

MODIFICATION TO THE  
REMEDIAL ACTION PLAN  
AND RECOMMENDATION FOR  
MONITORING ONLY PLAN

PMI TRANSFER FACILITY  
3650 SW 47 AVENUE  
DAVIE, FLORIDA 33314

PROJECT NO. 145-001-02  
REPORT NO. 311

July 10, 2001

Prepared by:

***Global Environmental Services***

***"Committed to improve the quality of life, worldwide"***



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**Prepared by:**

Global Environmental Services, Inc.  
250 S. Ocean Blvd., Suite 266  
Delray Beach, Florida 33483

July 10, 2001

Mr. Judd Gilbert  
Petroleum Management Inc.  
2191 SW 115 Terrace  
Davie, FL 33325

Reference: Modification to the Remedial Action Plan and  
Recommendation for Monitoring Only Plan Status  
PMI Transfer Facility  
3650 SW 47 Avenue, Davie, FL  
Project No. 145-001-02  
Report No. 311

Dear Mr. Gilbert:

On behalf of Petroleum Management Inc. (PMI), Cunnningham and Durrance Consulting Engineers in conjunction with Global Environmental Services, Inc. (GES) has completed the Modification to the Remedial Action Plan (RAP) for the former UST area at the referenced site according to your written authorization dated May 24, 2001. The original RAP for the referenced site was approved by Broward County DPEP on May 1, 1996. The RAP was not implemented because on October 14, 1996, the adjacent Perma-Fix facility experienced a large volume discharge (i.e. approximately 53,000-gallons) of waste petroleum product that migrated south onto the PMI facility from both the surface and the subsurface via a concrete drainpipe (see GES report no. 233 dated January 29, 1999). This Modification to the RAP only pertains to the contaminated soil documented at the former UST area at the referenced site.

The purpose for submitting a Modification to the Remedial Action Plan for the PMI facility was to re-evaluate the soil quality according to the new target cleanup levels established in Table IV of the revised FAC 62-770. Our scope of services included: 1) conducting 16 soil borings over the contaminated area (i.e. south and west of the former UST area), 2) obtaining soil samples for testing of EPA Methods 8021 and 8100 and FL Method PRO, 3) conducting soil leachate analyses by Method 1312 on 13 of the 16 soil samples and 4) updating the groundwater quality at 5 monitor well locations by testing the groundwater samples for EPA Methods 8021 and 8310.

Based on the soil laboratory results, evidence exists for excessively contaminated soil at seven of sixteen soil sample locations with EPA Method 8100 compounds being the most common contaminant. Also, evidence exists for contaminated soil exceeding the leachability level at eleven of sixteen soil samples with FL Method PRO compounds being the most common contaminant. Finally, evidence exists for the potential of the soil to leach contaminants into the groundwater based on nine of the thirteen soil leachate samples testing above site rehabilitation levels with EPA Method 8100 compounds being the most common contaminant.

Based on the results of the soil assessment, the excessively contaminated soil (i.e. soil sample locations exceeding TCLs or LLs) is located west and south of the former IRA excavation area over an area of 3825 ft<sup>2</sup> at the 3 to 4 foot-depth interval. This volume of contaminated soil (less the 470 ft<sup>2</sup> area directly under the aboveground tank silos) equates to approximately 168 tons of contaminated soil.


Based on the groundwater laboratory results, evidence exists for contaminated groundwater at three of five monitor well locations with EPA Method 8310 compounds being the most common contaminant. Site rehabilitation levels were exceeded for five EPA Method 8310 compounds at the three monitor well locations. The more contaminated groundwater appears to be located at the perimeter monitor well locations (MW-1, ATMW-14 and ATMW-15) relative to the source well location (MW-3). All contaminant concentrations are within Monitoring Only Plan guidelines.

Based on the results of the soil assessment, we recommend Remedial Action (RA) by removing and disposing of approximately 168 tons of contaminated soil south and west of the former IRA excavation area. The soil will be excavated in stages as to not disrupt existing operations or disturb existing infrastructure. All soil Remedial Action activities will be documented in a report submitted to Broward County DPEP for review and approval.

Based on the results of the limited groundwater assessment, we recommend Monitoring Only Plan (MOP) status for the contaminated groundwater. Monitor wells MW-1, MW-3, ATMW-14 and ATMW-15 will be sampled quarterly and analyzed for EPA Method 8021, EPA Method 8310 and FL Method PRO. All monitoring activities will be documented in quarterly MOP reports submitted to Broward County DPEP for review and approval.

We will forward this RAP Modification and MOP recommendation to Broward County DPEP for review. If you have any questions or require further information, please contact our office.

Respectfully submitted,



**GLOBAL ENVIRONMENTAL SERVICES**  
Christopher Perry, P.G. #1515  
Senior Project Geologist



**CUNNINGHAM & DURRANCE ENGINEERS** 7/10/01  
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7-10-01

CP:cl

cc: Client (1)

Broward County DPEP (1) Lorenzo Fernandez

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## **INTRODUCTION**

### **SITE LOCATION**

The subject site is located in Broward County, Township 50 South, Range 41 East, Section 25, approximately at the intersection of Oakes Road and Southwest 47<sup>th</sup> Avenue within the city limits of Davie, Florida. See Appendix A-1 for site location map.

### **SITE DESCRIPTION**

The site is located on a rectangular property having an area of approximately 46,350 square feet (1.06 acres). Improvements at the site include a bermed drum storage area, an aboveground storage tank (AST) area, within secondary containment, a concrete parking area, an office trailer, and various equipment storage or waste storage areas. The western three quarters of the property is covered with concrete pavement. The eastern quarter of the site is unpaved. During storm events, this low lying eastern quarter of the site becomes temporarily flooded. The eastern portion of the site also became temporarily flooded with waste petroleum product from an accidental discharge at the adjacent facility to the north on October 14, 1996. With the exception of the recently discovered concrete drainpipe on the eastern portion of the site, there are no underground utilities located on the subject property. See Appendix A-2 for an overall site plan.

The site is located in an industrial area. The properties to the east and south are used for storage and recycling of automobiles and their parts. The site is bordered on the west by SW 47 Avenue, with industrial warehouses located further to the west. Perma-Fix, a used oil and petroleum waste water recycling facility, is located to the north where an approximate 53,000 gallon discharge of waste petroleum product occurred during October of 1996.

### **SITE HISTORY**

The site has been utilized as a transfer facility for used oil and petroleum waste water storage and separation since 1983. Company vehicles are stored onsite, and light mechanical repair work has been performed at the site. All used oil and petroleum waste water is stored in an AST system within secondary containment structures at the site. Prior to 1983, the site was utilized by a trucking company.

A water sample collected from an onsite monitoring well on September 4, 1992 by Broward County Department of Natural Resource Protection personnel was found to contain levels of soluble hydrocarbons above state target levels. Geo Science and Engineering, a previous consultant, submitted a Contamination Assessment Plan (CAP) to the DNRP on November 25, 1992. The CAP contained re-sampling results below target levels and recommended a quarterly monitoring program. The CAP was approved and monitoring was performed at the site on a quarterly basis.

Another sampling event of an onsite well was conducted by DNRP personnel on April 22, 1994. The groundwater sample was found to contain levels of soluble hydrocarbons above state target levels. Based on these findings, the Broward County DNRP required the preparation of a CAR as a condition of an Environmental Assessment and Remediation License issued on July 15, 1994.

During September through December of 1994, U.S. Environmental Group (USEG), another consultant, coordinated the removal of two, 4,000 gallon underground storage tanks containing mixed petroleum products. In addition, approximately 374 tons of contaminated soil was removed and disposed from the site. The contaminated soils were excavated over the eastern portion of the site where the later discharge from the Permafix facility flowed across the PMI facility.

During September 1994 through March of 1995, USEG conducted contamination assessment activities related to the discharge from the removed underground storage tanks. The results of the soil assessment indicated that contaminated soils (approximately 875 cubic yards) remained on site to the south and west of the former UST area. The contaminated soil to the east and north of the former UST area (i.e. location of the 1996 off-site discharge from the Permafix facility on to the PMI facility) was excavated and backfilled. The results of groundwater assessment indicated that the contaminated groundwater was limited to the former UST area over a 40-foot diameter area. The groundwater contamination was confined to one well location (MW-3) with moderate concentrations of benzene (69.9 ug/L), total volatile organic aromatics (205.9 ug/L) and total naphthalenes (119.1 ug/L). These concentrations were well within monitoring only guidelines and free floating product was never observed in any of the eight PMI well locations.

U.S. Environmental Group then compiled all tank closure, initial remedial action and contamination assessment activities into a report submitted to Broward County DNRP on May 17, 1995. Based on the results of their report, USEG recommended submittal of a Remedial Action Plan to address the remaining contaminated soil on the site. On May 23, 1995, Broward County DNRP approved the report and requested that a RAP be submitted for the PMI facility.

U.S. Environmental Group submitted a Remedial Action Plan to Broward County DNRP on November 17, 1995. USEG submitted an Addendum to the RAP Broward County DNRP on April 29, 1996. On May 1, 1996, Broward County DNRP approved the RAP for the PMI facility.

Since the RAP approval, PMI has not implemented the clean up plan because on October 14, 1996, the adjacent Perma-Fix facility experienced a large volume discharge (i.e. approximately 53,000-gallons) of waste petroleum product that migrated south onto the PMI facility from both the surface and the subsurface via a concrete drainpipe (see GES report no. 233 dated January 29, 1999).

Also, since the RAP approval, soil cleanup guidelines had changed under FAC 62-770. Thus, GES recommended submitting a Modification to the Remedial Action Plan for the PMI facility by re-evaluating the soil quality according to the new target cleanup levels established in Table IV of the revised FAC 62-770.

