
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No)
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		76 °F
11) Outdoor Temperature		42 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments

B10 - 29 gal

310 45 gal

400 - 7.5 gal

Date: 3/24/11

Operator: Jason Mayer

Signature: [signature]

TABLE 2
OPERATIONS LOG

Site Name: Jennison-Wright Corporation Superfund Site
Job Number: Bodine 119386-11
Site Location: 900 West 22nd Street, Granite City, IL

Route originals to: Troy McFate, BESI
CC: Tom Campbell, EEEI
Treatment Plant File

Date: 03/31/11

On arrival was GWOU operating? Yes / No

A. GWOU FLOW

A1) Combined Extraction Flowrate	52.5 gpm	Number of HWI Wells Operating	6
A2) Recirculation Flowrate	(28.5) Arrival (37.5) Departure gpm	Recirculation Pump Running	M-3 / M-4
A3) Calculated Effluent Flowrate	10.0 40.1 gpm	Effluent Pump Running	M-5 / M-6

SANITARY / FIELD

B. GROUNDWATER EXTRACTION/DISCHARGE SYSTEM

B1) EW01 (M-1) — Operating Status: hand / off / auto
Flow: 26.2 gpm — Temperature: 67° °F
OUT 28.5 32.5 IN 10.0 SANITARY — FLOW Meter Readings
37.5 46.5 10.0
ARRIVE DEPT.

B2) EW02 (M-2) — Operating Status: hand / off / auto
Flow: 26.2 gpm — Temperature: 61° °F

B3) HWI-1 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: 0 psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B4) HWI-2 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: 11 psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B5) HWI-3 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: 13 psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B6) HWI-4 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: 5 psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B7) HWI-5 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: 12 psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

B8) HWI-6 — Operating Status: On / Off
Flow: 6.7 gpm — Packer Pressure: 12 psi
Temperature: Low X °F; Med ↓ °F; High ↓ °F

Comments/Notes: POTABLE WATER ON DUE TO LOW PRESSURE IN CLAY/CARBON TANKS, INFLUENT BAG FILTERS CLOGGED. BOILER BLOW DOWN. PUMPED CHEM AQUA chemical MIXTURE INTO BOTH FEED TANKS

C. GROUNDWATER TREATMENT SYSTEM

1) Pumps	Recirc. Pump (M-3)	Operating Status	hand / off / (auto)	
	Recirc. Pump (M-4)	Operating Status	hand / (off) / auto	
		Pressure	2 GAGE NOT-FUNCTIONING	psi
	Effluent Pump (M-5)	Operating Status	hand / (off) / auto	
	Effluent Pump (M-6)	Operating Status	hand / off / (auto)	
		Pressure	48	psi
	Heat Exchanger Pump	Operating Status ARRIVAL	(hand) / off / (auto) DEPARTURE	
		Pressure	44/64	psi
	Heat Exchanger Steam Pressure		1.0	psi
2) Thermometers		From Feed Tank	70.7	°F
		IN Heat Exchanger	131.9	°F
		OUT Heat Exchanger	148.6	°F
		To Wellfield	137.8	°F

3) Pressure	Before	After		Before	After	
Before Clay	27	46	psi	Before Carbon	20	31	psi
After Clay	21	34	psi	After Carbon	20	31	psi
Differential	6	6	psi	Differential	0	0	psi

4) Effluent Totalizer	Meter Reading	3,960,910	gallons
	Time Read	10.0 GPM	

D. BUILDING SYSTEMS

1) Building Sump Level Switch	Clear of Debris	(Yes) / No
	Empty sump	Yes / (No) 1/4 full
3) Vapor Phase Blower	Operating Correctly?	(Yes) / No
4) Building Exhaust Fan	Operating Correctly?	(Yes) / No
5) Building Louver	Clear of debris	(Yes) / No
7) Piping and valves	Inspect	(Yes) / No
8) Building Interior Lights	Operational?	(Yes) / No
9) Building Exterior Lights	Operational?	(Yes) / No
10) Building Temperature		63 °F
11) Outdoor Temperature		52 °F
12) DNAPL Solenoid	Status	hand / (off) / auto
13) Potable Water Solenoid	Status	hand / off / (auto)

General Comments BIOCIDE –

AN 400-55GAL AN 750C-55 GAL

AN 310H-55GAL. (AN 310H) 35GAL RESERVE

(AN 400 27.0 GAL) RESERVE

CUT AN 400 w/ APPX 10 GAL H_2O.

Date: 03/31/2011

Operator: Bill Ferry

Signature: [signature]

E. SAMPLE COLLECTION DATA

Example Sample Designation <Location><Date mmddyy> GWOUA003009

Location	Analyte	Identification	Sample Collected
Influent	Oil and grease (O&G)	GWOUA	Yes / (No)
Influent	Semi-volatile organics (SVOCs)	GWOUA	Yes / No
Separator	O&G	GWOUB	Yes / No
Separator	Total suspended solids (TSS)	GWOUB	Yes / No
Separator	pH	GWOUB	Yes / No
Effluent	TSS	GWOUE	Yes / No
Effluent	Arsenic (As)	GWOUE	Yes / No
Effluent	Biochemical O2 demand (BOD)	GWOUE	Yes / No
Effluent	SVOCs	GWOUE	Yes / No
Effluent	pH	GWOUE	Yes / No
Effluent	Temperature	GWOUE	Yes / No

Groundwater Elevations and Temperature
Jennison Wright NPL Site
Granite City, Illinois
Bodine Project Number 119386-11

Well ID	Date	Temperature (F)	Depth to Water (Feet bgs)
MW5S	03/30/11	117.5	16.48
MW5D		103.5	15.20
MW20D		110.7	17.18
MW21D		100.7	16.18 LNAPL 18.20 H_2O
MW22D		118.6	16.79
MW23D		118.7	16.7

Notes:
Feet bgs = Feet below ground surface.
Temperatures collected @ 35' BGS for MW 5D,5S,20D-23D (30')
LNAPL present from 16.18 - 18.20
Boiler Temperature @ 140 (F) Steam Pressure @ .5

APPENDIX B

System Operational Sample Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-30527-1
Client Project/Site: Jennison Wright

For:
Bodine Environmental Services
5350 East Firehouse Road
Decatur, Illinois 62521-9601

Attn: Troy McFate

Authorized for release by:
1/27/2011 2:21 PM

Richard Wright
Project Manager II
richard.wright@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Job ID: 500-30527-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-30527-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
Method(s) 624: The following sample(s) was diluted due to the abundance of non-target analytes: GWOUA (01192011) (500-30527-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method(s) 625: Due to the level of dilution required for the following sample(500-30527-5DL), surrogate recoveries are not reported: GWOUA (01192011) (500-30527-5).

Method(s) 625: The following sample was diluted due to the abundance of non-target analytes: GWOUA (01192011) (500-30527-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Client Sample ID: GWOUE (01192011) — Lab Sample ID: 500-30527-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	2.7	J	9.3	0.83	ug/L	1		625	Total/NA
2-Methylphenol	47		4.7	1.0	ug/L	1		625	Total/NA
2,4-Dimethylphenol	48		4.7	1.5	ug/L	1		625	Total/NA
Naphthalene	1.4	J	4.7	1.3	ug/L	1		625	Total/NA
Acenaphthene	21		4.7	1.4	ug/L	1		625	Total/NA
Fluorene	1.5	J	4.7	1.5	ug/L	1		625	Total/NA
3 & 4 Methylphenol	13		4.7	1.2	ug/L	1		625	Total/NA
HEM (Oil & Grease)	2.0	J B	5.1	1.8	mg/L	1		1664A	Total/NA
Total Suspended Solids	3.0	J B	5.0	1.0	mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	5.3		2.0	2.0	mg/L	1		SM 5210B	Total/NA

Client Sample ID: GWOUD (01192011) — Lab Sample ID: 500-30527-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM (Oil & Grease)	7.7	B	5.1	1.9	mg/L	1		1664A	Total/NA

Client Sample ID: GWOUC (01192011) — Lab Sample ID: 500-30527-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM (Oil & Grease)	8.2	B	5.1	1.8	mg/L	1		1664A	Total/NA
Total Suspended Solids	25	B	5.0	1.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: GWOUB (01192011) — Lab Sample ID: 500-30527-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM (Oil & Grease)	9.6	B	5.1	1.8	mg/L	1		1664A	Total/NA
Total Suspended Solids	12	B	5.0	1.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: GWOUA (01192011) — Lab Sample ID: 500-30527-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	46		12	21	ug/L	25		624	Total/NA
Toluene	73		12	15	ug/L	25		624	Total/NA
Ethylbenzene	85		12	18	ug/L	25		624	Total/NA
Phenol	60	J	100	8.9	ug/L	10		625	Total/NA
2-Methylphenol	320		50	11	ug/L	10		625	Total/NA
2,4-Dimethylphenol	410		50	16	ug/L	10		625	Total/NA
Acenaphthylene	23	J	50	15	ug/L	10		625	Total/NA
Acenaphthene	590		50	15	ug/L	10		625	Total/NA
Fluorene	480		50	16	ug/L	10		625	Total/NA
Pentachlorophenol	140	J	200	75	ug/L	10		625	Total/NA
Anthracene	140		50	14	ug/L	10		625	Total/NA
Dibenzofuran	410		50	15	ug/L	10		625	Total/NA
Fluoranthene	490		50	14	ug/L	10		625	Total/NA
Pyrene	330		50	14	ug/L	10		625	Total/NA
Benzo[a]anthracene	110		50	11	ug/L	10		625	Total/NA
Chrysene	85		50	13	ug/L	10		625	Total/NA
Benzo[b]fluoranthene	76		50	11	ug/L	10		625	Total/NA
Benzo[k]fluoranthene	50		50	14	ug/L	10		625	Total/NA
Benzo[a]pyrene	67		50	12	ug/L	10		625	Total/NA
Indeno[1,2,3-cd]pyrene	26	J	50	13	ug/L	10		625	Total/NA
Benzo[g,h,i]perylene	27	J	50	14	ug/L	10		625	Total/NA
3 & 4 Methylphenol	610		50	13	ug/L	10		625	Total/NA
Naphthalene - DL	6100		500	140	ug/L	100		625	Total/NA

Detection Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Client Sample ID: GWOUA (01192011) (Continued) — Lab Sample ID: 500-30527-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene - DL	1300		500	140	ug/L	100		625	Total/NA
Iron	3.8		0.10	0.029	mg/L	1		200.7 Rev 4.4	Total Recovera
HEM (Oil & Grease)	10	B	5.1	1.8	mg/L	1		1664A	Total/NA

Method Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CHI
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL CHI
200.7 Rev 4.4	Metals (ICP)	EPA	TAL CHI
1664A	HEM and SGT-HEM	1664A	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 5210B	BOD, 5-Day	SM	TAL CHI

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-30527-1	GWOUE (01192011)	Water	01/19/11 10:23	01/20/11 10:00
500-30527-2	GWOUD (01192011)	Water	01/19/11 10:37	01/20/11 10:00
500-30527-3	GWOUC (01192011)	Water	01/19/11 10:48	01/20/11 10:00
500-30527-4	GWOUB (01192011)	Water	01/19/11 11:02	01/20/11 10:00
500-30527-5	GWOUA (01192011)	Water	01/19/11 11:21	01/20/11 10:00

Client Sample ID: GWOUE (01192011)