GES believes that re-sampling and testing the soils for the parameters in Table IV of the revised FAC 62-770 may preclude extensive soil IRA activities proposed in the original RAP for the PMI facility.

The following Modification to the RAP involved conducting 16 soil borings over the contaminated area (i.e. south and west of the former UST area) and obtaining soil samples for testing of EPA Methods 8021 and 8100 and FL Method PRO. In addition, soil leachate analyses was conducted by Method 1312 on 13 of the 16 soil samples to evaluate the potential for the soil to act as a continuing source of groundwater contamination. Finally, groundwater quality was updated at 5 monitor well locations by testing the groundwater samples for EPA Methods 8021 and 8310.

## **MODIFICATION TO THE REMEDIAL ACTION PLAN**

### **SOIL ASSESSMENT**

On May 29, 2001, a GES project geologist, a Dynamic Drilling crew and an Envirodyne field technician were present at the facility to conduct soil sampling for laboratory testing and field screening with an OVA. The soil sampling for laboratory testing and field screening was conducted at 16 soil boring locations (SB-1 through SB-16) at the 3 to 4 foot depth interval to the south and west of the former IRA excavation. The groundwater table is approximately four feet below surface grade. See Appendix A-3 for the soil boring locations.

For testing of EPA Method 8021 compounds, the sampling procedure employed Method 5035 using the Encore sampler according to the protocol in the 1998 FDEP Memorandum. The procedure consisted of advancing a split-spoon sampler to 4 feet below grade, retracting the split-spoon sampler and advancing two Encore sampling containers directly into the soil within the split-spoon sampler at the 3 to 4 foot depth interval and retracting the Encore sampling containers. The Encore sampling containers were sealed with caps, placed on ice and transported to Envirodyne, Inc.

For testing of EPA Method 8100 and FL Method PRO compounds, the sampling procedure basically consisted of advancing a split-spoon sampler to 4 feet below grade, retracting the split-spoon sampler and obtaining soil samples directly from within the split spoon sampler at the 3 to 4 foot depth interval. The soil samples were then placed in appropriate sampling containers, sealed, placed on ice and transported to Envirodyne, Inc.



For field screening soil samples with an OVA, the sampling procedure consisted of advancing a split-spoon sampler to 4 feet below grade, retracting the split-spoon sampler and obtaining soil samples directly from within the split spoon sampler at the 3 to 4 foot depth interval. The soil samples were then placed in clean glass jars, sealed, allowed to set for a few minutes and then screened with the OVA (TVA-1000 model).

FAC 62-770 defines contaminated soil for the Diesel/Kerosene Group as any soil sample that has an OVA reading that exceeds 50 ppm. The revised FAC 62-770 defines contaminated soil based on target cleanup levels (TCLs) for individual compounds of each laboratory test parameter performed on the soil sample.

Envirodyne was instructed to analyze the soil samples, SB-1 through SB-16, for EPA Method 5035/8021, EPA Method 8100 and FL Method PRO. Envirodyne was also instructed to analyze the leachate from soil samples, SB-12 for EPA Method 1312/8021. Envirodyne was also instructed to analyze the soil samples, SB-3, SB-4, SB-5, SB-8, SB-9, SB-10, SB-13 and SB-16, for EPA Method 1312/8100. Envirodyne was also instructed to analyze the soil samples, SB-1, SB-2, SB-3, SB-6, SB-8, SB-10, SB-11 and SB-16 for FL Method 1312/PRO.

Refer to Table 1 for the OVA readings on the screened soil samples. Refer to Tables 2A and 2B for the total soil quality. Refer to Tables 3A and 3B for the soil leachate analyses. See Appendix A-3 for the soil sample locations.

<b>TABLE 1</b> <b>Soil OVA Resultant Readings (ppm): May 29, 2001</b> <b>PMI Transfer Facility</b>			
<b>Location</b>	<b>OVA Response</b>	<b>Location</b>	<b>OVA Response</b>
SB-1	215	SB-9	51
SB-2	99	SB-10	583
SB-3	73	SB-11	112
SB-4	6	SB-12	353
SB-5	17	SB-13	39
SB-6	292	SB-14	214
SB-7	59	SB-15	51
SB-8	58	SB-16	134
<b>Notes:</b> Samples obtained from 3-4 feet below grade. Water table at 4 feet. No petroleum/used oil stains or odors noted in soil from surface to 3 feet.			

Evidence exists for contaminated soil based on OVA readings greater than 50 ppm from 13 of 16 soil samples (SB-1, SB-2, SB-3, SB-6, SB-7, SB-8, SB-9, SB-10, SB-11, SB-12, SB-14, SB-15 and SB-16) according to FAC 62-770. Also, we found no evidence for contaminated soil based on OVA readings at less than 50 ppm at the remaining soil sample locations (SB-4, SB-5 and SB-13). Refer to Appendix B for the OVA field screening report.

**TABLE 2A**  
**Soil Quality: May 29, 2001**  
**PMI Transfer Facility: Eastern Half of Investigation Area**

Parameter	Soil Borings SB-1 through SB-8									
	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	TCL	LL
<b>EPA Method 8021 (mg/kg)</b>	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.5	0.007
Benzene						BDL	BDL	BDL	2000	0.4
Toluene						0.008	BDL	0.012	240	0.4
Ethylbenzene						0.023	BDL	0.049	290	0.3
Xylenes						0.021	0.006	0.170	6100	0.2
MTBE						BDL	BDL	BDL		
<b>EPA Method 8100 (mg/kg)</b>										
Acenaphthene	BDL	BDL	0.31	0.47	1.2	BDL	BDL	BDL	22000	4
Acenaphthylene	BDL	0.52	BDL	BDL	BDL	1.8	BDL	0.67	11000	22
Anthracene	BDL	BDL	0.91	1.3	2.8	BDL	BDL	BDL	290000	2000
Benzo(a)anthracene	BDL	BDL	2.0	4.2	6.0	BDL	BDL	BDL	5.1	2.9
Benzo(b)fluoranthene	BDL	BDL	2.2	4.9	9.8	BDL	BDL	BDL	5	9.8
Benzo(g,h,i)perylene	BDL	BDL	0.94	2.6	3.4	BDL	BDL	BDL	45000	13000
Benzo(k)fluoranthene	BDL	BDL	0.72	1.7	2.4	BDL	BDL	BDL	52	25
Benzo(a)pyrene	BDL	BDL	1.7	3.8	5.6	BDL	BDL	BDL	0.5	7.8
Chrysene	BDL	BDL	1.6	3.9	6.0	BDL	BDL	BDL	490	80
Dibenzo(a,h)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5	14
Fluoranthene	BDL	BDL	4.2	8.4	13	BDL	BDL	BDL	45000	550
Fluorene	BDL	0.18	0.41	0.47	1.2	0.5	BDL	BDL	24000	87
Indeno(1,2,3-cd)pyrene	BDL	BDL	0.84	2.7	3.9	BDL	BDL	BDL	5.2	28
Naphthalene	BDL	BDL	BDL	BDL	0.73	BDL	BDL	1.7	8600	1
Phenanthrene	BDL	BDL	2.9	4.7	4.2	BDL	BDL	BDL	29000	120
Pyrene	BDL	BDL	3.6	7.3	12	BDL	BDL	BDL	40000	570
<b>FL Method PRO (mg/kg)</b>	<b>1200</b>	<b>1100</b>	<b>450</b>	<b>96</b>	<b>260</b>	<b>4100</b>	<b>70</b>	<b>2100</b>	<b>2500</b>	<b>340</b>
EPA Method 8021 = Volatile Organic Aromatics (VOAs) using encore sampling method 5035										
EPA Method 8100 = Polynuclear Aromatic Hydrocarbons (PAHs)										
FL Method PRO = Petroleum Residual Organics (i.e. Oil and Grease)										
mg/kg = milligrams per kilogram (parts per million)										
BDL = below detection limits										
TCL = Target Cleanup Level per FAC 62-770, Table IV Exposure Level II										
LL = Leachability Level per FAC 62-770, Table IV based on Table V groundwater criteria										

At soil boring location SB-12, the soil sample tested above the leachability level (LL) for one EPA Method 8021 compound, benzene, at 0.009 mg/kg. At the remaining soil boring locations, SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7, SB-8, SB-9, SB-10, SB-11, SB-13, SB-14, SB-15 and SB-16, the soil samples tested below detection limits (BDL), below target cleanup levels (TCLs) or below LLs for all EPA Method 8021 compounds.

At soil boring locations, SB-3, SB-4, SB-5, SB-9, SB-10 and SB-16, the soil samples tested above the TCL for three EPA Method 8100 compounds [benzo(a)anthracene, benzo(b)fluoranthene, and benzo(a)pyrene] and above the LL for four EPA Method 8100 compounds [benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene and naphthalene]. At the remaining soil boring locations, SB-1, SB-2, SB-6, SB-7, SB-11, SB-12, SB-13, SB-14 and SB-15, the soil samples tested BDL, below TCLs or below LLs for all EPA Method 8100 compounds, with the exception of SB-8 which tested slightly above the LL for naphthalenes at 1.7 mg/kg.

Only at soil boring location, SB-6, the soil sample tested above the TCL for FL Method PRO compounds. However, at soil boring locations, SB-1, SB-2, SB-3, SB-6, SB-8, SB-10, SB-11 and SB-16, the soil samples tested above the LL for FL Method PRO compounds. At the remaining soil boring locations, SB-4, SB-5, SB-7, SB-9, SB-12, SB-13, SB-14 and SB-15 and the soil samples tested BDL, below TCLs or below LLs for all FL Method PRO compounds.

Overall, 12 of the 16 soil samples tested either above the TCL or above the LL for EPA Method 8021, EPA Method 8100 or FL Method PRO compounds. Refer to Appendices A-4 and A-5 for a benzo(a)pyrene and PRO concentration map. Refer to Appendix C for a copy of the laboratory results. Based on the parameter where the TCL or LL was exceeded, the 12 soil samples (plus an additional sample from SB-13) were analyzed for the Synthetic Precipitate Leachate Procedure (SPLP Method 1312) to evaluate the potential for the soil to act as a continuing source of groundwater contamination.

**TABLE 2B**  
**Soil Quality: May 29, 2001**  
**PMI Transfer Facility: Western Half of Investigation Area**

Parameter	Soil Borings SB-9 through SB-16								TCL	LL
	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16		
<b>EPA Method 8021 (mg/kg)</b>	BDL		BDL		BDL		BDL	BDL		
Benzene		BDL		<b>0.009</b>		BDL			1.5	0.007
Toluene		BDL		0.006		BDL			2000	0.4
Ethylbenzene		0.023		BDL		BDL			240	0.4
Xylenes		0.010		BDL		0.006			290	0.3
MTBE		BDL		BDL		0.007			6100	0.2
<b>EPA Method 8100 (mg/kg)</b>										
Acenaphthene	0.15	0.27	0.49	BDL	BDL	BDL	BDL	1.5	22000	4
Acenaphthylene	BDL	0.70	0.75	BDL	BDL	BDL	BDL	BDL	11000	22
Anthracene	0.26	BDL	BDL	BDL	BDL	BDL	BDL	BDL	290000	2000
Benzo(a)anthracene	0.94	1.2	BDL	BDL	0.30	BDL	BDL	BDL	5.1	2.9
Benzo(b)fluoranthene	1.2	1.4	BDL	BDL	0.51	BDL	BDL	BDL	5	9.8
Benzo(g,h,i)perylene	0.60	0.97	BDL	BDL	BDL	BDL	BDL	BDL	45000	13000
Benzo(k)fluoranthene	0.40	0.80	BDL	BDL	BDL	BDL	BDL	BDL	52	25
Benzo(a)pyrene	<b>0.80</b>	<b>1.3</b>	BDL	BDL	0.31	BDL	BDL	<b>2.0</b>	0.5	7.8
Chrysene	0.87	1.1	BDL	BDL	BDL	BDL	BDL	1.8	490	80
Dibenzo(a,h)anthracene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.5	14
Fluoranthene	2.0	2.6	BDL	BDL	0.70	BDL	BDL	0.49	45000	550
Fluorene	BDL	0.29	0.49	BDL	BDL	BDL	BDL	BDL	24000	87
Indeno(1,2,3-cd)pyrene	0.60	0.56	BDL	BDL	BDL	BDL	BDL	1.2	5.2	28
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	0.40	BDL	8600	1
Phenanthrene	1.2	1.3	BDL	BDL	0.45	BDL	BDL	5.1	29000	120
Pyrene	1.9	2.7	BDL	BDL	0.56	BDL	0.23	4.8	40000	570
<b>FL Method PRO (mg/kg)</b>	<b>83</b>	<b>1100</b>	<b>540</b>	<b>210</b>	<b>140</b>	<b>15</b>	<b>250</b>	<b>2200</b>	<b>2500</b>	<b>340</b>
EPA Method 8021 = Volatile Organic Aromatics (VOAs) using encore sampling method 5035										
EPA Method 8100 = Polynuclear Aromatic Hydrocarbons (PAHs)										
FL Method PRO = Petroleum Residual Organics (i.e. Oil and Grease)										
mg/kg = milligrams per kilogram (parts per million)										
BDL = below detection limits										
TCL = Target Cleanup Level per FAC 62-770, Table IV Exposure Level II										
LL = Leachability Level per FAC 62-770, Table IV based on Table V groundwater criteria										

**TABLE 3A**  
**Soil Leachate Analyses: May 29, 2001**  
**PMI Transfer Facility: Eastern Half of Investigation Area**

	Soil Borings SB-1 through SB-8								
Parameter	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SRL
EPA Method 8021 (ug/L)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	---
EPA Method 8100 (ug/L)	N/A	N/A				N/A	N/A		
Acenaphthene			BDL	3.4	3.6			BDL	20
Acenaphthylene			BDL	BDL	BDL			1.2	210
Anthracene			BDL	250	BDL			BDL	2100
Benzo(a)anthracene			4.6	110	BDL			29	0.2
Benzo(b)fluoranthene			4.4	110	22			29	0.2
Benzo(g,h,i)perylene			2.9	88	5.7			23	210
Benzo(k)fluoranthene			BDL	70	BDL			17	0.5
Benzo(a)pyrene			BDL	110	BDL			27	0.2
Chrysene			3.9	150	BDL			46	5
Dibenzo(a,h)anthracene			BDL	55	BDL			14	0.2
Fluoranthene			4.2	BDL	6.1			88	280
Fluorene			BDL	BDL	8.0			BDL	280
Indeno(1,2,3-cd)pyrene			1.1	64	1.2			17	0.2
Naphthalene			2.5	BDL	3.6			BDL	20
Phenanthrene			7.6	140	3.2			40	210
Pyrene			10	200	6.4			55	210
FL Method PRO (mg/L)	9.7	4.2	3.1	N/A	N/A	4.0	N/A	5.0	5.0
EPA Method 8021 = Volatile Organic Aromatics (VOAs) EPA Method 8100 = Polynuclear Aromatic Hydrocarbons (PAHs) FL Method PRO = Petroleum Residual Organics (i.e. Oil and Grease) ug/L = micrograms per liter (parts per billion) mg/L = milligrams per liter (parts per million) BDL = below detection limits SRL = Site Rehabilitation Level per FAC 62-770, Table V N/A = Not Analyzed									

At soil boring location SB-12, the soil leachate tested BDL for all EPA Method 1312/8021 compounds.

At soil boring locations, SB-3, SB-4, SB-5, SB-8, SB-9, SB-10 and SB-16 the soil leachate tested above the site rehabilitation levels (SRLs) for seven EPA Method 1312-8100 compounds (benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene). At the other soil boring location, SB-13, the soil leachate tested either BDL or below SRLs for all EPA Method 1312/8100 compounds.

At soil boring locations, SB-1, SB-8 and SB-11, the soil leachate tested at or above the SRL for FL Method 1312/PRO compounds. At other soil boring locations (SB-2, SB-3, SB-6 and SB-10) the soil leachate tested below the SRL for FL Method PRO compounds.

Overall, 9 of the 13 soil leachate samples tested above the SRL for EPA Method 8100 or FL Method PRO compounds. Refer to Appendix A-6 for a benzo(a)anthracene concentration map. Refer to Appendix C for a copy of the laboratory results.

**TABLE 3B**  
**Soil Leachate Analyses: May 29, 2001**  
**PMI Transfer Facility: Western Half of Investigation Area**

Parameter	Soil Borings SB-9 through SB-16								
	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	SRL
<b>EPA Method 8021 (ug/L)</b>	N/A	N/A	N/A	BDL	N/A	N/A	N/A	N/A	---
<b>EPA Method 8100 (ug/L)</b>			N/A	N/A		N/A	N/A		
Acenaphthene	BDL	BDL			BDL			BDL	20
Acenaphthylene	1.6	BDL			BDL			2.4	210
Anthracene	BDL	BDL			BDL			BDL	2100
Benzo(a)anthracene	3.9	3.5			BDL			28	0.2
Benzo(b)fluoranthene	12	BDL			BDL			50	0.2
Benzo(g,h,i)perylene	5.8	BDL			BDL			16	210
Benzo(k)fluoranthene	6.2	BDL			BDL			13	0.5
Benzo(a)pyrene	BDL	1.7			BDL			19	0.2
Chrysene	12	BDL			BDL			31	5
Dibenzo(a,h)anthracene	5.3	BDL			BDL			4.6	0.2
Fluoranthene	32	4.2			BDL			110	280
Fluorene	BDL	34			3.8			BDL	280
Indeno(1,2,3-cd)pyrene	1.1	1.6			BDL			11	0.2
Naphthalene	5.9	BDL			BDL			BDL	20
Phenanthrene	9.5	1.8			BDL			BDL	210
Pyrene	18	5.0			BDL			99	210
<b>FL Method PRO (mg/L)</b>	N/A	4.4	17	N/A	N/A	N/A	N/A	4.0	5.0
EPA Method 8021 = Volatile Organic Aromatics (VOAs) EPA Method 8100 = Polynuclear Aromatic Hydrocarbons (PAHs) FL Method PRO = Petroleum Residual Organics (i.e. Oil and Grease) ug/L = micrograms per liter (parts per billion) mg/L = milligrams per liter (parts per million) BDL = below detection limits SRL = Site Rehabilitation Level per FAC 62-770, Table V N/A = Not Analyzed									

These results indicate that most of the excessively contaminated soil (i.e. soil samples exceeding the TCL) is located west (SB-4, SB-5, SB-6, SB-9, SB-10 and SB-16) and south (SB-3) of the former IRA excavation area. The primary and most pervasive contaminant is the EPA Method 8100 compound, benzo(a)pyrene, which occurs in six of these seven soil samples. One other soil sample, SB-5, exceeded the TCL for two other EPA Method 8100 compounds, benzo(a)anthracene and benzo(b)fluoranthene. Also, only one soil sample, SB-6, exceeded the TCL for FL Method PRO compounds. No soil samples exceeded the TCL for EPA Method 8021 compounds.