Date Collected: 01/19/11 10:23
Date Received: 01/20/11 10:00

Lab Sample ID: 500-30527-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	<9.3		9.3	4.9	ug/L		01/26/11 09:55	01/26/11 20:10	1
Phenol	**2.7**	**J**	9.3	0.83	ug/L		01/26/11 09:55	01/26/11 20:10	1
Bis(2-chloroethyl)ether	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
2,2'-oxybis[1-chloropropane]	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
N-Nitrosodi-n-propylamine	<4.7		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
Hexachloroethane	<4.7		4.7	1.1	ug/L		01/26/11 09:55	01/26/11 20:10	1
2-Chlorophenol	<4.7		4.7	0.99	ug/L		01/26/11 09:55	01/26/11 20:10	1
2-Methylphenol	**47**		4.7	1.0	ug/L		01/26/11 09:55	01/26/11 20:10	1
Nitrobenzene	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
Bis(2-chloroethoxy)methane	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
1,2,4-Trichlorobenzene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Isophorone	<4.7		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
2,4-Dimethylphenol	**48**		4.7	1.5	ug/L		01/26/11 09:55	01/26/11 20:10	1
Hexachlorobutadiene	<4.7		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
Naphthalene	**1.4**	**J**	4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
2,4-Dichlorophenol	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
2,4,6-Trichlorophenol	<4.7		4.7	1.0	ug/L		01/26/11 09:55	01/26/11 20:10	1
Hexachlorocyclopentadiene	<9.3		9.3	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
2-Chloronaphthalene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
4-Chloro-3-methylphenol	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
2,6-Dinitrotoluene	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
2-Nitrophenol	<4.7		4.7	1.1	ug/L		01/26/11 09:55	01/26/11 20:10	1
Dimethyl phthalate	<4.7		4.7	1.1	ug/L		01/26/11 09:55	01/26/11 20:10	1
2,4-Dinitrophenol	<19		19	7.6	ug/L		01/26/11 09:55	01/26/11 20:10	1
Acenaphthylene	<4.7		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
2,4-Dinitrotoluene	<4.7		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
Acenaphthene	**21**		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
4-Nitrophenol	<19		19	3.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
Fluorene	**1.5**	**J**	4.7	1.5	ug/L		01/26/11 09:55	01/26/11 20:10	1
1,2-Diphenylhydrazine	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
4-Bromophenyl phenyl ether	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Hexachlorobenzene	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
Diethyl phthalate	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
4-Chlorophenyl phenyl ether	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
Pentachlorophenol	<19		19	7.0	ug/L		01/26/11 09:55	01/26/11 20:10	1
N-Nitrosodiphenylamine	<4.7		4.7	1.7	ug/L		01/26/11 09:55	01/26/11 20:10	1
4,6-Dinitro-2-methylphenol	<19		19	4.7	ug/L		01/26/11 09:55	01/26/11 20:10	1
Phenanthrene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Anthracene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Dibenzofuran	<4.7		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
Di-n-butyl phthalate	<4.7		4.7	1.1	ug/L		01/26/11 09:55	01/26/11 20:10	1
Benzidine	<47		47	9.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Fluoranthene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Pyrene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Butyl benzyl phthalate	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
Benzo[a]anthracene	<4.7		4.7	1.1	ug/L		01/26/11 09:55	01/26/11 20:10	1
Chrysene	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
3,3'-Dichlorobenzidine	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
Bis(2-ethylhexyl) phthalate	<9.3		9.3	1.0	ug/L		01/26/11 09:55	01/26/11 20:10	1
Di-n-octyl phthalate	<9.3		9.3	1.5	ug/L		01/26/11 09:55	01/26/11 20:10	1

Client Sample ID: GWOUE (01192011)

Date Collected: 01/19/11 10:23
Date Received: 01/20/11 10:00

Lab Sample ID: 500-30527-1
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<4.7		4.7	1.1	ug/L		01/26/11 09:55	01/26/11 20:10	1
Benzo[k]fluoranthene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
Benzo[a]pyrene	<4.7		4.7	1.1	ug/L		01/26/11 09:55	01/26/11 20:10	1
Indeno[1,2,3-cd]pyrene	<4.7		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1
Dibenz(a,h)anthracene	<4.7		4.7	1.4	ug/L		01/26/11 09:55	01/26/11 20:10	1
Benzo[g,h,i]perylene	<4.7		4.7	1.3	ug/L		01/26/11 09:55	01/26/11 20:10	1
3 & 4 Methylphenol	**13**		4.7	1.2	ug/L		01/26/11 09:55	01/26/11 20:10	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*28*		*10 - 110*	*01/26/11 09:55*	*01/26/11 20:10*	*1*
Phenol-d5	*19*		*10 - 110*	*01/26/11 09:55*	*01/26/11 20:10*	*1*
Nitrobenzene-d5	*48*		*28 - 110*	*01/26/11 09:55*	*01/26/11 20:10*	*1*
2-Fluorobiphenyl	*59*		*31 - 110*	*01/26/11 09:55*	*01/26/11 20:10*	*1*
2,4,6-Tribromophenol	*97*		*34 - 116*	*01/26/11 09:55*	*01/26/11 20:10*	*1*
Terphenyl-d14	*56*		*20 - 133*	*01/26/11 09:55*	*01/26/11 20:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	**2.0**	J B	5.1	1.8	mg/L		01/24/11 11:38	01/24/11 16:13	1
Total Suspended Solids	**3.0**	J B	5.0	1.0	mg/L			01/24/11 21:59	1
Biochemical Oxygen Demand	**5.3**		2.0	2.0	mg/L			01/20/11 13:30	1

Analytical Data

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Client Sample ID: GWOUD (01192011)

Date Collected: 01/19/11 10:37
Date Received: 01/20/11 10:00

Lab Sample ID: 500-30527-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	7.7	B	5.1	1.9	mg/L		01/24/11 11:52	01/24/11 16:17	1

Analytical Data

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Client Sample ID: GWOUC (01192011)

Date Collected: 01/19/11 10:48
Date Received: 01/20/11 10:00

Lab Sample ID: 500-30527-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	8.2	B	5.1	1.8	mg/L		01/24/11 12:07	01/24/11 16:22	1
Total Suspended Solids	25	B	5.0	1.0	mg/L			01/24/11 22:02	1

Analytical Data

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Client Sample ID: GWOUB (01192011)

Lab Sample ID: 500-30527-4

Date Collected: 01/19/11 11:02
Date Received: 01/20/11 10:00

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	9.6	B	5.1	1.8	mg/L		01/24/11 12:21	01/24/11 16:26	1
Total Suspended Solids	12	B	5.0	1.0	mg/L			01/24/11 22:05	1

Client Sample ID: GWOUA (01192011)

Date Collected: 01/19/11 11:21
Date Received: 01/20/11 10:00

Lab Sample ID: 500-30527-5
Matrix: Water

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<25		25	22	ug/L			01/22/11 02:25	25
Vinyl chloride	<25		25	27	ug/L			01/22/11 02:25	25
Bromomethane	<25		25	25	ug/L			01/22/11 02:25	25
Chloroethane	<25		25	39	ug/L			01/22/11 02:25	25
Acrolein	<1000		1000	900	ug/L			01/22/11 02:25	25
1,1-Dichloroethene	<25		25	26	ug/L			01/22/11 02:25	25
Methylene Chloride	<25		25	25	ug/L			01/22/11 02:25	25
trans-1,2-Dichloroethene	<25		25	15	ug/L			01/22/11 02:25	25
Acrylonitrile	<200		200	150	ug/L			01/22/11 02:25	25
1,1-Dichloroethane	<25		25	11	ug/L			01/22/11 02:25	25
Chloroform	<25		25	15	ug/L			01/22/11 02:25	25
1,1,1-Trichloroethane	<25		25	19	ug/L			01/22/11 02:25	25
Carbon tetrachloride	<25		25	18	ug/L			01/22/11 02:25	25
Benzene	**46**		12	21	ug/L			01/22/11 02:25	25
1,2-Dichloroethane	<25		25	16	ug/L			01/22/11 02:25	25
Trichloroethene	<25		25	18	ug/L			01/22/11 02:25	25
1,2-Dichloropropane	<25		25	20	ug/L			01/22/11 02:25	25
Bromodichloromethane	<25		25	15	ug/L			01/22/11 02:25	25
2-Chloroethyl vinyl ether	<25		25	86	ug/L			01/22/11 02:25	25
Toluene	**73**		12	15	ug/L			01/22/11 02:25	25
1,1,2-Trichloroethane	<25		25	25	ug/L			01/22/11 02:25	25
Tetrachloroethene	<25		25	15	ug/L			01/22/11 02:25	25
Dibromochloromethane	<25		25	28	ug/L			01/22/11 02:25	25
Chlorobenzene	<25		25	15	ug/L			01/22/11 02:25	25
Ethylbenzene	**85**		12	18	ug/L			01/22/11 02:25	25
Bromoform	<25		25	21	ug/L			01/22/11 02:25	25
1,1,2,2-Tetrachloroethane	<25		25	19	ug/L			01/22/11 02:25	25
1,2-Dichlorobenzene	<25		25	20	ug/L			01/22/11 02:25	25
1,3-Dichlorobenzene	<25		25	16	ug/L			01/22/11 02:25	25
1,4-Dichlorobenzene	<25		25	16	ug/L			01/22/11 02:25	25
1,3-Dichloropropene, Total	<25		25	18	ug/L			01/22/11 02:25	25

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*79 - 120*		*01/22/11 02:25*	*25*
4-Bromofluorobenzene (Surr)	*95*		*72 - 120*		*01/22/11 02:25*	*25*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*01/22/11 02:25*	*25*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	<100		100	52	ug/L		01/26/11 09:55	01/26/11 20:33	10
Phenol	**60**	**J**	100	8.9	ug/L		01/26/11 09:55	01/26/11 20:33	10
Bis(2-chloroethyl)ether	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
2,2'-oxybis[1-chloropropane]	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
N-Nitrosodi-n-propylamine	<50		50	16	ug/L		01/26/11 09:55	01/26/11 20:33	10
Hexachloroethane	<50		50	12	ug/L		01/26/11 09:55	01/26/11 20:33	10
2-Chlorophenol	<50		50	11	ug/L		01/26/11 09:55	01/26/11 20:33	10
2-Methylphenol	**320**		50	11	ug/L		01/26/11 09:55	01/26/11 20:33	10
Nitrobenzene	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
Bis(2-chloroethoxy)methane	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
1,2,4-Trichlorobenzene	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
Isophorone	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10

Client Sample ID: GWOUA (01192011)

Date Collected: 01/19/11 11:21
Date Received: 01/20/11 10:00

Lab Sample ID: 500-30527-5

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	**410**		50	16	ug/L		01/26/11 09:55	01/26/11 20:33	10
Hexachlorobutadiene	<50		50	15	ug/L		01/26/11 09:55	01/26/11 20:33	10
2,4-Dichlorophenol	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
2,4,6-Trichlorophenol	<50		50	11	ug/L		01/26/11 09:55	01/26/11 20:33	10
Hexachlorocyclopentadiene	<100		100	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
2-Chloronaphthalene	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
4-Chloro-3-methylphenol	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
2,6-Dinitrotoluene	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
2-Nitrophenol	<50		50	12	ug/L		01/26/11 09:55	01/26/11 20:33	10
Dimethyl phthalate	<50		50	12	ug/L		01/26/11 09:55	01/26/11 20:33	10
2,4-Dinitrophenol	<200		200	81	ug/L		01/26/11 09:55	01/26/11 20:33	10
Acenaphthylene	**23**	J	50	15	ug/L		01/26/11 09:55	01/26/11 20:33	10
2,4-Dinitrotoluene	<50		50	15	ug/L		01/26/11 09:55	01/26/11 20:33	10
Acenaphthene	**590**		50	15	ug/L		01/26/11 09:55	01/26/11 20:33	10
4-Nitrophenol	<200		200	36	ug/L		01/26/11 09:55	01/26/11 20:33	10
Fluorene	**480**		50	16	ug/L		01/26/11 09:55	01/26/11 20:33	10
1,2-Diphenylhydrazine	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
4-Bromophenyl phenyl ether	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
Hexachlorobenzene	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
Diethyl phthalate	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
4-Chlorophenyl phenyl ether	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
Pentachlorophenol	**140**	J	200	75	ug/L		01/26/11 09:55	01/26/11 20:33	10
N-Nitrosodiphenylamine	<50		50	18	ug/L		01/26/11 09:55	01/26/11 20:33	10
4,6-Dinitro-2-methylphenol	<200		200	50	ug/L		01/26/11 09:55	01/26/11 20:33	10
Anthracene	**140**		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
Dibenzofuran	**410**		50	15	ug/L		01/26/11 09:55	01/26/11 20:33	10
Di-n-butyl phthalate	<50		50	12	ug/L		01/26/11 09:55	01/26/11 20:33	10
Benzidine	<500		500	100	ug/L		01/26/11 09:55	01/26/11 20:33	10
Fluoranthene	**490**		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
Pyrene	**330**		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
Butyl benzyl phthalate	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
Benzo[a]anthracene	**110**		50	11	ug/L		01/26/11 09:55	01/26/11 20:33	10
Chrysene	**85**		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
3,3'-Dichlorobenzidine	<50		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
Bis(2-ethylhexyl) phthalate	<100		100	11	ug/L		01/26/11 09:55	01/26/11 20:33	10
Di-n-octyl phthalate	<100		100	16	ug/L		01/26/11 09:55	01/26/11 20:33	10
Benzo[b]fluoranthene	**76**		50	11	ug/L		01/26/11 09:55	01/26/11 20:33	10
Benzo[k]fluoranthene	**50**		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
Benzo[a]pyrene	**67**		50	12	ug/L		01/26/11 09:55	01/26/11 20:33	10
Indeno[1,2,3-cd]pyrene	**26**	J	50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10
Dibenz(a,h)anthracene	<50		50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
Benzo[g,h,i]perylene	**27**	J	50	14	ug/L		01/26/11 09:55	01/26/11 20:33	10
3 & 4 Methylphenol	**610**		50	13	ug/L		01/26/11 09:55	01/26/11 20:33	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*44*		*10 - 110*	*01/26/11 09:55*	*01/26/11 20:33*	*10*
Phenol-d5	*30*		*10 - 110*	*01/26/11 09:55*	*01/26/11 20:33*	*10*
Nitrobenzene-d5	*84*		*28 - 110*	*01/26/11 09:55*	*01/26/11 20:33*	*10*
2-Fluorobiphenyl	*85*		*31 - 110*	*01/26/11 09:55*	*01/26/11 20:33*	*10*
2,4,6-Tribromophenol	*108*		*34 - 116*	*01/26/11 09:55*	*01/26/11 20:33*	*10*
Terphenyl-d14	*79*		*20 - 133*	*01/26/11 09:55*	*01/26/11 20:33*	*10*