These results also indicate the contaminated soil that has the potential to contaminate the groundwater (i.e. soil samples exceeding the LL) is located west (SB-4, SB-5, SB-6, SB-9, SB-10, SB-11, SB-12, SB-13 and SB-16) and south (SB-1, SB-2, SB-3 and SB-8) of the former IRA excavation area. The primary contaminants that exceeded the LL are FL Method PRO compounds, which occur in eight of these thirteen soil samples. Only two soil samples, SB-4 and SB-5, exceeded the LL for one EPA Method 8100 compound, benzo(a)anthracene and one soil sample, SB-8, exceeded the LL for another EPA 8100 Method compound, naphthalene. Only one soil sample, SB-12 exceeded the LL for one EPA Method 8021 compound, benzene.

The leachate analyses indicate the soil can act as a continuing source of groundwater contamination and is located west (SB-4, SB-5, SB-9, SB-10, SB-11 and SB-16) and south (SB-1, SB-3 and SB-8) of the former IRA excavation area. The primary and most pervasive contaminant is the EPA Method 8100 compound, benzo(a)anthracene, which occurs in six of the nine soil leachate samples. Only three soil leachate samples, SB-1, SB-8 and SB-11, exceeded or equaled the SRL for FL Method PRO compounds. The only soil leachate sample, SB-12, for EPA Method 8021 tested BDL for all compounds.

In summary, evidence exists for excessively contaminated soil at seven of sixteen soil samples with EPA Method 8100 compounds being the most common contaminant. Also, evidence exists for contaminated soil exceeding the leachability level at eleven of sixteen soil samples with FL Method PRO compounds being the most common contaminant. Finally, evidence exists for the potential of the soil to leach contaminants into the groundwater based on nine of the thirteen soil leachate samples testing above site rehabilitation levels with EPA Method 8100 compounds being the most common contaminant.

## GROUNDWATER ASSESSMENT

On May 29, 2001, a GES project manager and Envirodyne field technician were on site to obtain groundwater samples for laboratory testing at five monitor well locations. Shallow monitor wells, MW-1, MW-3, MW-5, ATMW-14 and ATMW-15 were sampled to update the groundwater quality for this investigation. Also, the five shallow MWs were sampled with a bailer for visual observations. The Envirodyne field technician collected all groundwater samples in accordance with the Envirodyne CQAP (890041G).

Table 4 summarizes the our field observations at the five permanent MW locations.

<b>TABLE 4</b> <b>PMI Transfer Facility</b> <b>Groundwater Observations: May 29, 2001</b>	
<b>Monitor Well No.</b>	<b>Observations</b>
MW-1	Floating used oil product, 1"
MW-3	Floating used oil product, 1/2"
MW-5	Clear, no odors
ATMW-14	Suspended used oil globules, no odors
ATMW-15	Clear, no odors

Prior to purging and sampling MW-1 and MW-3, the floating product was bailed out and the teflon tubing was then inserted into the bottom of the well for purging with a peristaltic pump. Prior to sampling each MW, the Teflon bailer was cleaned according to the Envirodyne CQAP. After cleaning the bailer, each MW was purged of five well volumes with a peristaltic pump. After purging each well, the groundwater sample was transferred directly from the bailer into appropriate sampling containers. The sampling containers were packed in ice and transported to Envirodyne, Inc.

Envirodyne of Boca Raton, Florida conducted the analytical testing of the groundwater samples taken on the subject site. Envirodyne has been certified by Health and Rehabilitative Services (HRS) (No. E86188) and Florida Department of Environmental Protection (FDEP) (No. 890041G) to conduct analytical testing of soil and groundwater samples.

Envirodyne was instructed to analyze the five groundwater samples from MW-1, MW-3, MW-5, ATMW-14 and ATMW-15 for EPA Method 8021 (volatile organic aromatic compounds) and EPA Method 8310 (polynuclear aromatic hydrocarbons). Refer to Table 5 for the groundwater quality. Refer to Appendix D for the laboratory results. See Appendix A-3 for the monitor well locations.

<b>TABLE 5</b> <b>Groundwater Quality: May 29, 2001</b> <b>PMI Transfer Facility</b>						
	Monitor Wells					
Parameter	MW-1	MW-3	MW-5	ATMW-14	ATMW-15	SRL
<b>EPA Method 8021 (ug/l)</b>				BDL		
Benzene	BDL	BDL	BDL		BDL	1.0
Toluene	BDL	BDL	BDL		BDL	40
Ethylbenzene	BDL	BDL	BDL		BDL	30
Xylenes	BDL	BDL	BDL		BDL	20
MTBE	2.0	3.3	29		4.5	35
<b>EPA Method 8310 (ug/l)</b>			BDL			
Anthracene	BDL	1.0		BDL	BDL	2100
Benzo(a)anthracene	BDL	BDL		0.24	0.26	0.2
Benzo(b)fluoranthene	BDL	BDL		0.41	0.98	0.2
Benzo(g,h,i)perylene	0.33	BDL		0.44	0.36	210
Benzo(k)fluoranthene	0.24	BDL		0.35	0.15	0.5
Benzo(a)pyrene	0.39	BDL		0.38	0.36	0.2
Chrysene	BDL	BDL		0.35	0.29	5
Dibenzo(a,h)anthracene	BDL	BDL		0.38	BDL	0.2
Fluoranthene	2.4	BDL		BDL	BDL	280
Fluorene	BDL	9.0		BDL	BDL	280
Indeno(1,2,3-cd)pyrene	0.17	BDL		0.36	0.26	0.2
Naphthalene	BDL	BDL		BDL	BDL	20
EPA Method 8021	= Volatile Organic Aromatics (VOAs)					
EPA Method 8310	= Polynuclear Aromatic Hydrocarbons (PAHs)					
ug/L	= micrograms per liter (parts per billion)					
BDL	= below detection limits					
SRL	= Site Rehabilitation Level per FAC 62-770, Table V					

At all five monitor well locations, MW-1, MW-3, MW-5, ATMW-14 and ATMW-15, the groundwater samples tested either BDL or below SRLs for all EPA Method 8021 compounds. In addition, two monitor well locations, MW-3 and MW-5, the groundwater samples tested either BDL or below SRLs for all EPA Method 8310 compounds.



At the MW-1 location (i.e. adjacent to concrete drainpipe), the groundwater sample tested at 0.39 ug/L for benzo(a)pyrene, just above the site rehabilitation level (SRL) set for benzo(a)pyrene at 0.2 ug/L according to FAC 62-770. Also, the groundwater sample tested at low concentrations for benzo(g,h,i)perylene (0.33 ug/L), benzo(k)fluoranthene (0.24 ug/L), fluoranthene (2.4 ug/L) and indeno(1,2,3-cd)pyrene (0.17 ug/L). These concentrations are all below the SRLs set for benzo(g,h,i)perylene at 210 ug/L, for benzo(k)fluoranthene at 0.5 ug/L, fluoranthene at 280 ug/L, and indeno(1,2,3-cd)pyrene at 0.2 ug/L.

At the ATMW-14 location (i.e. adjacent to concrete drainpipe), the groundwater sample tested at 0.24 ug/L for benzo(a)anthracene, at 0.41 ug/L for benzo(b)fluoranthene, at 0.38 ug/L for benzo(a)pyrene, at 0.38 ug/L for dibenzo(a,h)anthracene and at 0.36 ug/L for ideno(1,2,3-cd)pyrene. These concentrations exceed the site rehabilitation level set for benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene and ideno(1,2,3-cd)pyrene set at 0.2 ug/L according to FAC 62-770. Also, the groundwater sample tested at low concentrations for benzo(g,h,i)perylene (0.44 ug/L), benzo(k)fluoranthene (0.35 ug/L) and chrysene (0.35 ug/L). These concentrations are all below the SRLs set for benzo(g,h,i)perylene at 210 ug/L, for benzo(k)fluoranthene at 0.5 ug/L, chrysene at 5.0 ug/L.

At the ATMW-15 location (i.e. adjacent to Perma-Fix facility), the groundwater sample tested at 0.26 ug/L for benzo(a)anthracene, at 0.98 ug/L for benzo(b)fluoranthene, at 0.36 ug/L for benzo(a)pyrene and at 0.26 ug/L for ideno(1,2,3-cd)pyrene. These concentrations exceed the site rehabilitation level set for benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, and ideno(1,2,3-cd)pyrene set at 0.2 ug/L according to FAC 62-770. Also, the groundwater sample tested at low concentrations for benzo(g,h,i)perylene (0.36 ug/L), benzo(k)fluoranthene (0.15 ug/L) and chrysene (0.29 ug/L). These concentrations are all below the SRLs set for benzo(g,h,i)perylene at 210 ug/L, for benzo(k)fluoranthene at 0.5 ug/L, chrysene at 5.0 ug/L.

Refer to Appendix A-7 for a benzo(a)pyrene concentration map.

These results indicate that the highest concentrations of EPA Method 8310 compounds were detected at perimeter monitor well locations, MW-1, ATMW-14 and ATMW-15. None of the EPA Method 8310 compounds of concern [i.e. benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene and ideno(1,2,3-cd)pyrene] were detected at the source monitor well location MW-3 or at the other perimeter monitor well location MW-5. These results suggest that the source of the groundwater contamination may be from the off-site discharge of used oil product from the Perma-Fix facility. This is supported by the consistency of the contaminant concentrations at the well locations proximal to the discharge combined with the lack of the contaminants at the source well location. In addition, our field observations now indicate the presence of suspended globules of used oil at the ATMW-14 location (i.e. adjacent to the concrete drainpipe). The used oil product discharging from the concrete drainpipe may now be dissolving into the groundwater as well.



In summary, evidence exists for contaminated groundwater at three of five monitor well locations with benzo(a)pyrene being the most common contaminant. Site rehabilitation levels were exceeded for five EPA Method 8310 compounds at the three monitor well locations. All contaminant concentrations are within Monitoring Only Plan guidelines.

## REMEDIAL ACTION PLAN

Based on the results of the soil assessment, the excessively contaminated soil (i.e. soil sample locations exceeding TCLs or LLs) is located west and south of the former IRA excavation area. The contaminated area west of the former IRA excavation is divided into a larger area immediately west of the former excavation measuring approximately 60 feet by 40 feet and a smaller isolated patch further west measuring approximately 15 by 15 feet. The contaminated area south of the former IRA excavation is located partially under the existing aboveground storage tank farm measuring approximately 60 feet by 20 feet. However, about 470 ft<sup>2</sup> of this 1,200 ft<sup>2</sup> area is overlain by the aboveground tank silos. The depth of the contaminated soil is 3 to 4 feet below grade (i.e. soil-groundwater interface). Stains and odors in the soil were absent from surface grade to three feet in depth. Refer to Appendix A-8 for the site detail showing the probable extent of contaminated soil planned for excavation.

Therefore, the volume of contaminated soil over the large west area is approximately 90 yards<sup>3</sup>. This volume roughly equates to 120 tons of contaminated soil. Also, the volume of contaminated soil over the small west area is approximately 9 yards<sup>3</sup>. This volume roughly equates to 12 tons of contaminated soil. Finally, the volume of contaminated soil over the south area (less the area directly under the tank silos) is approximately 27 yards<sup>3</sup>. This volume roughly equates to 36 tons of contaminated soil.

In summary, the contaminated soil is located west and south of the former IRA excavation area over an area of 3825 ft<sup>2</sup> at the 3 to 4 foot-depth interval. This volume of contaminated soil (less the 470 ft<sup>2</sup> area directly under the aboveground tank silos) equates to approximately 168 tons of contaminated soil.

Thus, we propose to remove and dispose of approximately 168 tons of contaminated soil from the areas west and south of the former IRA excavation. The soil will be excavated in stages as to not disrupt existing operations or disturb existing infrastructure. Logistically, the soil to be removed beneath the aboveground storage tank farm presents the greatest challenge. The soil will have to be removed in sub-stages with small patches cut out of the concrete between the tank silos, the clean overburden and contaminated soil removed with soil vacuum trucks, back filled and resurfaced with concrete. Each of these small patch areas will have to be done separately so as not to disturb the stability of the aboveground tanks. Also, some contaminated soil will remain directly below the silo tanks.

The soil to be removed west of the former IRA excavation can be accomplished in three stages. The large west area (60' x 40') can be divided into two stages and the isolated area further west will be the third stage. The contaminated soil from each area of



excavation will be stockpiled and contained on visquene, tested and properly disposed. Also the clean overburden from surface grade to 3 foot depth will be stockpiled separately and screened with an OVA prior to returning the clean fill to the excavation.

After excavation of the staged areas, soil samples from the excavation perimeter will be obtained to confirm that clean soil criteria is achieved. The samples will be obtained at or near the groundwater interface (i.e. approximately 3 to 4 feet below grade) along the sidewalls of the excavation. Each discrete soil sample will be placed in appropriate sampling containers, sealed, packed in ice and delivered to Envirodyne, Inc. for testing.

Envirodyne Inc. of Boca Raton, Florida will conduct all the sampling and analytical testing of the soil samples taken during the soil remedial action activities. Each soil sample will be analyzed for EPA Method 8260, EPA Method 8270, FL Method PRO and four metals (arsenic, cadmium, chromium and lead).

Prior to soil disposal from the site, three composite soil samples will be obtained from the stockpile for laboratory testing. The composite soil samples will be tested for EPA Method 8021, EPA Method 8080, EPA Method 9252, FL Method PRO and 8 RCRA Metals. The composite soil samples will be sealed, packed-in-ice and delivered to Envirodyne, Inc. in Boca Raton, Florida. The results of the soil testing will be evaluated to determine if the contaminated soils are within maximum contaminant levels (MCLs) to allow for proper disposal.

Pending laboratory results that the soil stockpile is below MCLs, the contaminated soil will be transported from the site to either an approved soil treatment facility or landfill facility. All soil cleanup activities will be documented in a report submitted to Broward County DPEP for review and approval.

Based on the results of the limited groundwater assessment, the more contaminated groundwater appears to be located at the perimeter monitor well locations (MW-1, ATMW-14 and ATMW-15) relative to the source well location (MW-3). The groundwater quality exceeds SRLs at the perimeter well locations but are below the natural attenuation default concentrations. Therefore, we propose a simple Monitoring Only Plan for the contaminated groundwater on the site.

Overall, we propose to conduct quarterly sampling and testing at monitor wells MW-1, MW-3, ATMW-14 and ATMW-15. Envirodyne Inc. of Boca Raton, Florida will conduct all the sampling and analytical testing of the groundwater samples taken during the groundwater monitoring activities. Each groundwater sample will be analyzed for EPA Method 8021, EPA Method 8310 and FL Method PRO. All groundwater monitoring activities will be documented in quarterly MOP reports submitted to Broward County DPEP for review and approval.

We understand that Broward County has issued an order for ATMW-14 and ATMW-15 to be abandoned. However, we request that these wells remain in place and be used for monitoring activities, especially in light of the recent analyses at ATMW-14 and ATMW-



15. The used oil product discovered discharging from the underground pipe is now beginning to appear at the ATMW-14 location (i.e. adjacent to concrete drainpipe).

## **CONCLUSIONS AND RECOMMENDATIONS**

### **CONCLUSIONS**

Based on the results of this RAP Modification for the site, we conclude the following:

1. Based on the soil laboratory results, evidence exists for excessively contaminated soil at seven of sixteen soil sample locations with EPA Method 8100 compounds being the most common contaminant. Also, evidence exists for contaminated soil exceeding the leachability level at eleven of sixteen soil samples with FL Method PRO compounds being the most common contaminant. Finally, evidence exists for the potential of the soil to leach contaminants into the groundwater based on nine of the thirteen soil leachate samples testing above site rehabilitation levels with EPA Method 8100 compounds being the most common contaminant.
2. Based on the results of the soil assessment, the excessively contaminated soil (i.e. soil sample locations exceeding TCLs or LLs) is located west and south of the former IRA excavation area over an area of 3825 ft<sup>2</sup> at the 3 to 4 foot-depth interval. This volume of contaminated soil (less the 470 ft<sup>2</sup> area directly under the aboveground tank silos) equates to approximately 168 tons of contaminated soil.
3. Based on the groundwater laboratory results, evidence exists for contaminated groundwater at three of five monitor well locations with EPA Method 8310 compounds being the most common contaminant. Site rehabilitation levels were exceeded for five EPA Method 8310 compounds at the three monitor well locations. The more contaminated groundwater appears to be located at the perimeter monitor well locations (MW-1, ATMW-14 and ATMW-15) relative to the source well location (MW-3). All contaminant concentrations are within Monitoring Only Plan guidelines..

### **RECOMMENDATIONS**

Based on our conclusions of this investigation, we recommend the following for the site:

1. Based on the results of the soil assessment, we recommend Remedial Action (RA) by removing and disposing of approximately 168 tons of contaminated soil south and west of the former IRA excavation area. The soil will be excavated in stages as to not disrupt existing operations or disturb existing infrastructure. All soil Remedial Action activities will be documented in a report submitted to Broward County DPEP for review and approval.



2. Based on the results of the limited groundwater assessment, we recommend Monitoring Only Plan (MOP) status for the contaminated groundwater. Monitor wells MW-1, MW-3, ATMW-14 and ATMW-15 will be sampled quarterly and analyzed for EPA Method 8021, EPA Method 8310 and FL Method PRO. All monitoring activities will be documented in quarterly MOP reports submitted to Broward County DPEP for review and approval.

We will forward a copy of this RAP Modification and MOP recommendation to Broward County DPEP for review. Please copy us on the Broward County review letter for this report.



## APPENDIX A





OAKES RD.

**PERMA FIX  
FACILITY**

IRA EXCAVATION AREA

**AUTO PARTS YARD**

**PMI TRANSFER  
FACILITY**

north property line

AREA  
concrete OF

south property line

**STUDY**

east property line

**AUTO PARTS YARD**

SW 47 AVE.