Analytical Data

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Client Sample ID: GWOUA (01192011)

Lab Sample ID: 500-30527-5

Date Collected: 01/19/11 11:21
Date Received: 01/20/11 10:00

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	6100		500	140	ug/L		01/26/11 09:55	01/26/11 20:56	100
Phenanthrene	1300		500	140	ug/L		01/26/11 09:55	01/26/11 20:56	100

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.8		0.10	0.029	mg/L		01/21/11 07:30	01/21/11 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	10	B	5.1	1.8	mg/L		01/24/11 12:35	01/24/11 16:30	1

Qualifier Definition/Glossary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

Surrogate Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water — Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TOL (79-120)	BFB (72-120)	12DCE (80-120)					
500-30527-5	GWOUA (01192011)	98	95	103					
LCS 500-104053/5	LCS 500-104053/5	107	105	107					
MB 500-104053/38	MB 500-104053/38	112	105	109					

Surrogate Legend

TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	2FP (10-110)	PHL (10-110)	NBZ (28-110)	FBP (31-110)	TBP (34-116)	TPH (20-133)		
500-30527-1	GWOUE (01192011)	28	19	48	59	97	56		
500-30527-5	GWOUA (01192011)	44	30	84	85	108	79		
500-30527-5 - DL	GWOUA (01192011)	0 D	0 D	0 D	0 D	0 D	0 D		
LCS 500-104332/2-A	LCS 500-104332/2-A	40	27	71	70	97	84		
LCSD 500-104332/3-A	LCSD 500-104332/3-A	40	27	71	70	92	83		
MB 500-104332/1-A	MB 500-104332/1-A	44	29	77	75	88	82		

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPH = Terphenyl-d14

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-104053/38
Matrix: Water
Analysis Batch: 104053

Client Sample ID: MB 500-104053/38
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<1.0		1.0	0.88	ug/L			01/21/11 14:57	1
Vinyl chloride	<1.0		1.0	1.1	ug/L			01/21/11 14:57	1
Bromomethane	<1.0		1.0	0.99	ug/L			01/21/11 14:57	1
Chloroethane	<1.0		1.0	1.6	ug/L			01/21/11 14:57	1
Acrolein	<40		40	36	ug/L			01/21/11 14:57	1
1,1-Dichloroethene	<1.0		1.0	1.0	ug/L			01/21/11 14:57	1
Methylene Chloride	<1.0		1.0	1.0	ug/L			01/21/11 14:57	1
trans-1,2-Dichloroethene	<1.0		1.0	0.61	ug/L			01/21/11 14:57	1
Acrylonitrile	<8.0		8.0	6.0	ug/L			01/21/11 14:57	1
1,1-Dichloroethane	<1.0		1.0	0.45	ug/L			01/21/11 14:57	1
Chloroform	<1.0		1.0	0.61	ug/L			01/21/11 14:57	1
1,1,1-Trichloroethane	<1.0		1.0	0.76	ug/L			01/21/11 14:57	1
Carbon tetrachloride	<1.0		1.0	0.74	ug/L			01/21/11 14:57	1
Benzene	<0.50		0.50	0.84	ug/L			01/21/11 14:57	1
1,2-Dichloroethane	<1.0		1.0	0.65	ug/L			01/21/11 14:57	1
Trichloroethene	<1.0		1.0	0.73	ug/L			01/21/11 14:57	1
1,2-Dichloropropane	<1.0		1.0	0.82	ug/L			01/21/11 14:57	1
Bromodichloromethane	<1.0		1.0	0.59	ug/L			01/21/11 14:57	1
2-Chloroethyl vinyl ether	<1.0		1.0	3.5	ug/L			01/21/11 14:57	1
cis-1,3-Dichloropropene	<1.0		1.0	0.70	ug/L			01/21/11 14:57	1
Toluene	<0.50		0.50	0.60	ug/L			01/21/11 14:57	1
trans-1,3-Dichloropropene	<1.0		1.0	0.74	ug/L			01/21/11 14:57	1
1,1,2-Trichloroethane	<1.0		1.0	1.0	ug/L			01/21/11 14:57	1
Tetrachloroethene	<1.0		1.0	0.61	ug/L			01/21/11 14:57	1
Dibromochloromethane	<1.0		1.0	1.1	ug/L			01/21/11 14:57	1
Chlorobenzene	<1.0		1.0	0.61	ug/L			01/21/11 14:57	1
Ethylbenzene	<0.50		0.50	0.73	ug/L			01/21/11 14:57	1
Bromoform	<1.0		1.0	0.84	ug/L			01/21/11 14:57	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	0.77	ug/L			01/21/11 14:57	1
1,2-Dichlorobenzene	<1.0		1.0	0.81	ug/L			01/21/11 14:57	1
1,3-Dichlorobenzene	<1.0		1.0	0.66	ug/L			01/21/11 14:57	1
1,4-Dichlorobenzene	<1.0		1.0	0.64	ug/L			01/21/11 14:57	1
1,3-Dichloropropene, Total	<1.0		1.0	0.74	ug/L			01/21/11 14:57	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*112*		*79 - 120*		*01/21/11 14:57*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 120*		*01/21/11 14:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*80 - 120*		*01/21/11 14:57*	*1*

Lab Sample ID: LCS 500-104053/5
Matrix: Water
Analysis Batch: 104053

Client Sample ID: LCS 500-104053/5
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Chloromethane	50.0	50.6		ug/L		101	10 - 273
Vinyl chloride	50.0	49.3		ug/L		99	10 - 251
Bromomethane	50.0	48.3		ug/L		97	10 - 242
Chloroethane	50.0	53.7		ug/L		107	14 - 230
1,1-Dichloroethene	50.0	50.5		ug/L		101	10 - 234

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-104053/5
Matrix: Water
Analysis Batch: 104053

Client Sample ID: LCS 500-104053/5
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Methylene Chloride	50.0	49.1		ug/L		98	10 - 221
trans-1,2-Dichloroethene	50.0	52.3		ug/L		105	54 - 156
1,1-Dichloroethane	50.0	51.9		ug/L		104	59 - 155
Chloroform	50.0	51.3		ug/L		103	51 - 138
1,1,1-Trichloroethane	50.0	51.4		ug/L		103	52 - 162
Carbon tetrachloride	50.0	51.4		ug/L		103	70 - 140
Benzene	50.0	50.8		ug/L		102	37 - 151
1,2-Dichloroethane	50.0	53.4		ug/L		107	49 - 155
Trichloroethene	50.0	50.9		ug/L		102	71 - 157
1,2-Dichloropropane	50.0	53.3		ug/L		107	10 - 210
Bromodichloromethane	50.0	53.3		ug/L		107	35 - 155
2-Chloroethyl vinyl ether	50.0	46.8		ug/L		94	10 - 305
cis-1,3-Dichloropropene	53.8	55.0		ug/L		102	10 - 227
Toluene	50.0	50.2		ug/L		100	47 - 150
trans-1,3-Dichloropropene	48.6	52.1		ug/L		107	17 - 183
1,1,2-Trichloroethane	50.0	54.2		ug/L		108	52 - 150
Tetrachloroethene	50.0	49.7		ug/L		99	64 - 148
Dibromochloromethane	50.0	52.1		ug/L		104	53 - 149
Chlorobenzene	50.0	50.6		ug/L		101	37 - 160
Ethylbenzene	50.0	50.3		ug/L		101	37 - 162
Bromoform	50.0	55.1		ug/L		110	45 - 169
1,1,2,2-Tetrachloroethane	50.0	53.4		ug/L		107	46 - 157
1,2-Dichlorobenzene	50.0	51.4		ug/L		103	18 - 190
1,3-Dichlorobenzene	50.0	50.9		ug/L		102	59 - 156
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	18 - 190

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*107*		*79 - 120*
4-Bromofluorobenzene (Surr)	*105*		*72 - 120*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-104332/1-A
Matrix: Water
Analysis Batch: 104373

Client Sample ID: MB 500-104332/1-A
Prep Type: Total/NA
Prep Batch: 104332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	<10		10	5.2	ug/L		01/26/11 09:55	01/26/11 19:01	1
Phenol	<10		10	0.89	ug/L		01/26/11 09:55	01/26/11 19:01	1
Bis(2-chloroethyl)ether	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
2,2'-oxybis[1-chloropropane]	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
N-Nitrosodi-n-propylamine	<5.0		5.0	1.6	ug/L		01/26/11 09:55	01/26/11 19:01	1
Hexachloroethane	<5.0		5.0	1.2	ug/L		01/26/11 09:55	01/26/11 19:01	1
2-Chlorophenol	<5.0		5.0	1.1	ug/L		01/26/11 09:55	01/26/11 19:01	1
2-Methylphenol	<5.0		5.0	1.1	ug/L		01/26/11 09:55	01/26/11 19:01	1
Nitrobenzene	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
Bis(2-chloroethoxy)methane	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
1,2,4-Trichlorobenzene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-104332/1-A
Matrix: Water
Analysis Batch: 104373

Client Sample ID: MB 500-104332/1-A
Prep Type: Total/NA
Prep Batch: 104332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
2,4-Dimethylphenol	<5.0		5.0	1.6	ug/L		01/26/11 09:55	01/26/11 19:01	1
Hexachlorobutadiene	<5.0		5.0	1.5	ug/L		01/26/11 09:55	01/26/11 19:01	1
Naphthalene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
2,4-Dichlorophenol	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
2,4,6-Trichlorophenol	<5.0		5.0	1.1	ug/L		01/26/11 09:55	01/26/11 19:01	1
Hexachlorocyclopentadiene	<10		10	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
2-Chloronaphthalene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
4-Chloro-3-methylphenol	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
2,6-Dinitrotoluene	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
2-Nitrophenol	<5.0		5.0	1.2	ug/L		01/26/11 09:55	01/26/11 19:01	1
Dimethyl phthalate	<5.0		5.0	1.2	ug/L		01/26/11 09:55	01/26/11 19:01	1
2,4-Dinitrophenol	<20		20	8.1	ug/L		01/26/11 09:55	01/26/11 19:01	1
Acenaphthylene	<5.0		5.0	1.5	ug/L		01/26/11 09:55	01/26/11 19:01	1
2,4-Dinitrotoluene	<5.0		5.0	1.5	ug/L		01/26/11 09:55	01/26/11 19:01	1
Acenaphthene	<5.0		5.0	1.5	ug/L		01/26/11 09:55	01/26/11 19:01	1
4-Nitrophenol	<20		20	3.6	ug/L		01/26/11 09:55	01/26/11 19:01	1
Fluorene	<5.0		5.0	1.6	ug/L		01/26/11 09:55	01/26/11 19:01	1
1,2-Diphenylhydrazine	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
4-Bromophenyl phenyl ether	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
Hexachlorobenzene	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
Diethyl phthalate	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
4-Chlorophenyl phenyl ether	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
Pentachlorophenol	<20		20	7.5	ug/L		01/26/11 09:55	01/26/11 19:01	1
N-Nitrosodiphenylamine	<5.0		5.0	1.8	ug/L		01/26/11 09:55	01/26/11 19:01	1
4,6-Dinitro-2-methylphenol	<20		20	5.0	ug/L		01/26/11 09:55	01/26/11 19:01	1
Phenanthrene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
Anthracene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
Dibenzofuran	<5.0		5.0	1.5	ug/L		01/26/11 09:55	01/26/11 19:01	1
Di-n-butyl phthalate	<5.0		5.0	1.2	ug/L		01/26/11 09:55	01/26/11 19:01	1
Benzidine	<50		50	10	ug/L		01/26/11 09:55	01/26/11 19:01	1
Fluoranthene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
Pyrene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
Butyl benzyl phthalate	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
Benzo[a]anthracene	<5.0		5.0	1.1	ug/L		01/26/11 09:55	01/26/11 19:01	1
Chrysene	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
3,3'-Dichlorobenzidine	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
Bis(2-ethylhexyl) phthalate	<10		10	1.1	ug/L		01/26/11 09:55	01/26/11 19:01	1
Di-n-octyl phthalate	<10		10	1.6	ug/L		01/26/11 09:55	01/26/11 19:01	1
Benzo[b]fluoranthene	<5.0		5.0	1.1	ug/L		01/26/11 09:55	01/26/11 19:01	1
Benzo[k]fluoranthene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
Benzo[a]pyrene	<5.0		5.0	1.2	ug/L		01/26/11 09:55	01/26/11 19:01	1
Indeno[1,2,3-cd]pyrene	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1
Dibenz(a,h)anthracene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
Benzo[g,h,i]perylene	<5.0		5.0	1.4	ug/L		01/26/11 09:55	01/26/11 19:01	1
3 & 4 Methylphenol	<5.0		5.0	1.3	ug/L		01/26/11 09:55	01/26/11 19:01	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*44*		*10 - 110*	*01/26/11 09:55*	*01/26/11 19:01*	*1*

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-104332/1-A
Matrix: Water
Analysis Batch: 104373

Client Sample ID: MB 500-104332/1-A
Prep Type: Total/NA
Prep Batch: 104332

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*29*		*10 - 110*	*01/26/11 09:55*	*01/26/11 19:01*	*1*
Nitrobenzene-d5	*77*		*28 - 110*	*01/26/11 09:55*	*01/26/11 19:01*	*1*
2-Fluorobiphenyl	*75*		*31 - 110*	*01/26/11 09:55*	*01/26/11 19:01*	*1*
2,4,6-Tribromophenol	*88*		*34 - 116*	*01/26/11 09:55*	*01/26/11 19:01*	*1*
Terphenyl-d14	*82*		*20 - 133*	*01/26/11 09:55*	*01/26/11 19:01*	*1*

Lab Sample ID: LCS 500-104332/2-A
Matrix: Water
Analysis Batch: 104373

Client Sample ID: LCS 500-104332/2-A
Prep Type: Total/NA
Prep Batch: 104332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
N-Nitrosodimethylamine	50.0	24.4		ug/L		49	10 - 200
Phenol	50.0	13.9		ug/L		28	5 - 112
Bis(2-chloroethyl)ether	50.0	32.3		ug/L		65	12 - 158
2,2'-oxybis[1-chloropropane]	50.0	32.5		ug/L		65	36 - 166
N-Nitrosodi-n-propylamine	50.0	33.9		ug/L		68	10 - 230
Hexachloroethane	50.0	28.0		ug/L		56	40 - 113
2-Chlorophenol	50.0	30.2		ug/L		60	23 - 134
2-Methylphenol	50.0	27.9		ug/L		56	30 - 146
Nitrobenzene	50.0	33.7		ug/L		67	35 - 180
Bis(2-chloroethoxy)methane	50.0	34.8		ug/L		70	33 - 184
1,2,4-Trichlorobenzene	50.0	31.0		ug/L		62	44 - 142
Isophorone	50.0	33.7		ug/L		67	21 - 196
2,4-Dimethylphenol	50.0	32.9		ug/L		66	32 - 119
Hexachlorobutadiene	50.0	30.4		ug/L		61	24 - 116
Naphthalene	50.0	32.3		ug/L		65	21 - 133
2,4-Dichlorophenol	50.0	34.4		ug/L		69	39 - 135
2,4,6-Trichlorophenol	50.0	38.4		ug/L		77	37 - 144
Hexachlorocyclopentadiene	50.0	30.6		ug/L		61	10 - 200
2-Chloronaphthalene	50.0	34.7		ug/L		69	60 - 118
4-Chloro-3-methylphenol	50.0	35.7		ug/L		71	22 - 147
2,6-Dinitrotoluene	50.0	46.3		ug/L		93	50 - 158
2-Nitrophenol	50.0	35.9		ug/L		72	29 - 182
Dimethyl phthalate	50.0	40.9		ug/L		82	10 - 112
2,4-Dinitrophenol	50.0	51.3		ug/L		103	10 - 191
Acenaphthylene	50.0	37.5		ug/L		75	33 - 145
2,4-Dinitrotoluene	50.0	47.2		ug/L		94	39 - 139
Acenaphthene	50.0	37.0		ug/L		74	47 - 145
4-Nitrophenol	50.0	19.3	J	ug/L		39	10 - 132
Fluorene	50.0	39.5		ug/L		79	59 - 121
4-Bromophenyl phenyl ether	50.0	42.9		ug/L		86	53 - 127
Hexachlorobenzene	50.0	43.7		ug/L		87	10 - 152
Diethyl phthalate	50.0	40.4		ug/L		81	10 - 114
4-Chlorophenyl phenyl ether	50.0	40.3		ug/L		81	25 - 158
Pentachlorophenol	50.0	40.9		ug/L		82	14 - 176
N-Nitrosodiphenylamine	50.0	42.3		ug/L		85	10 - 200
4,6-Dinitro-2-methylphenol	50.0	48.4		ug/L		97	10 - 181
Phenanthrene	50.0	41.8		ug/L		84	54 - 120
Anthracene	50.0	41.2		ug/L		82	27 - 133

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-104332/2-A — **Client Sample ID: LCS 500-104332/2-A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 104373 — **Prep Batch: 104332**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Dibenzofuran	50.0	38.4		ug/L		77	
Di-n-butyl phthalate	50.0	42.6		ug/L		85	1 - 118
Benzidine	50.0	<50		ug/L		11	10 - 200
Fluoranthene	50.0	45.8		ug/L		92	26 - 137
Pyrene	50.0	39.8		ug/L		80	52 - 115
Butyl benzyl phthalate	50.0	41.0		ug/L		82	10 - 152
Benzo[a]anthracene	50.0	42.5		ug/L		85	33 - 143
Chrysene	50.0	42.5		ug/L		85	17 - 168
3,3'-Dichlorobenzidine	50.0	43.4		ug/L		87	10 - 262
Bis(2-ethylhexyl) phthalate	50.0	39.9		ug/L		80	8 - 158
Di-n-octyl phthalate	50.0	47.7		ug/L		95	4 - 146
Benzo[b]fluoranthene	50.0	53.4		ug/L		107	24 - 159
Benzo[k]fluoranthene	50.0	50.5		ug/L		101	11 - 162
Benzo[a]pyrene	50.0	54.1		ug/L		108	17 - 163
Indeno[1,2,3-cd]pyrene	50.0	60.0		ug/L		120	10 - 171
Dibenz(a,h)anthracene	50.0	58.1		ug/L		116	10 - 227
Benzo[g,h,i]perylene	50.0	58.5		ug/L		117	10 - 219
3 & 4 Methylphenol	50.0	30.7		ug/L		61	11 - 150

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*40*		*10 - 110*
Phenol-d5	*27*		*10 - 110*
Nitrobenzene-d5	*71*		*28 - 110*
2-Fluorobiphenyl	*70*		*31 - 110*
2,4,6-Tribromophenol	*97*		*34 - 116*
Terphenyl-d14	*84*		*20 - 133*

Lab Sample ID: LCSD 500-104332/3-A — **Client Sample ID: LCSD 500-104332/3-A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 104373 — **Prep Batch: 104332**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
N-Nitrosodimethylamine	50.0	24.1		ug/L		48	10 - 200	1	20
Phenol	50.0	14.2		ug/L		28	5 - 112	2	20
Bis(2-chloroethyl)ether	50.0	33.1		ug/L		66	12 - 158	3	20
2,2'-oxybis[1-chloropropane]	50.0	33.9		ug/L		68	36 - 166	4	20
N-Nitrosodi-n-propylamine	50.0	34.8		ug/L		70	10 - 230	3	20
Hexachloroethane	50.0	29.2		ug/L		58	40 - 113	4	20
2-Chlorophenol	50.0	31.3		ug/L		63	23 - 134	4	20
2-Methylphenol	50.0	28.7		ug/L		57	30 - 146	3	20
Nitrobenzene	50.0	34.4		ug/L		69	35 - 180	2	20
Bis(2-chloroethoxy)methane	50.0	35.1		ug/L		70	33 - 184	1	20
1,2,4-Trichlorobenzene	50.0	32.3		ug/L		65	44 - 142	4	20
Isophorone	50.0	33.3		ug/L		67	21 - 196	1	20
2,4-Dimethylphenol	50.0	33.3		ug/L		67	32 - 119	1	20
Hexachlorobutadiene	50.0	31.8		ug/L		64	24 - 116	5	20
Naphthalene	50.0	32.4		ug/L		65	21 - 133	0	20
2,4-Dichlorophenol	50.0	34.2		ug/L		68	39 - 135	1	20
2,4,6-Trichlorophenol	50.0	36.4		ug/L		73	37 - 144	5	20

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-104332/3-A
Matrix: Water
Analysis Batch: 104373

Client Sample ID: LCSD 500-104332/3-A
Prep Type: Total/NA
Prep Batch: 104332

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Hexachlorocyclopentadiene	50.0	31.4		ug/L		63	10 - 200	3	20
2-Chloronaphthalene	50.0	35.5		ug/L		71	60 - 118	2	20
4-Chloro-3-methylphenol	50.0	34.2		ug/L		68	22 - 147	4	20
2,6-Dinitrotoluene	50.0	46.1		ug/L		92	50 - 158	0	20
2-Nitrophenol	50.0	36.8		ug/L		74	29 - 182	3	20
Dimethyl phthalate	50.0	39.8		ug/L		80	10 - 112	3	20
2,4-Dinitrophenol	50.0	51.1		ug/L		102	10 - 191	0	20
Acenaphthylene	50.0	37.7		ug/L		75	33 - 145	1	20
2,4-Dinitrotoluene	50.0	47.3		ug/L		95	39 - 139	0	20
Acenaphthene	50.0	37.4		ug/L		75	47 - 145	1	20
4-Nitrophenol	50.0	19.6	J	ug/L		39	10 - 132	2	20
Fluorene	50.0	39.6		ug/L		79	59 - 121	0	20
4-Bromophenyl phenyl ether	50.0	41.6		ug/L		83	53 - 127	3	20
Hexachlorobenzene	50.0	43.0		ug/L		86	10 - 152	2	20
Diethyl phthalate	50.0	40.5		ug/L		81	10 - 114	0	20
4-Chlorophenyl phenyl ether	50.0	38.9		ug/L		78	25 - 158	3	20
Pentachlorophenol	50.0	39.9		ug/L		80	14 - 176	3	20
N-Nitrosodiphenylamine	50.0	41.4		ug/L		83	10 - 200	2	20
4,6-Dinitro-2-methylphenol	50.0	47.2		ug/L		94	10 - 181	3	20
Phenanthrene	50.0	42.3		ug/L		85	54 - 120	1	20
Anthracene	50.0	41.8		ug/L		84	27 - 133	1	20
Dibenzofuran	50.0	37.8		ug/L		76		1	
Di-n-butyl phthalate	50.0	43.3		ug/L		87	1 - 118	2	20
Benzidine	50.0	<50		ug/L		11	10 - 200	2	20
Fluoranthene	50.0	44.6		ug/L		89	26 - 137	3	20
Pyrene	50.0	40.4		ug/L		81	52 - 115	2	20
Butyl benzyl phthalate	50.0	40.5		ug/L		81	10 - 152	1	20
Benzo[a]anthracene	50.0	43.8		ug/L		88	33 - 143	3	20
Chrysene	50.0	42.9		ug/L		86	17 - 168	1	20
3,3'-Dichlorobenzidine	50.0	43.9		ug/L		88	10 - 262	1	20
Bis(2-ethylhexyl) phthalate	50.0	40.0		ug/L		80	8 - 158	0	20
Di-n-octyl phthalate	50.0	48.3		ug/L		97	4 - 146	1	20
Benzo[b]fluoranthene	50.0	56.6		ug/L		113	24 - 159	6	20
Benzo[k]fluoranthene	50.0	49.2		ug/L		98	11 - 162	3	20
Benzo[a]pyrene	50.0	55.3		ug/L		111	17 - 163	2	20
Indeno[1,2,3-cd]pyrene	50.0	61.9		ug/L		124	10 - 171	3	20
Dibenz(a,h)anthracene	50.0	60.1		ug/L		120	10 - 227	3	20
Benzo[g,h,i]perylene	50.0	60.8		ug/L		122	10 - 219	4	20
3 & 4 Methylphenol	50.0	31.6		ug/L		63	11 - 150	3	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*40*		*10 - 110*
Phenol-d5	*27*		*10 - 110*
Nitrobenzene-d5	*71*		*28 - 110*
2-Fluorobiphenyl	*70*		*31 - 110*
2,4,6-Tribromophenol	*92*		*34 - 116*
Terphenyl-d14	*83*		*20 - 133*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 500-104042/1-A — **Client Sample ID: MB 500-104042/1-A**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 104117 — **Prep Batch: 104042**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.10		0.10	0.029	mg/L		01/21/11 07:30	01/21/11 13:59	1