**GLOBAL  
ENVIRONMENTAL  
SERVICES**

**MODIFICATION TO THE REMEDIAL ACTION PLAN  
PMI TRANSFER FACILITY  
3650 SW 47 AVENUE  
DAVIE, FLORIDA 33314**

**OVERALL SITE PLAN**

DRAWN BY: CL

DATE: 07-10-01

CHECKED BY: CP

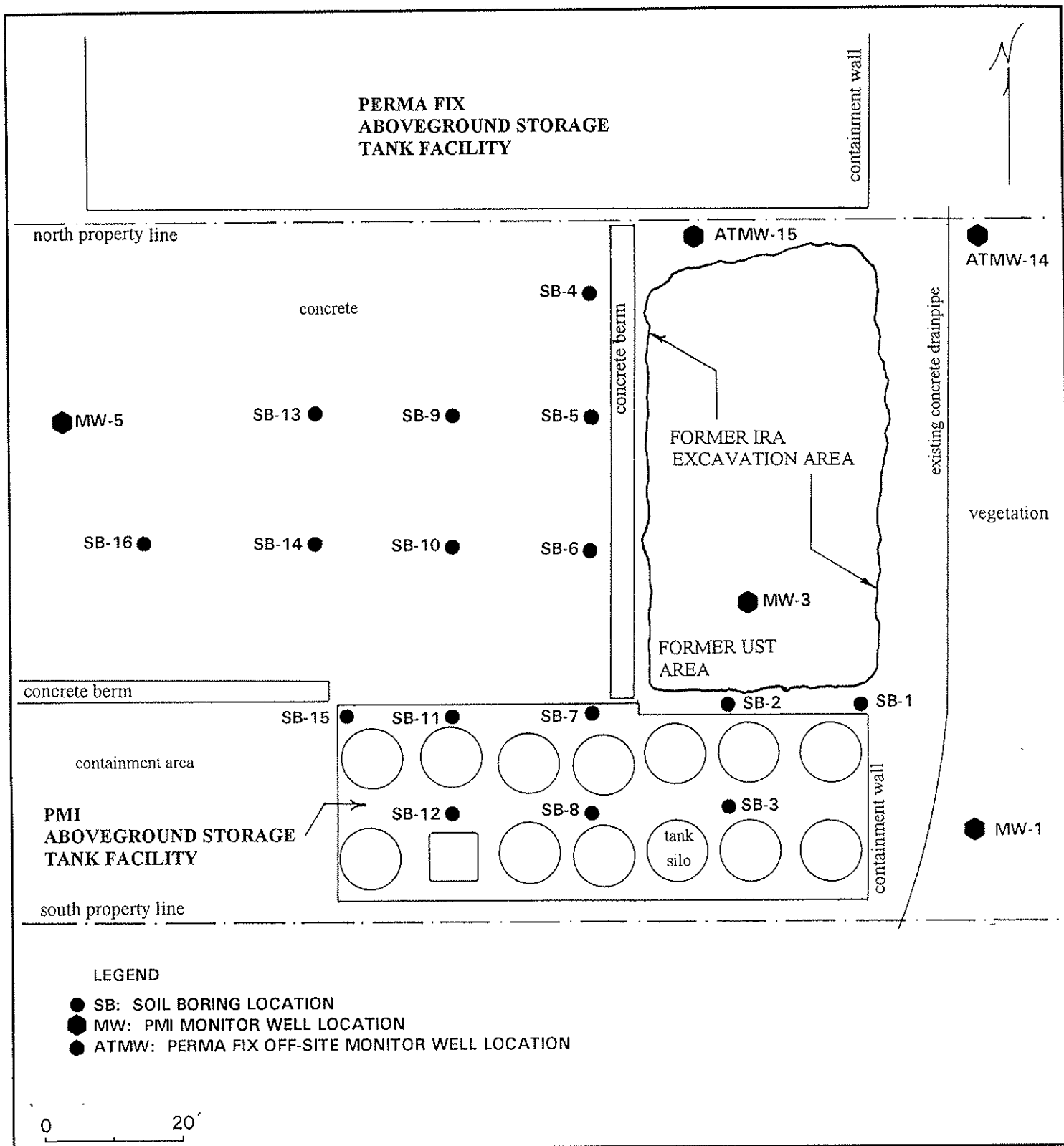
DATE: 07-10-01


SCALE: 1" = 40'