Lab Sample ID: LCS 500-104042/2-A — **Client Sample ID: LCS 500-104042/2-A**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 104117 — **Prep Batch: 104042**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Iron	0.500	0.466		mg/L		93	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 500-104135/1-A — **Client Sample ID: MB 500-104135/1-A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 104136 — **Prep Batch: 104135**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	1.90	J	5.0	1.8	mg/L		01/24/11 09:15	01/24/11 15:30	1

Lab Sample ID: LCS 500-104135/2-A — **Client Sample ID: LCS 500-104135/2-A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 104136 — **Prep Batch: 104135**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
HEM (Oil & Grease)	40.0	35.2		mg/L		88	78 - 114

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-104199/1 — **Client Sample ID: MB 500-104199/1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 104199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.00	J	5.0	1.0	mg/L			01/24/11 21:50	1

Lab Sample ID: LCS 500-104199/2 — **Client Sample ID: LCS 500-104199/2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 104199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Suspended Solids	200	203		mg/L		102	80 - 120

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 500-103955/1 MB — **Client Sample ID: USB 500-103955/1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 103955

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0		2.0	2.0	mg/L			01/20/11 13:20	1

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: LCS 500-103955/2
Matrix: Water
Analysis Batch: 103955

Client Sample ID: LCS 500-103955/2
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Biochemical Oxygen Demand	198	214		mg/L		108	85 - 115

QC Association Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30527-1

GC/MS VOA

Analysis Batch: 104053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-30527-5	GWOUA (01192011)	Total/NA	Water	624	
MB 500-104053/38	MB 500-104053/38	Total/NA	Water	624	
LCS 500-104053/5	LCS 500-104053/5	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 104332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-104332/1-A	MB 500-104332/1-A	Total/NA	Water	625	
LCS 500-104332/2-A	LCS 500-104332/2-A	Total/NA	Water	625	
LCSD 500-104332/3-A	LCSD 500-104332/3-A	Total/NA	Water	625	
500-30527-1	GWOUE (01192011)	Total/NA	Water	625	
500-30527-5	GWOUA (01192011)	Total/NA	Water	625	
500-30527-5 - DL	GWOUA (01192011)	Total/NA	Water	625	

Analysis Batch: 104373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-104332/1-A	MB 500-104332/1-A	Total/NA	Water	625	104332
LCS 500-104332/2-A	LCS 500-104332/2-A	Total/NA	Water	625	104332
LCSD 500-104332/3-A	LCSD 500-104332/3-A	Total/NA	Water	625	104332
500-30527-1	GWOUE (01192011)	Total/NA	Water	625	104332
500-30527-5	GWOUA (01192011)	Total/NA	Water	625	104332
500-30527-5 - DL	GWOUA (01192011)	Total/NA	Water	625	104332

Metals

Prep Batch: 104042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-104042/1-A	MB 500-104042/1-A	Total Recoverable	Water	200.7	
LCS 500-104042/2-A	LCS 500-104042/2-A	Total Recoverable	Water	200.7	
500-30527-5	GWOUA (01192011)	Total Recoverable	Water	200.7	

Analysis Batch: 104117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-104042/1-A	MB 500-104042/1-A	Total Recoverable	Water	200.7 Rev 4.4	104042
LCS 500-104042/2-A	LCS 500-104042/2-A	Total Recoverable	Water	200.7 Rev 4.4	104042
500-30527-5	GWOUA (01192011)	Total Recoverable	Water	200.7 Rev 4.4	104042

General Chemistry

Analysis Batch: 103955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
USB 500-103955/1 MB	USB 500-103955/1	Total/NA	Water	SM 5210B	
LCS 500-103955/2	LCS 500-103955/2	Total/NA	Water	SM 5210B	
500-30527-1	GWOUE (01192011)	Total/NA	Water	SM 5210B	

Prep Batch: 104135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-104135/1-A	MB 500-104135/1-A	Total/NA	Water	1664A	
500-30527-1	GWOUE (01192011)	Total/NA	Water	1664A	
500-30527-2	GWOUD (01192011)	Total/NA	Water	1664A	
500-30527-3	GWOUC (01192011)	Total/NA	Water	1664A	

General Chemistry (Continued)

Prep Batch: 104135 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-30527-4	GWOUB (01192011)	Total/NA	Water	1664A	
500-30527-5	GWOUA (01192011)	Total/NA	Water	1664A	
LCS 500-104135/2-A	LCS 500-104135/2-A	Total/NA	Water	1664A	

Analysis Batch: 104136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-104135/1-A	MB 500-104135/1-A	Total/NA	Water	1664A	104135
500-30527-1	GWOUE (01192011)	Total/NA	Water	1664A	104135
500-30527-2	GWOUD (01192011)	Total/NA	Water	1664A	104135
500-30527-3	GWOUC (01192011)	Total/NA	Water	1664A	104135
500-30527-4	GWOUB (01192011)	Total/NA	Water	1664A	104135
500-30527-5	GWOUA (01192011)	Total/NA	Water	1664A	104135
LCS 500-104135/2-A	LCS 500-104135/2-A	Total/NA	Water	1664A	104135

Analysis Batch: 104199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-104199/1	MB 500-104199/1	Total/NA	Water	SM 2540D	
LCS 500-104199/2	LCS 500-104199/2	Total/NA	Water	SM 2540D	
500-30527-1	GWOUE (01192011)	Total/NA	Water	SM 2540D	
500-30527-3	GWOUC (01192011)	Total/NA	Water	SM 2540D	
500-30527-4	GWOUB (01192011)	Total/NA	Water	SM 2540D	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-30527
Chain of Custody Number:
Page 1 of 1
Temperature °C of Cooler: (3.5) (4.0)

Client: BODINE ENVIRONMENTAL
Client Project #: 119356-11
Project Name: IEPA JENNISON WRIGHT
Project Location/State: GRANITE CITY, IL
Lab Project #:
Sampler: BRETT BAKER
Lab PM: DICK WRIGHT

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	TSS	OIL + GREASE	TSS + BOD	SVOCs	VOCs	TOTAL IRON	[illegible]			Comments
							8	2	8	8	1	3	[illegible]			
1		GWOUE (01192011)	1/19/11	1023	4	W		X	X	X						
2		GWOUD (01192011)	1/19/11	1037	1	W		X								
3		GWOUC (01192011)	1/19/11	1048	2	W	X	X								
4		GWOUB (01192011)	1/19/11	1102	2	W	X	X								
5		GWOUA (01192011)	1/19/11	1121	7	W		X		X	X	X	[illegible]			

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days X 7 Days ___ 10 Days ___ 15 Days ___ Other
Requested Due Date

Sample Disposal
[ ] Return to Client [X] Disposal by Lab [ ] Archive for ___ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
BRETT BAKER	BODINE	1/19/11	1157	[signature]	TA	1/20/11	1015

Lab Courier:
Shipped: FEDEX
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SC – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments:

Lab Comments:

TAL 4124 500 (1209)

01/27/2011

Login Sample Receipt Check List

Client: Bodine Environmental Services

Job Number: 500-30527-1

Login Number: 30527
Creator: Lunt, Jeff T
List Number: 1

List Source: TestAmerica Chicago

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.5,4.0
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-30950-1
Client Project/Site: Jennison Wright

For:
Bodine Environmental Services
5350 East Firehouse Road
Decatur, Illinois 62521-9601

Attn: Troy McFate

Cindy Pritchard

Authorized for release by:
2/25/2011 10:08 AM
Cindy Pritchard
Project Mgmt. Assistant
cindy.pritchard@testamericainc.com

Designee for

Richard Wright
Project Manager II
richard.wright@testamericainc.com

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Job ID: 500-30950-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-30950-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS Semi VOA
Method(s) 625: The following samples were diluted due to the abundance of non-target analytes: GWOUA (02162011) (500-30950-1), GWOUE (02162011) (500-30950-5). Elevated reporting limits (RLs) are provided.

Method(s) 625: Due to the level of dilution required for the following secondary dilution, surrogate recoveries are not reported: GWOUA (02162011) (500-30950-1).

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Client Sample ID: GWOUA (02162011) — Lab Sample ID: 500-30950-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	51	J	100	8.9	ug/L	10		625	Total/NA
2-Methylphenol	300		50	11	ug/L	10		625	Total/NA
2,4-Dimethylphenol	470		50	16	ug/L	10		625	Total/NA
Acenaphthylene	16	J	50	15	ug/L	10		625	Total/NA
Acenaphthene	420		50	15	ug/L	10		625	Total/NA
Fluorene	280		50	16	ug/L	10		625	Total/NA
Pentachlorophenol	240		200	75	ug/L	10		625	Total/NA
Phenanthrene	500		50	14	ug/L	10		625	Total/NA
Anthracene	61		50	14	ug/L	10		625	Total/NA
Dibenzofuran	270		50	15	ug/L	10		625	Total/NA
Fluoranthene	170		50	14	ug/L	10		625	Total/NA
Pyrene	120		50	14	ug/L	10		625	Total/NA
Benzo[a]anthracene	29	J	50	11	ug/L	10		625	Total/NA
Chrysene	28	J	50	13	ug/L	10		625	Total/NA
Benzo[b]fluoranthene	19	J	50	11	ug/L	10		625	Total/NA
Benzo[a]pyrene	16	J	50	12	ug/L	10		625	Total/NA
3 & 4 Methylphenol	640		50	13	ug/L	10		625	Total/NA
Naphthalene - DL	5000		500	140	ug/L	100		625	Total/NA
HEM (Oil & Grease)	4.5	J	5.2	1.9	mg/L	1		1664A	Total/NA

Client Sample ID: GWOUB (02162011) — Lab Sample ID: 500-30950-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM (Oil & Grease)	4.7	J	5.2	1.9	mg/L	1		1664A	Total/NA
Total Suspended Solids	2.5	J	5.0	1.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: GWOUC (02162011) — Lab Sample ID: 500-30950-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM (Oil & Grease)	6.0		5.2	1.9	mg/L	1		1664A	Total/NA
Total Suspended Solids	3.0	J	5.0	1.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: GWOUD (02162011) — Lab Sample ID: 500-30950-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM (Oil & Grease)	2.5	J	5.2	1.9	mg/L	1		1664A	Total/NA

Client Sample ID: GWOUE (02162011) — Lab Sample ID: 500-30950-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylphenol	85		20	4.4	ug/L	4		625	Total/NA
2,4-Dimethylphenol	41		20	6.6	ug/L	4		625	Total/NA
Acenaphthene	47		20	6.1	ug/L	4		625	Total/NA
Pentachlorophenol	39	J	81	30	ug/L	4		625	Total/NA
3 & 4 Methylphenol	64		20	5.3	ug/L	4		625	Total/NA
HEM (Oil & Grease)	2.1	J	5.1	1.8	mg/L	1		1664A	Total/NA
Biochemical Oxygen Demand	6.5		2.0	2.0	mg/L	1		SM 5210B	Total/NA

Method Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Method	Method Description	Protocol	Laboratory
625	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL CHI
1664A	HEM and SGT-HEM	1664A	TAL CHI
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CHI
SM 5210B	BOD, 5-Day	SM	TAL CHI

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-30950-1	GWOUA (02162011)	Water	02/16/11 12:20	02/17/11 10:30
500-30950-2	GWOUB (02162011)	Water	02/16/11 12:25	02/17/11 10:30
500-30950-3	GWOUC (02162011)	Water	02/16/11 12:31	02/17/11 10:30
500-30950-4	GWOUD (02162011)	Water	02/16/11 12:35	02/17/11 10:30
500-30950-5	GWOUE (02162011)	Water	02/16/11 12:10	02/17/11 10:30

Client Sample ID: GWOUA (02162011)