PROJECT NO: 145-001-02

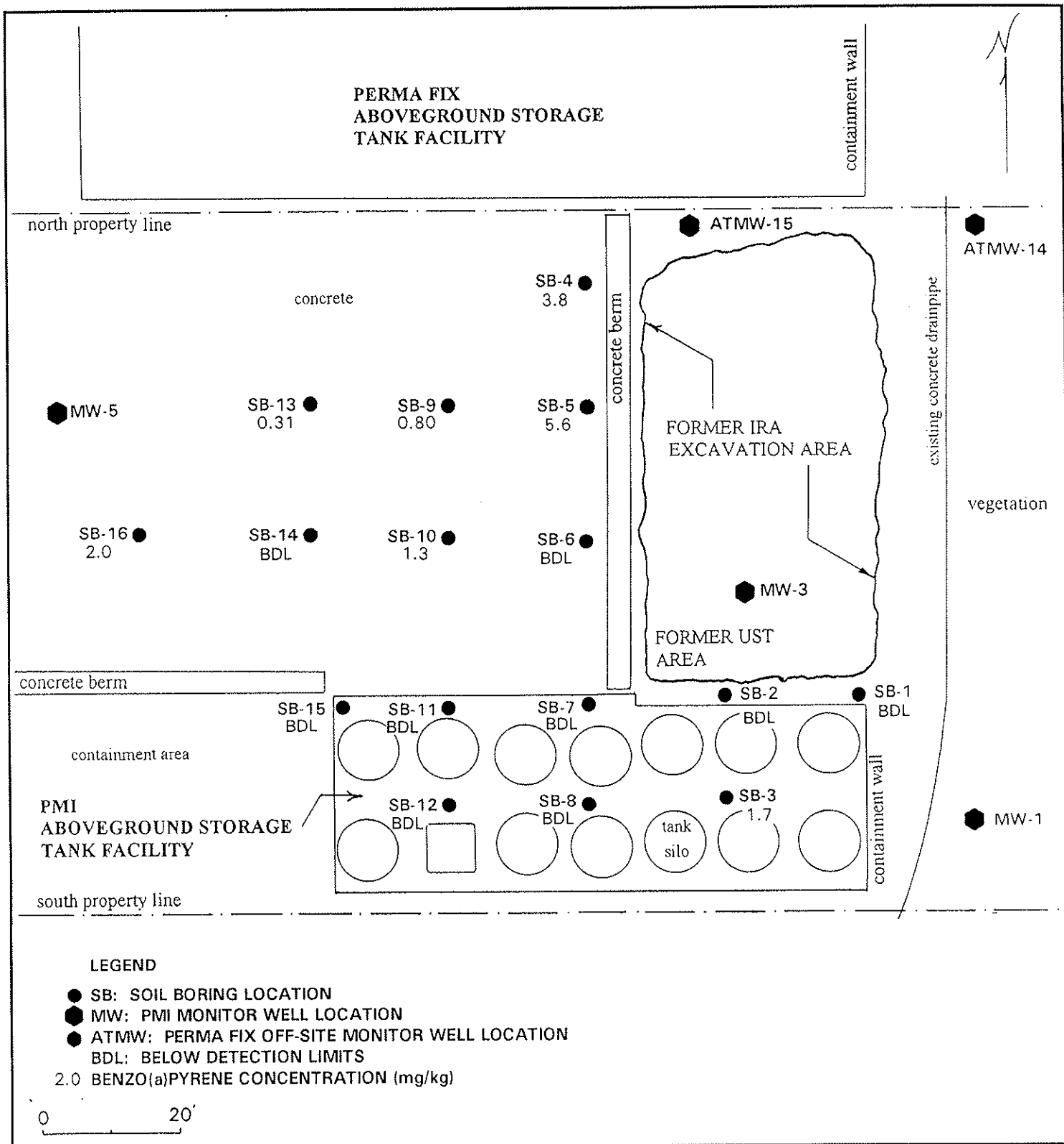
REPORT NO: 311


PAGE NO: A-2

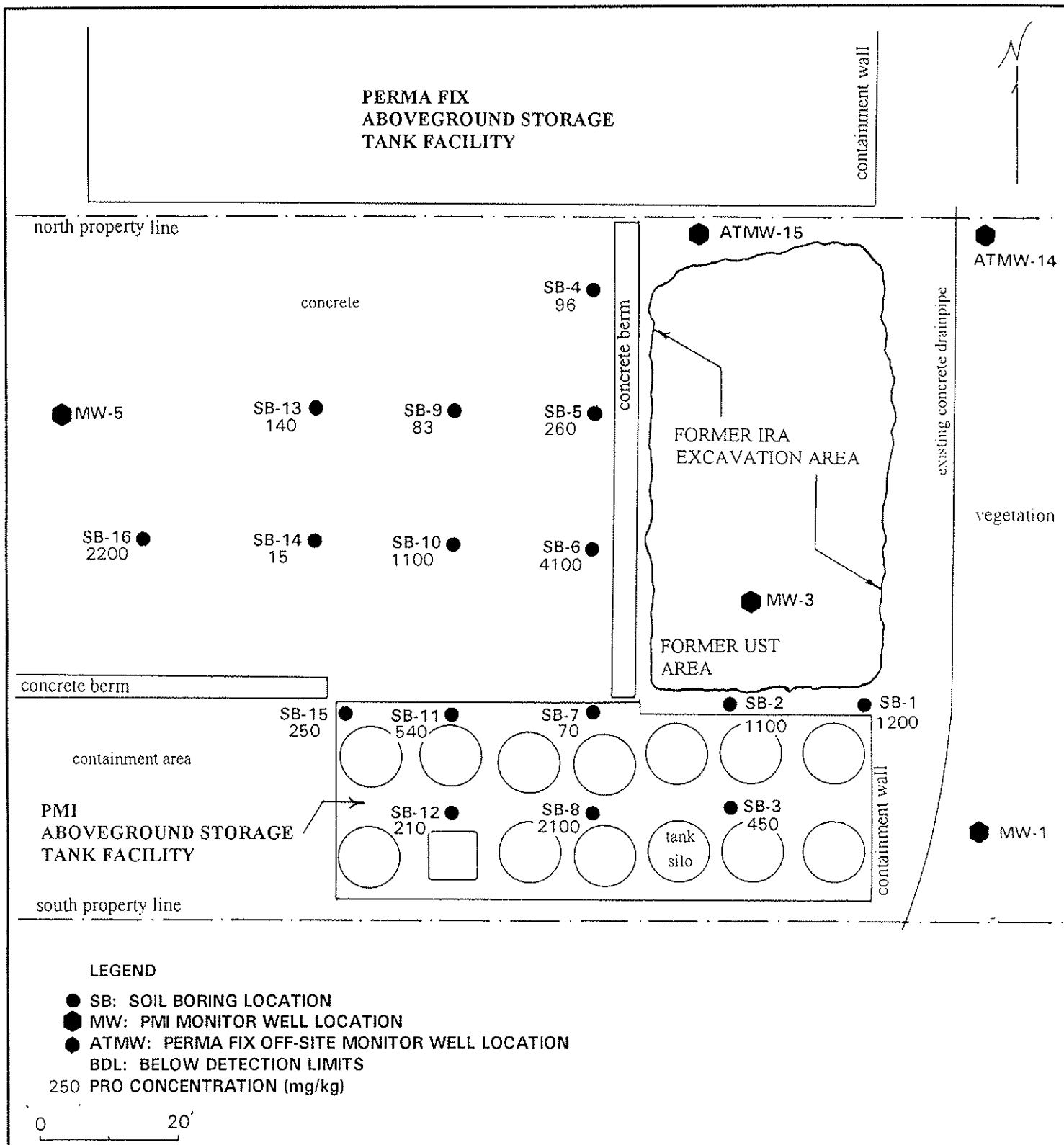



 <p><b>GLOBAL ENVIRONMENTAL SERVICES</b></p>	<p><b>MODIFICATION TO THE REMEDIAL ACTION PLAN</b></p> <p><b>PMI TRANSFER FACILITY</b></p> <p><b>3650 SW 47 AVENUE</b></p> <p><b>DAVIE, FLORIDA 33314</b></p>			
	<p><b>SITE DETAIL: SOIL BORING AND MONITOR WELL LOCATIONS</b></p>			
	DRAWN BY: CL	DATE: 07-10-01	CHECKED BY: CP	DATE: 07-10-01
	SCALE: 1" = 20'	PROJECT NO: 145-001-02	REPORT NO: 311	PAGE NO. A-3

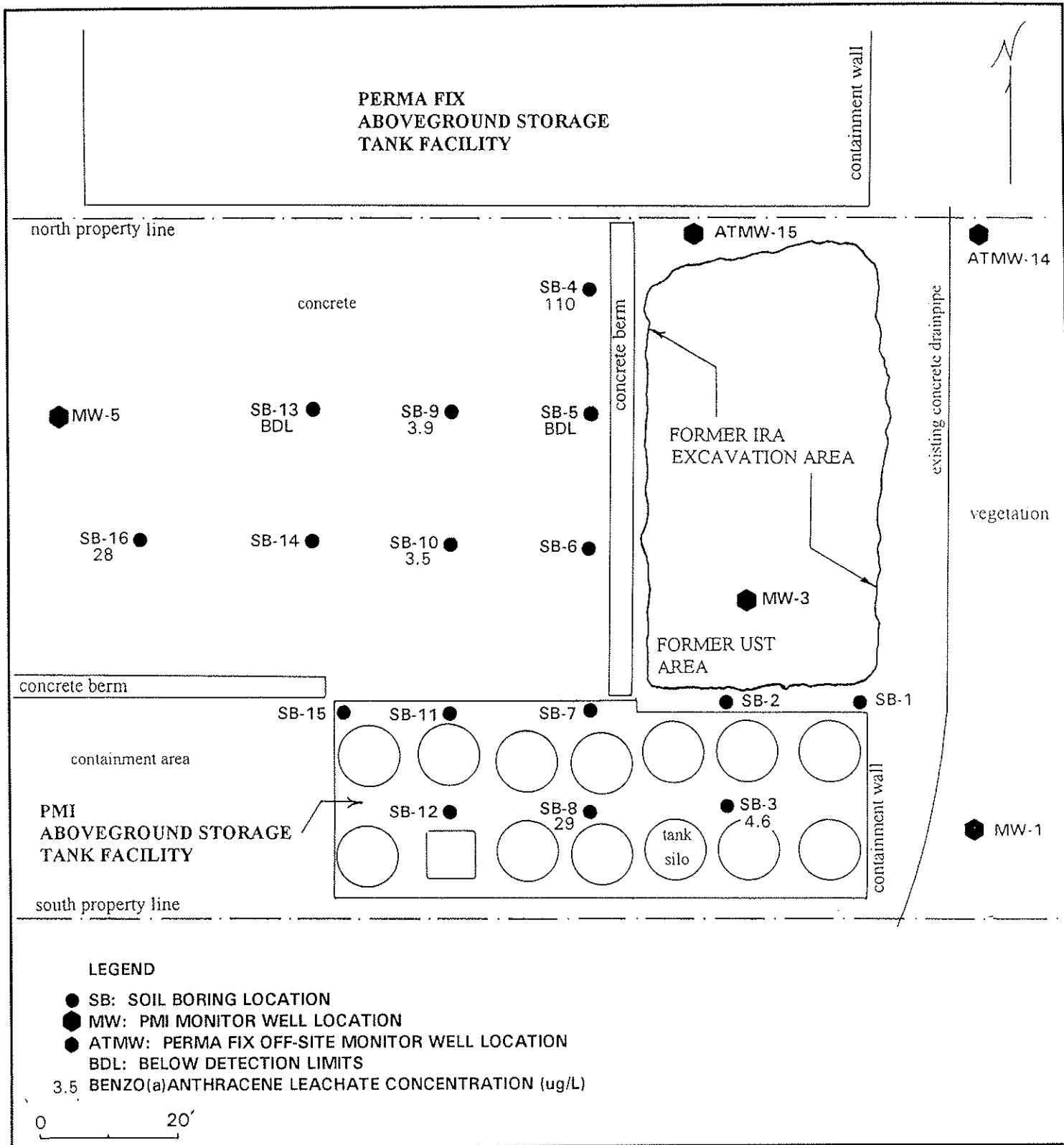





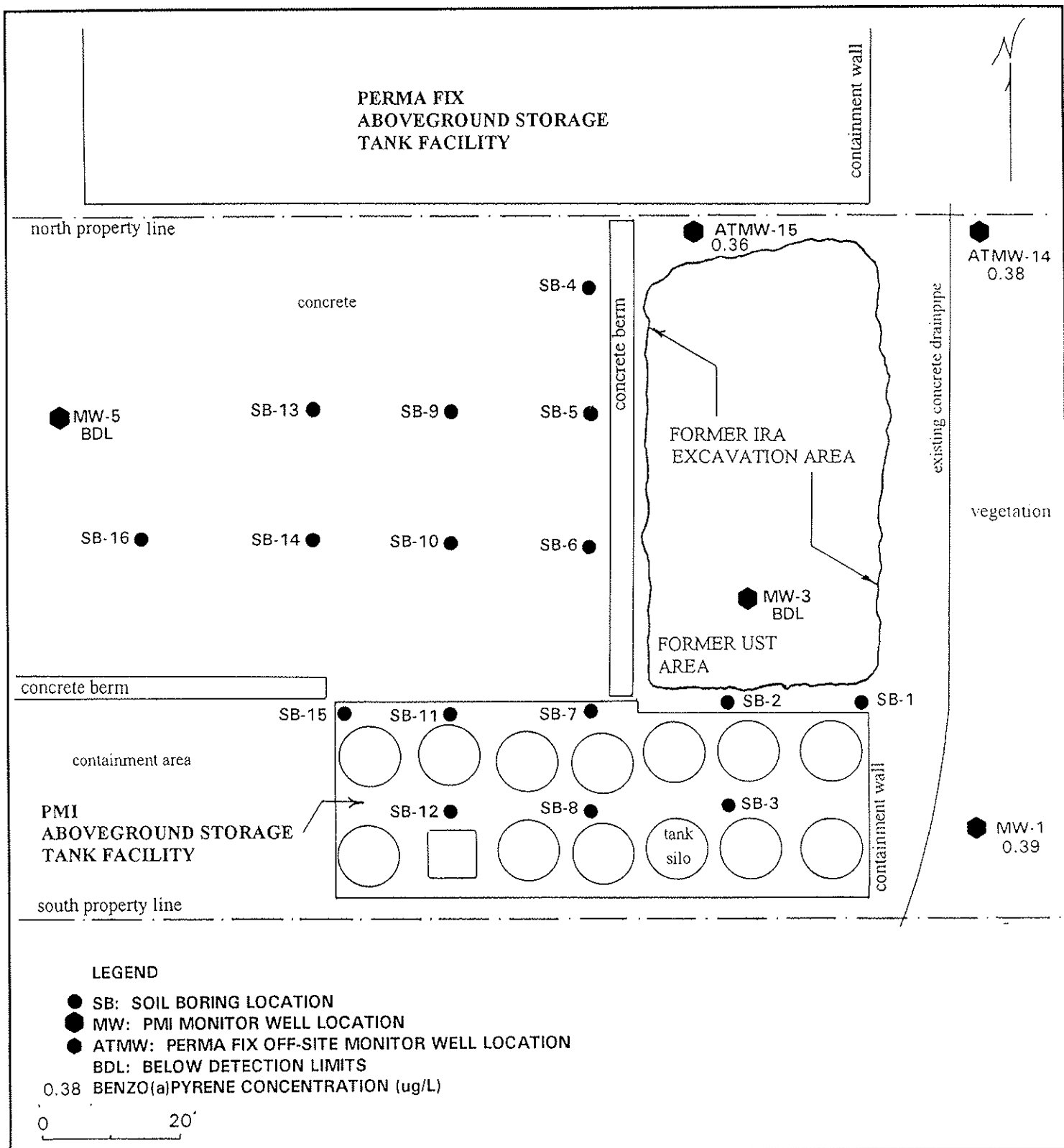
 <p><b>GLOBAL ENVIRONMENTAL SERVICES</b></p>	<p><b>MODIFICATION TO THE REMEDIAL ACTION PLAN</b>  <b>PMI TRANSFER FACILITY</b>  <b>3650 SW 47 AVENUE</b>  <b>DAVIE, FLORIDA 33314</b></p>			
	<p><b>SITE PLAN: BENZO(a)PYRENE CONCENTRATION MAP</b></p>			
	DRAWN BY: CL	DATE: 07-10-01	CHECKED BY: CP	DATE: 07-10-01
	SCALE: 1" = 20'	PROJECT NO: 145-001-02	REPORT NO: 311	PAGE NO: A-4