Date Collected: 02/16/11 12:20
Date Received: 02/17/11 10:30

Lab Sample ID: 500-30950-1

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	<100		100	52	ug/L		02/21/11 07:25	02/22/11 21:24	10
Phenol	**51**	**J**	100	8.9	ug/L		02/21/11 07:25	02/22/11 21:24	10
Bis(2-chloroethyl)ether	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
2,2'-oxybis[1-chloropropane]	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
N-Nitrosodi-n-propylamine	<50		50	16	ug/L		02/21/11 07:25	02/22/11 21:24	10
Hexachloroethane	<50		50	12	ug/L		02/21/11 07:25	02/22/11 21:24	10
2-Chlorophenol	<50		50	11	ug/L		02/21/11 07:25	02/22/11 21:24	10
2-Methylphenol	**300**		50	11	ug/L		02/21/11 07:25	02/22/11 21:24	10
Nitrobenzene	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
Bis(2-chloroethoxy)methane	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
1,2,4-Trichlorobenzene	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Isophorone	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
2,4-Dimethylphenol	**470**		50	16	ug/L		02/21/11 07:25	02/22/11 21:24	10
Hexachlorobutadiene	<50		50	15	ug/L		02/21/11 07:25	02/22/11 21:24	10
2,4-Dichlorophenol	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
2,4,6-Trichlorophenol	<50		50	11	ug/L		02/21/11 07:25	02/22/11 21:24	10
Hexachlorocyclopentadiene	<100		100	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
2-Chloronaphthalene	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
4-Chloro-3-methylphenol	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
2,6-Dinitrotoluene	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
2-Nitrophenol	<50		50	12	ug/L		02/21/11 07:25	02/22/11 21:24	10
Dimethyl phthalate	<50		50	12	ug/L		02/21/11 07:25	02/22/11 21:24	10
2,4-Dinitrophenol	<200		200	81	ug/L		02/21/11 07:25	02/22/11 21:24	10
Acenaphthylene	**16**	**J**	50	15	ug/L		02/21/11 07:25	02/22/11 21:24	10
2,4-Dinitrotoluene	<50		50	15	ug/L		02/21/11 07:25	02/22/11 21:24	10
Acenaphthene	**420**		50	15	ug/L		02/21/11 07:25	02/22/11 21:24	10
4-Nitrophenol	<200		200	36	ug/L		02/21/11 07:25	02/22/11 21:24	10
Fluorene	**280**		50	16	ug/L		02/21/11 07:25	02/22/11 21:24	10
1,2-Diphenylhydrazine	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
4-Bromophenyl phenyl ether	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Hexachlorobenzene	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
Diethyl phthalate	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
4-Chlorophenyl phenyl ether	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
Pentachlorophenol	**240**		200	75	ug/L		02/21/11 07:25	02/22/11 21:24	10
N-Nitrosodiphenylamine	<50		50	18	ug/L		02/21/11 07:25	02/22/11 21:24	10
4,6-Dinitro-2-methylphenol	<200		200	50	ug/L		02/21/11 07:25	02/22/11 21:24	10
Phenanthrene	**500**		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Anthracene	**61**		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Dibenzofuran	**270**		50	15	ug/L		02/21/11 07:25	02/22/11 21:24	10
Di-n-butyl phthalate	<50		50	12	ug/L		02/21/11 07:25	02/22/11 21:24	10
Benzidine	<500		500	100	ug/L		02/21/11 07:25	02/22/11 21:24	10
Fluoranthene	**170**		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Pyrene	**120**		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Butyl benzyl phthalate	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
Benzo[a]anthracene	**29**	**J**	50	11	ug/L		02/21/11 07:25	02/22/11 21:24	10
Chrysene	**28**	**J**	50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
3,3'-Dichlorobenzidine	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
Bis(2-ethylhexyl) phthalate	<100		100	11	ug/L		02/21/11 07:25	02/22/11 21:24	10
Di-n-octyl phthalate	<100		100	16	ug/L		02/21/11 07:25	02/22/11 21:24	10
Benzo[b]fluoranthene	**19**	**J**	50	11	ug/L		02/21/11 07:25	02/22/11 21:24	10

Client Sample ID: GWOUA (02162011)

Lab Sample ID: 500-30950-1

Date Collected: 02/16/11 12:20
Date Received: 02/17/11 10:30

Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Benzo[a]pyrene	**16**	J	50	12	ug/L		02/21/11 07:25	02/22/11 21:24	10
Indeno[1,2,3-cd]pyrene	<50		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10
Dibenz(a,h)anthracene	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
Benzo[g,h,i]perylene	<50		50	14	ug/L		02/21/11 07:25	02/22/11 21:24	10
3 & 4 Methylphenol	**640**		50	13	ug/L		02/21/11 07:25	02/22/11 21:24	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*39*		*10 - 110*	*02/21/11 07:25*	*02/22/11 21:24*	*10*
Phenol-d5	*25*		*10 - 110*	*02/21/11 07:25*	*02/22/11 21:24*	*10*
Nitrobenzene-d5	*71*		*28 - 110*	*02/21/11 07:25*	*02/22/11 21:24*	*10*
2-Fluorobiphenyl	*79*		*31 - 110*	*02/21/11 07:25*	*02/22/11 21:24*	*10*
2,4,6-Tribromophenol	*100*		*34 - 116*	*02/21/11 07:25*	*02/22/11 21:24*	*10*
Terphenyl-d14	*99*		*20 - 133*	*02/21/11 07:25*	*02/22/11 21:24*	*10*

Method: 625 - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	5000		500	140	ug/L		02/21/11 07:25	02/22/11 21:45	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	4.5	J	5.2	1.9	mg/L		02/21/11 08:19	02/21/11 14:26	1

Analytical Data

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Client Sample ID: GWOUB (02162011)

Lab Sample ID: 500-30950-2

Date Collected: 02/16/11 12:25
Date Received: 02/17/11 10:30

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	4.7	J	5.2	1.9	mg/L		02/21/11 08:35	02/21/11 14:30	1
Total Suspended Solids	2.5	J	5.0	1.0	mg/L			02/20/11 17:18	1

Analytical Data

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Client Sample ID: GWOUC (02162011)

Lab Sample ID: 500-30950-3

Date Collected: 02/16/11 12:31
Date Received: 02/17/11 10:30

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	6.0		5.2	1.9	mg/L		02/21/11 08:52	02/21/11 14:34	1
Total Suspended Solids	3.0	J	5.0	1.0	mg/L			02/20/11 17:21	1

Analytical Data

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Client Sample ID: GWOUD (02162011)
Date Collected: 02/16/11 12:35
Date Received: 02/17/11 10:30

Lab Sample ID: 500-30950-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.5	J	5.2	1.9	mg/L		02/21/11 09:08	02/21/11 14:38	1

Client Sample ID: GWOUE (02162011)

Lab Sample ID: 500-30950-5

Date Collected: 02/16/11 12:10

Matrix: Water

Date Received: 02/17/11 10:30

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	<40		40	21	ug/L		02/21/11 07:25	02/23/11 08:44	4
Phenol	<40		40	3.6	ug/L		02/21/11 07:25	02/23/11 08:44	4
Bis(2-chloroethyl)ether	<20		20	5.7	ug/L		02/21/11 07:25	02/23/11 08:44	4
2,2'-oxybis[1-chloropropane]	<20		20	5.8	ug/L		02/21/11 07:25	02/23/11 08:44	4
N-Nitrosodi-n-propylamine	<20		20	6.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
Hexachloroethane	<20		20	4.8	ug/L		02/21/11 07:25	02/23/11 08:44	4
2-Chlorophenol	<20		20	4.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
2-Methylphenol	**85**		20	4.4	ug/L		02/21/11 07:25	02/23/11 08:44	4
Nitrobenzene	<20		20	5.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
Bis(2-chloroethoxy)methane	<20		20	5.8	ug/L		02/21/11 07:25	02/23/11 08:44	4
1,2,4-Trichlorobenzene	<20		20	5.5	ug/L		02/21/11 07:25	02/23/11 08:44	4
Isophorone	<20		20	5.9	ug/L		02/21/11 07:25	02/23/11 08:44	4
2,4-Dimethylphenol	**41**		20	6.6	ug/L		02/21/11 07:25	02/23/11 08:44	4
Hexachlorobutadiene	<20		20	6.0	ug/L		02/21/11 07:25	02/23/11 08:44	4
Naphthalene	<20		20	5.7	ug/L		02/21/11 07:25	02/23/11 08:44	4
2,4-Dichlorophenol	<20		20	5.4	ug/L		02/21/11 07:25	02/23/11 08:44	4
2,4,6-Trichlorophenol	<20		20	4.4	ug/L		02/21/11 07:25	02/23/11 08:44	4
Hexachlorocyclopentadiene	<40		40	5.1	ug/L		02/21/11 07:25	02/23/11 08:44	4
2-Chloronaphthalene	<20		20	5.8	ug/L		02/21/11 07:25	02/23/11 08:44	4
4-Chloro-3-methylphenol	<20		20	5.6	ug/L		02/21/11 07:25	02/23/11 08:44	4
2,6-Dinitrotoluene	<20		20	5.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
2-Nitrophenol	<20		20	4.9	ug/L		02/21/11 07:25	02/23/11 08:44	4
Dimethyl phthalate	<20		20	4.7	ug/L		02/21/11 07:25	02/23/11 08:44	4
2,4-Dinitrophenol	<81		81	33	ug/L		02/21/11 07:25	02/23/11 08:44	4
Acenaphthylene	<20		20	5.9	ug/L		02/21/11 07:25	02/23/11 08:44	4
2,4-Dinitrotoluene	<20		20	6.0	ug/L		02/21/11 07:25	02/23/11 08:44	4
Acenaphthene	**47**		20	6.1	ug/L		02/21/11 07:25	02/23/11 08:44	4
4-Nitrophenol	<81		81	15	ug/L		02/21/11 07:25	02/23/11 08:44	4
Fluorene	<20		20	6.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
1,2-Diphenylhydrazine	<20		20	5.6	ug/L		02/21/11 07:25	02/23/11 08:44	4
4-Bromophenyl phenyl ether	<20		20	5.7	ug/L		02/21/11 07:25	02/23/11 08:44	4
Hexachlorobenzene	<20		20	5.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
Diethyl phthalate	<20		20	5.1	ug/L		02/21/11 07:25	02/23/11 08:44	4
4-Chlorophenyl phenyl ether	<20		20	5.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
Pentachlorophenol	**39**	J	81	30	ug/L		02/21/11 07:25	02/23/11 08:44	4
N-Nitrosodiphenylamine	<20		20	7.2	ug/L		02/21/11 07:25	02/23/11 08:44	4
4,6-Dinitro-2-methylphenol	<81		81	20	ug/L		02/21/11 07:25	02/23/11 08:44	4
Phenanthrene	<20		20	5.6	ug/L		02/21/11 07:25	02/23/11 08:44	4
Anthracene	<20		20	5.8	ug/L		02/21/11 07:25	02/23/11 08:44	4
Dibenzofuran	<20		20	5.9	ug/L		02/21/11 07:25	02/23/11 08:44	4
Di-n-butyl phthalate	<20		20	4.9	ug/L		02/21/11 07:25	02/23/11 08:44	4
Benzidine	<200		200	40	ug/L		02/21/11 07:25	02/23/11 08:44	4
Fluoranthene	<20		20	5.7	ug/L		02/21/11 07:25	02/23/11 08:44	4
Pyrene	<20		20	5.8	ug/L		02/21/11 07:25	02/23/11 08:44	4
Butyl benzyl phthalate	<20		20	5.1	ug/L		02/21/11 07:25	02/23/11 08:44	4
Benzo[a]anthracene	<20		20	4.6	ug/L		02/21/11 07:25	02/23/11 08:44	4
Chrysene	<20		20	5.4	ug/L		02/21/11 07:25	02/23/11 08:44	4
3,3'-Dichlorobenzidine	<20		20	5.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
Bis(2-ethylhexyl) phthalate	<40		40	4.5	ug/L		02/21/11 07:25	02/23/11 08:44	4
Di-n-octyl phthalate	<40		40	6.5	ug/L		02/21/11 07:25	02/23/11 08:44	4

Client Sample ID: GWOUE (02162011)

Date Collected: 02/16/11 12:10
Date Received: 02/17/11 10:30

Lab Sample ID: 500-30950-5
Matrix: Water

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<20		20	4.6	ug/L		02/21/11 07:25	02/23/11 08:44	4
Benzo[k]fluoranthene	<20		20	5.5	ug/L		02/21/11 07:25	02/23/11 08:44	4
Benzo[a]pyrene	<20		20	4.8	ug/L		02/21/11 07:25	02/23/11 08:44	4
Indeno[1,2,3-cd]pyrene	<20		20	5.3	ug/L		02/21/11 07:25	02/23/11 08:44	4
Dibenz(a,h)anthracene	<20		20	5.9	ug/L		02/21/11 07:25	02/23/11 08:44	4
Benzo[g,h,i]perylene	<20		20	5.7	ug/L		02/21/11 07:25	02/23/11 08:44	4
3 & 4 Methylphenol	**64**		20	5.3	ug/L		02/21/11 07:25	02/23/11 08:44	4

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*38*		*10 - 110*	*02/21/11 07:25*	*02/23/11 08:44*	*4*
Phenol-d5	*23*		*10 - 110*	*02/21/11 07:25*	*02/23/11 08:44*	*4*
Nitrobenzene-d5	*62*		*28 - 110*	*02/21/11 07:25*	*02/23/11 08:44*	*4*
2-Fluorobiphenyl	*71*		*31 - 110*	*02/21/11 07:25*	*02/23/11 08:44*	*4*
2,4,6-Tribromophenol	*98*		*34 - 116*	*02/21/11 07:25*	*02/23/11 08:44*	*4*
Terphenyl-d14	*82*		*20 - 133*	*02/21/11 07:25*	*02/23/11 08:44*	*4*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	**2.1**	J	5.1	1.8	mg/L		02/21/11 09:25	02/21/11 14:42	1
Total Suspended Solids	<5.0		5.0	1.0	mg/L			02/20/11 17:23	1
Biochemical Oxygen Demand	**6.5**		2.0	2.0	mg/L			02/18/11 08:20	1

Qualifier Definition/Glossary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

QC Association Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

GC/MS Semi VOA

Prep Batch: 105970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-105970/1-A	MB 500-105970/1-A	Total/NA	Water	625	
LCS 500-105970/2-A	LCS 500-105970/2-A	Total/NA	Water	625	
500-30950-1	GWOUA (02162011)	Total/NA	Water	625	
500-30950-1 - DL	GWOUA (02162011)	Total/NA	Water	625	
500-30950-5	GWOUE (02162011)	Total/NA	Water	625	

Analysis Batch: 106036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-30950-1	GWOUA (02162011)	Total/NA	Water	625	105970
500-30950-1 - DL	GWOUA (02162011)	Total/NA	Water	625	105970
500-30950-5	GWOUE (02162011)	Total/NA	Water	625	105970
MB 500-105970/1-A	MB 500-105970/1-A	Total/NA	Water	625	105970
LCS 500-105970/2-A	LCS 500-105970/2-A	Total/NA	Water	625	105970

General Chemistry

Analysis Batch: 105875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
USB 500-105875/1 MB	USB 500-105875/1	Total/NA	Water	SM 5210B	
LCS 500-105875/2	LCS 500-105875/2	Total/NA	Water	SM 5210B	
500-30950-5	GWOUE (02162011)	Total/NA	Water	SM 5210B	

Analysis Batch: 105953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-105953/1	MB 500-105953/1	Total/NA	Water	SM 2540D	
500-30950-2	GWOUB (02162011)	Total/NA	Water	SM 2540D	
500-30950-3	GWOUC (02162011)	Total/NA	Water	SM 2540D	
LCS 500-105953/2	LCS 500-105953/2	Total/NA	Water	SM 2540D	
500-30950-5	GWOUE (02162011)	Total/NA	Water	SM 2540D	

Prep Batch: 105967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-105967/1-A	MB 500-105967/1-A	Total/NA	Water	1664A	
LCS 500-105967/2-A	LCS 500-105967/2-A	Total/NA	Water	1664A	
LCSD 500-105967/3-A	LCSD 500-105967/3-A	Total/NA	Water	1664A	
500-30950-1	GWOUA (02162011)	Total/NA	Water	1664A	
500-30950-2	GWOUB (02162011)	Total/NA	Water	1664A	
500-30950-3	GWOUC (02162011)	Total/NA	Water	1664A	
500-30950-4	GWOUD (02162011)	Total/NA	Water	1664A	
500-30950-5	GWOUE (02162011)	Total/NA	Water	1664A	

Analysis Batch: 105968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-105967/1-A	MB 500-105967/1-A	Total/NA	Water	1664A	105967
LCS 500-105967/2-A	LCS 500-105967/2-A	Total/NA	Water	1664A	105967
LCSD 500-105967/3-A	LCSD 500-105967/3-A	Total/NA	Water	1664A	105967
500-30950-1	GWOUA (02162011)	Total/NA	Water	1664A	105967
500-30950-2	GWOUB (02162011)	Total/NA	Water	1664A	105967
500-30950-3	GWOUC (02162011)	Total/NA	Water	1664A	105967
500-30950-4	GWOUD (02162011)	Total/NA	Water	1664A	105967
500-30950-5	GWOUE (02162011)	Total/NA	Water	1664A	105967

Surrogate Summary

Client: Bodine Environmental Services
Project/Site: Jennison Wright

TestAmerica Job ID: 500-30950-1

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	2FP (10-110)	PHL (10-110)	NBZ (28-110)	FBP (31-110)	TBP (34-116)	TPH (20-133)
500-30950-1	GWOUA (02162011)	39	25	71	79	100	99
500-30950-1 - DL	GWOUA (02162011)	0 D	0 D	0 D	0 D	0 D	0 D
500-30950-5	GWOUE (02162011)	38	23	62	71	98	82
LCS 500-105970/2-A	LCS 500-105970/2-A	39	24	62	66	87	92
MB 500-105970/1-A	MB 500-105970/1-A	39	25	66	63	69	86

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPH = Terphenyl-d14

Method: 625 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-105970/1-A
Matrix: Water
Analysis Batch: 106036

Client Sample ID: MB 500-105970/1-A
Prep Type: Total/NA
Prep Batch: 105970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	<10		10	5.2	ug/L		02/21/11 07:25	02/22/11 12:00	1
Phenol	<10		10	0.89	ug/L		02/21/11 07:25	02/22/11 12:00	1
Bis(2-chloroethyl)ether	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
2,2'-oxybis[1-chloropropane]	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
N-Nitrosodi-n-propylamine	<5.0		5.0	1.6	ug/L		02/21/11 07:25	02/22/11 12:00	1
Hexachloroethane	<5.0		5.0	1.2	ug/L		02/21/11 07:25	02/22/11 12:00	1
2-Chlorophenol	<5.0		5.0	1.1	ug/L		02/21/11 07:25	02/22/11 12:00	1
2-Methylphenol	<5.0		5.0	1.1	ug/L		02/21/11 07:25	02/22/11 12:00	1
Nitrobenzene	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
Bis(2-chloroethoxy)methane	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
1,2,4-Trichlorobenzene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Isophorone	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
2,4-Dimethylphenol	<5.0		5.0	1.6	ug/L		02/21/11 07:25	02/22/11 12:00	1
Hexachlorobutadiene	<5.0		5.0	1.5	ug/L		02/21/11 07:25	02/22/11 12:00	1
Naphthalene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
2,4-Dichlorophenol	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
2,4,6-Trichlorophenol	<5.0		5.0	1.1	ug/L		02/21/11 07:25	02/22/11 12:00	1
Hexachlorocyclopentadiene	<10		10	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
2-Chloronaphthalene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
4-Chloro-3-methylphenol	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
2,6-Dinitrotoluene	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
2-Nitrophenol	<5.0		5.0	1.2	ug/L		02/21/11 07:25	02/22/11 12:00	1
Dimethyl phthalate	<5.0		5.0	1.2	ug/L		02/21/11 07:25	02/22/11 12:00	1
2,4-Dinitrophenol	<20		20	8.1	ug/L		02/21/11 07:25	02/22/11 12:00	1
Acenaphthylene	<5.0		5.0	1.5	ug/L		02/21/11 07:25	02/22/11 12:00	1
2,4-Dinitrotoluene	<5.0		5.0	1.5	ug/L		02/21/11 07:25	02/22/11 12:00	1
Acenaphthene	<5.0		5.0	1.5	ug/L		02/21/11 07:25	02/22/11 12:00	1
4-Nitrophenol	<20		20	3.6	ug/L		02/21/11 07:25	02/22/11 12:00	1
Fluorene	<5.0		5.0	1.6	ug/L		02/21/11 07:25	02/22/11 12:00	1
1,2-Diphenylhydrazine	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
4-Bromophenyl phenyl ether	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Hexachlorobenzene	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
Diethyl phthalate	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
4-Chlorophenyl phenyl ether	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
Pentachlorophenol	<20		20	7.5	ug/L		02/21/11 07:25	02/22/11 12:00	1
N-Nitrosodiphenylamine	<5.0		5.0	1.8	ug/L		02/21/11 07:25	02/22/11 12:00	1
4,6-Dinitro-2-methylphenol	<20		20	5.0	ug/L		02/21/11 07:25	02/22/11 12:00	1
Phenanthrene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Anthracene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Dibenzofuran	<5.0		5.0	1.5	ug/L		02/21/11 07:25	02/22/11 12:00	1
Di-n-butyl phthalate	<5.0		5.0	1.2	ug/L		02/21/11 07:25	02/22/11 12:00	1
Benzidine	<50		50	10	ug/L		02/21/11 07:25	02/22/11 12:00	1
Fluoranthene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Pyrene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Butyl benzyl phthalate	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
Benzo[a]anthracene	<5.0		5.0	1.1	ug/L		02/21/11 07:25	02/22/11 12:00	1
Chrysene	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
3,3'-Dichlorobenzidine	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
Bis(2-ethylhexyl) phthalate	<10		10	1.1	ug/L		02/21/11 07:25	02/22/11 12:00	1

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-105970/1-A
Matrix: Water
Analysis Batch: 106036

Client Sample ID: MB 500-105970/1-A
Prep Type: Total/NA
Prep Batch: 105970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	<10		10	1.6	ug/L		02/21/11 07:25	02/22/11 12:00	1
Benzo[b]fluoranthene	<5.0		5.0	1.1	ug/L		02/21/11 07:25	02/22/11 12:00	1
Benzo[k]fluoranthene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Benzo[a]pyrene	<5.0		5.0	1.2	ug/L		02/21/11 07:25	02/22/11 12:00	1
Indeno[1,2,3-cd]pyrene	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1
Dibenz(a,h)anthracene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
Benzo[g,h,i]perylene	<5.0		5.0	1.4	ug/L		02/21/11 07:25	02/22/11 12:00	1
3 & 4 Methylphenol	<5.0		5.0	1.3	ug/L		02/21/11 07:25	02/22/11 12:00	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*39*		*10 - 110*	*02/21/11 07:25*	*02/22/11 12:00*	*1*
Phenol-d5	*25*		*10 - 110*	*02/21/11 07:25*	*02/22/11 12:00*	*1*
Nitrobenzene-d5	*66*		*28 - 110*	*02/21/11 07:25*	*02/22/11 12:00*	*1*
2-Fluorobiphenyl	*63*		*31 - 110*	*02/21/11 07:25*	*02/22/11 12:00*	*1*
2,4,6-Tribromophenol	*69*		*34 - 116*	*02/21/11 07:25*	*02/22/11 12:00*	*1*
Terphenyl-d14	*86*		*20 - 133*	*02/21/11 07:25*	*02/22/11 12:00*	*1*

Lab Sample ID: LCS 500-105970/2-A
Matrix: Water
Analysis Batch: 106036

Client Sample ID: LCS 500-105970/2-A
Prep Type: Total/NA
Prep Batch: 105970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
N-Nitrosodimethylamine	50.0	23.3		ug/L		47	10 - 200
Phenol	50.0	14.3		ug/L		29	5 - 112
Bis(2-chloroethyl)ether	50.0	31.7		ug/L		63	12 - 158
2,2'-oxybis[1-chloropropane]	50.0	28.9		ug/L		58	36 - 166
N-Nitrosodi-n-propylamine	50.0	32.0		ug/L		64	10 - 230
Hexachloroethane	50.0	21.1		ug/L		42	40 - 113
2-Chlorophenol	50.0	29.0		ug/L		58	23 - 134
2-Methylphenol	50.0	26.2		ug/L		52	30 - 146
Nitrobenzene	50.0	30.3		ug/L		61	35 - 180
Bis(2-chloroethoxy)methane	50.0	32.2		ug/L		64	33 - 184
1,2,4-Trichlorobenzene	50.0	25.0		ug/L		50	44 - 142
Isophorone	50.0	32.0		ug/L		64	21 - 196
2,4-Dimethylphenol	50.0	31.1		ug/L		62	32 - 119
Hexachlorobutadiene	50.0	22.8		ug/L		46	24 - 116
Naphthalene	50.0	29.0		ug/L		58	21 - 133
2,4-Dichlorophenol	50.0	33.1		ug/L		66	39 - 135
2,4,6-Trichlorophenol	50.0	37.7		ug/L		75	37 - 144
Hexachlorocyclopentadiene	50.0	21.8		ug/L		44	10 - 200
2-Chloronaphthalene	50.0	31.1		ug/L		62	60 - 118
4-Chloro-3-methylphenol	50.0	35.3		ug/L		71	22 - 147
2,6-Dinitrotoluene	50.0	40.9		ug/L		82	50 - 158
2-Nitrophenol	50.0	31.1		ug/L		62	29 - 182
Dimethyl phthalate	50.0	40.2		ug/L		80	10 - 112
2,4-Dinitrophenol	50.0	34.6		ug/L		69	10 - 191
Acenaphthylene	50.0	35.8		ug/L		72	33 - 145
2,4-Dinitrotoluene	50.0	40.0		ug/L		80	39 - 139
Acenaphthene	50.0	33.3		ug/L		67	47 - 145

Method: 625 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-105970/2-A
Matrix: Water
Analysis Batch: 106036

Client Sample ID: LCS 500-105970/2-A
Prep Type: Total/NA
Prep Batch: 105970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
4-Nitrophenol	50.0	13.8	J	ug/L		28	10 - 132
Fluorene	50.0	37.4		ug/L		75	59 - 121
4-Bromophenyl phenyl ether	50.0	42.7		ug/L		85	53 - 127
Hexachlorobenzene	50.0	42.9		ug/L		86	10 - 152
Diethyl phthalate	50.0	40.2		ug/L		80	10 - 114
4-Chlorophenyl phenyl ether	50.0	35.8		ug/L		72	25 - 158
Pentachlorophenol	50.0	40.5		ug/L		81	14 - 176
N-Nitrosodiphenylamine	50.0	42.1		ug/L		84	10 - 200
4,6-Dinitro-2-methylphenol	50.0	40.3		ug/L		81	10 - 181
Phenanthrene	50.0	42.4		ug/L		85	54 - 120
Anthracene	50.0	43.5		ug/L		87	27 - 133
Dibenzofuran	50.0	35.1		ug/L		70	
Di-n-butyl phthalate	50.0	45.5		ug/L		91	1 - 118
Benzidine	50.0	<50		ug/L		11	10 - 200
Fluoranthene	50.0	45.2		ug/L		90	26 - 137
Pyrene	50.0	46.5		ug/L		93	52 - 115
Butyl benzyl phthalate	50.0	47.9		ug/L		96	10 - 152
Benzo[a]anthracene	50.0	40.7		ug/L		81	33 - 143
Chrysene	50.0	43.3		ug/L		87	17 - 168
3,3'-Dichlorobenzidine	50.0	44.4		ug/L		89	10 - 262
Bis(2-ethylhexyl) phthalate	50.0	45.3		ug/L		91	8 - 158
Di-n-octyl phthalate	50.0	52.4		ug/L		105	4 - 146
Benzo[b]fluoranthene	50.0	50.7		ug/L		101	24 - 159
Benzo[k]fluoranthene	50.0	43.3		ug/L		87	11 - 162
Benzo[a]pyrene	50.0	44.4		ug/L		89	17 - 163
Indeno[1,2,3-cd]pyrene	50.0	41.2		ug/L		82	10 - 171
Dibenz(a,h)anthracene	50.0	39.4		ug/L		79	10 - 227
Benzo[g,h,i]perylene	50.0	41.1		ug/L		82	10 - 219
3 & 4 Methylphenol	50.0	28.4		ug/L		57	11 - 150

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*39*		*10 - 110*
Phenol-d5	*24*		*10 - 110*
Nitrobenzene-d5	*62*		*28 - 110*
2-Fluorobiphenyl	*66*		*31 - 110*
2,4,6-Tribromophenol	*87*		*34 - 116*
Terphenyl-d14	*92*		*20 - 133*

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 500-105967/1-A
Matrix: Water
Analysis Batch: 105968

Client Sample ID: MB 500-105967/1-A
Prep Type: Total/NA
Prep Batch: 105967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	<5.0		5.0	1.8	mg/L		02/21/11 07:30	02/21/11 14:15	1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 500-105967/2-A — **Client Sample ID: LCS 500-105967/2-A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 105968 — **Prep Batch: 105967**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
HEM (Oil & Grease)	40.0	36.4		mg/L		91	78 - 114

Lab Sample ID: LCSD 500-105967/3-A — **Client Sample ID: LCSD 500-105967/3-A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 105968 — **Prep Batch: 105967**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	39.2		mg/L		98	78 - 114	7	18

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 500-105953/1 — **Client Sample ID: MB 500-105953/1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 105953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.0		5.0	1.0	mg/L			02/20/11 16:30	1

Lab Sample ID: LCS 500-105953/2 — **Client Sample ID: LCS 500-105953/2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 105953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Total Suspended Solids	200	190		mg/L		95	80 - 120

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 500-105875/1 MB — **Client Sample ID: USB 500-105875/1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 105875

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<2.0		2.0	2.0	mg/L			02/18/11 08:11	1

Lab Sample ID: LCS 500-105875/2 — **Client Sample ID: LCS 500-105875/2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 105875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Biochemical Oxygen Demand	198	207		mg/L		105	85 - 115

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax 708.534.5211

(optional)
Report To
Contact:
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-30950
Chain of Custody Number:
Page ____ of ____
Temperature °C of Cooler: 3.2

Client: BODINE ENVIRONMENTAL
Client Project #: 119386-11
Project Name: IEPA - JENNISON WRIGHT NPL SITE
Project Location/State: GRANITE CITY, IL
Lab Project #:
Sampler: JOSH TURNER
Lab PM:

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	SVOC	OIL & GREASE	BOD & TSS	TSS						Comments
1		GW0VA (02162011)	02/16/11	1220	3	W	X	X								
2		GW0VB (02162011)	↓	1225	2	↓		X		X						
3		GW0VC (02162011)	↓	1231	2	↓		X		X						
4		GW0VD (02162011)	↓	1235	1	↓		X								
5		GW0VE (02162011)	↓	1210	4	↓	X	X	X							

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days X 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	BODINE ENV.	02/16/2011	3:55 P.M	[signature]	TA	2/17/11	1030
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: ☐
Shipped: ☒
Hand Delivered: ☐

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
Wi – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

02/25/2011

Login Sample Receipt Check List

Client: Bodine Environmental Services

Job Number: 500-30950-1

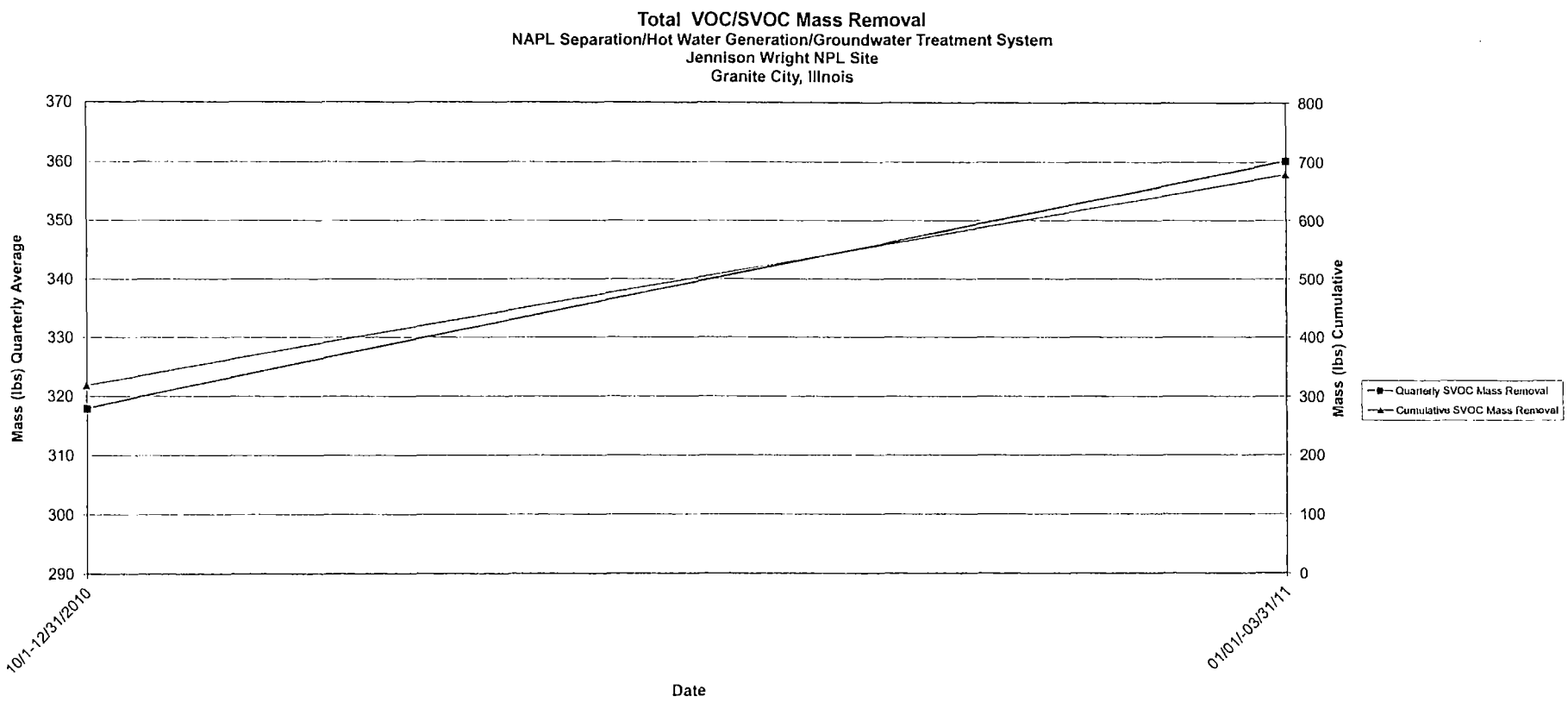
Login Number: 30950
Creator: Lunt, Jeff T
List Number: 1

List Source: TestAmerica Chicago

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.2
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

APPENDIX C

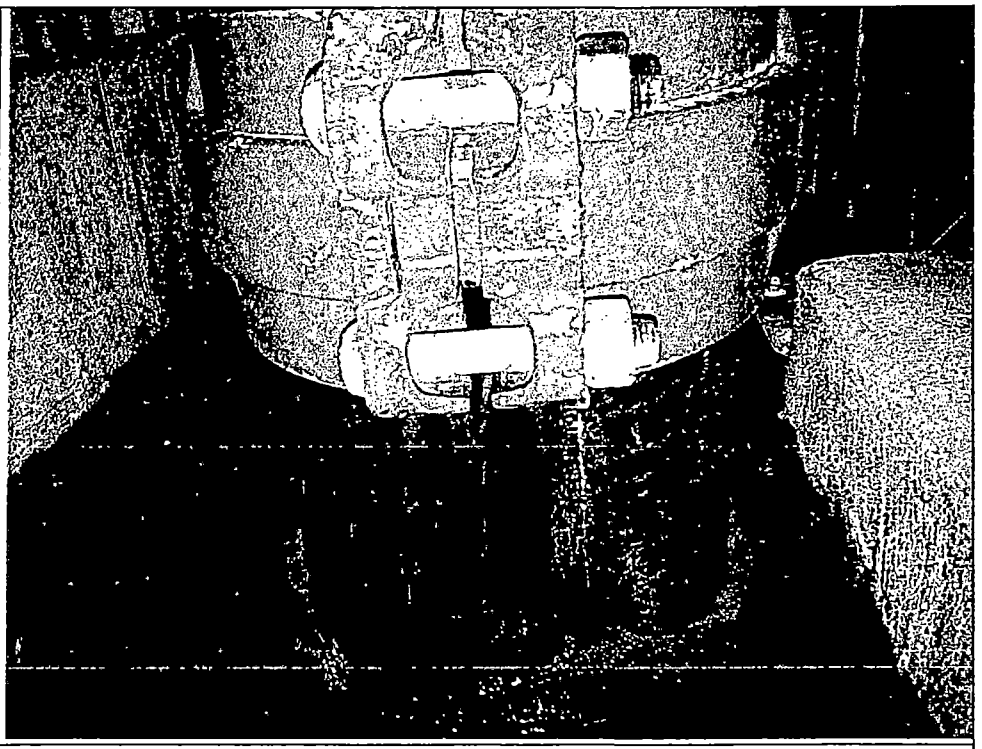
Cumulative VOC/SVOC Mass Removal and VOC/SVOC Concentration Graphs


Total VOC/SVOC Mass Removal
NAPL Separation/Hot Water Generation/Groundwater Treatment System
Jennison Wright NPL Site
Granite City, Illnois
Mass (lbs) Quarterly Average
370
360
350
340
330
320
310
300
290
Mass (lbs) Cumulative
800
700
600
500
400
300
200
100
0
10/1-12/31/2010
01/01/-03/31/11
Date
Quarterly SVOC Mass Removal
Cumulative SVOC Mass Removal

APPENDIX D

Photograph Log

Photo #1	
Illinois Environmental Protection Agency	
Subject: Jennison Wright NPL Site Remediation	
Taken by: Rick Evey	
January 2011	
Bodine Project No. 119386	Facility: Jennison Wright NPL Site – LPC No. 1190400008
	Location: 900 W. 22nd Street, Granite City, Illinois
	Description: A photo indicating scaling on the flow meter paddles after the heat exchanger.

Photo #2	
Illinois Environmental Protection Agency	
Subject: Jennison Wright NPL Site Remediation	
Taken by: Rick Evey	
January 2011	
Bodine Project No. 119386	Facility: Jennison Wright NPL Site – LPC No. 1190400008
	Location: 900 W. 22nd Street, Granite City, Illinois
	Description: A photo showing a leak in the 10" HDPE influent line.