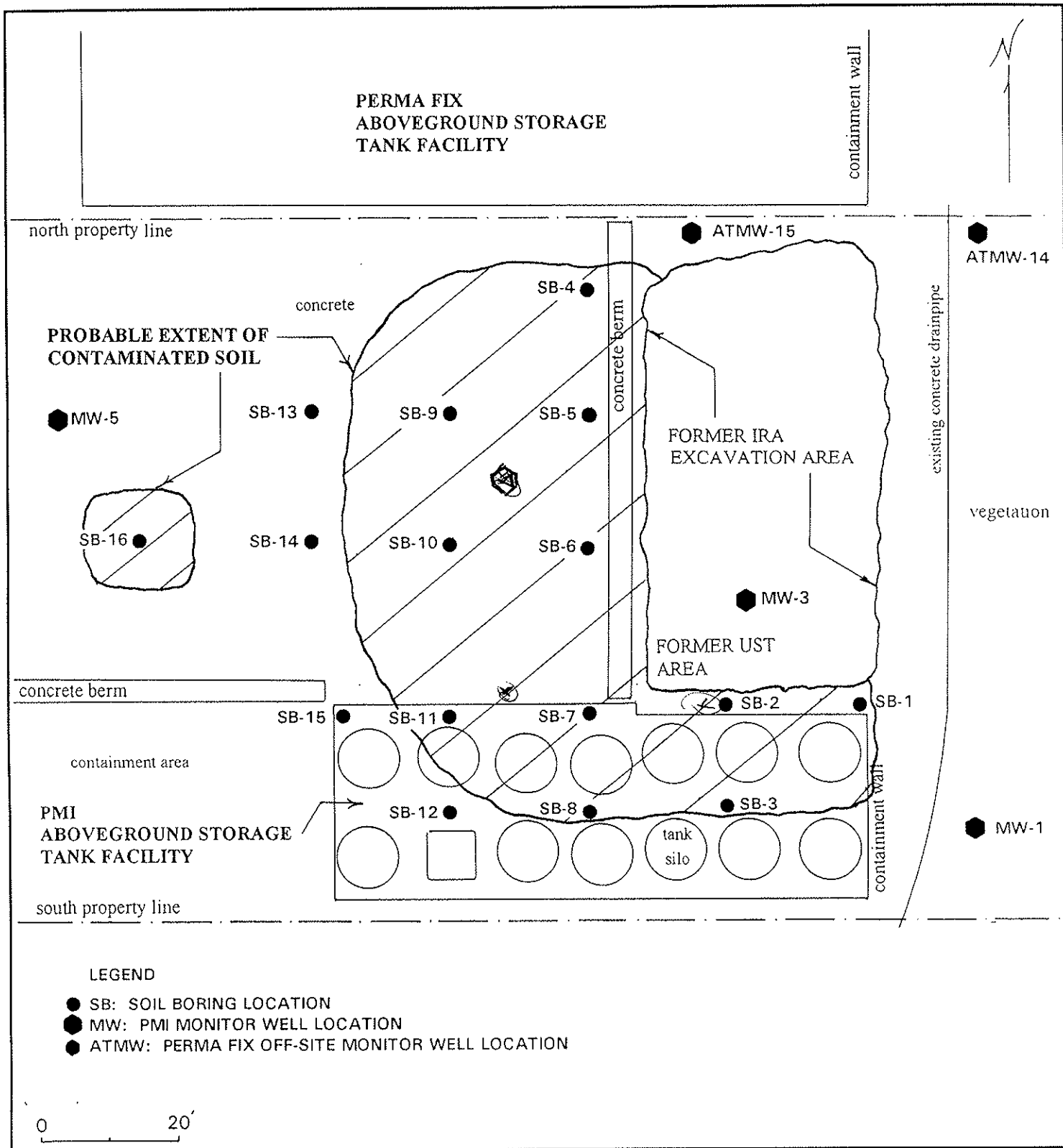
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	<p style="text-align: center;"><b>SITE PLAN: PRO CONCENTRATION MAP</b></p>			
	DRAWN BY: CL	DATE: 07-10-01	CHECKED BY: CP	DATE: 07-10-01
	SCALE: 1" = 20'	PROJECT NO: 145-001-02	REPORT NO: 311	PAGE NO: A-5




 <p><b>GLOBAL ENVIRONMENTAL SERVICES</b></p>	<p style="text-align: center;"><b>MODIFICATION TO THE REMEDIAL ACTION PLAN PMI TRANSFER FACILITY 3650 SW 47 AVENUE DAVIE, FLORIDA 33314</b></p>			
	<p style="text-align: center;"><b>SITE PLAN: BENZO(a)ANTHRACENE LEACHATE CONCENTRATION MAP</b></p>			
	DRAWN BY: CL	DATE: 07-10-01	CHECKED BY: CP	DATE: 07-10-01
	SCALE: 1" = 20'	PROJECT NO: 145-001-02	REPORT NO: 311	PAGE NO: A-6



 <p><b>GLOBAL ENVIRONMENTAL SERVICES</b></p>	<p><b>MODIFICATION TO THE REMEDIAL ACTION PLAN PMI TRANSFER FACILITY 3650 SW 47 AVENUE DAVIE, FLORIDA 33314</b></p>			
	<p><b>SITE PLAN: BENZO(a)PYRENE CONCENTRATION MAP</b></p>			
	DRAWN BY: CL	DATE: 07-10-01	CHECKED BY: CP	DATE: 07-10-01
	SCALE: 1" = 20'	PROJECT NO: 145-001-02	REPORT NO: 311	PAGE NO: A-7



 <p><b>GLOBAL ENVIRONMENTAL SERVICES</b></p>	<p><b>MODIFICATION TO THE REMEDIAL ACTION PLAN</b>  <b>PMI TRANSFER FACILITY</b>  <b>3650 SW 47 AVENUE</b>  <b>DAVIE, FLORIDA 33314</b></p>			
	<p><b>SITE PLAN: PROBABLE EXTENT OF SOIL CONTAMINATION</b></p>			
	DRAWN BY: CL	DATE: 07-10-01	CHECKED BY: CP	DATE: 07-10-01
	SCALE: 1" = 20'	PROJECT NO: 145-001-02	REPORT NO: 311	PAGE NO: A-8

## APPENDIX B



## OVA Field Screening Report

Foxboro TVA-1000A Serial #4919013

Operator: Bevin Morris  
Date: 05/29/2001  
Client: Global Environment Services, Inc.  
Time: 0900-1730  
Site: PMI Transfer Facility 3650 SW 47th Ave. Davie, FL.

Page1 of 2

			No Filter -	Bckgrnd	= Value	Carbon Filter -	Bckgrnd	= Value	Methane Value
Area	Sample Point	PID	NA						
	SB-1 (3-4')	FID	225.0	4.5	220.5	6.8	1.9	4.9	215.6
Area	Sample Point	PID	NA						
	SB-2 (3-4')	FID	106.0	4.5	101.5	4.3	1.9	2.4	99.1
Area	Sample Point	PID	NA						
	SB-3 (3-4')	FID	82.3	4.3	78.0	6.5	1.9	4.6	73.4
Area	Sample Point	PID	NA						
	SB-4 (3-4')	FID	10.7	4.3	6.4	0.0	0.0	<1	6.4
Area	Sample Point	PID	NA						
	SB-5 (3-4')	FID	21.2	4.2	17.0	0.0	0.0	<1	17.0
Area	Sample Point	PID	NA						
	SB-6 (3-4')	FID	303.0	4.2	298.8	7.8	1.2	6.6	292.2
Area	Sample Point	PID	NA						
	SB-7 (3-4')	FID	68.7	4.2	64.5	6.5	1.2	5.3	59.2
Area	Sample Point	PID	NA						
	SB-8 (3-4')	FID	67.3	4.2	63.1	5.9	1.2	4.7	58.4

Calibration: Checked calibration @ 09:00, Ambient Reading 4.5 ppm, Methane Reading: 99 ppm. (Std. 99 ppm)  
Zero Air Reading: <1 ppm.

Notes: Weather: Sunny & warm 90 degrees.  
On Site: Christopher Perry and Dynamic drilling crew.  
NA = Not Applicable  
Carbon Filter Used.

## OVA Field Screening Report

Foxboro TVA-1000A Serial #4919013

Operator: Bevin Morris  
Date: 05/29/2001  
Client: Global Environment Services, Inc.  
Time: 0900-1730  
Site: PMI Transfer Facility 3650 SW 47th Ave. Davie, FL.

Page 2 of 2

			No Filter -	Bckgrnd	= Value	Carbon Filter -	Bckgrnd	= Value	Methane Value
Area	Sample Point	PID	NA						
	SB-9 (3-4')	FID	58.6	4.0	54.6	4.8	1.2	3.6	51.0
Area	Sample Point	PID	NA						
	SB-10 (3-4')	FID	597.0	3.9	593.1	11.1	1.2	9.9	583.2
Area	Sample Point	PID	NA						
	SB-11(3-4')	FID	122.0	3.5	118.5	7.3	1.2	6.1	112.4
Area	Sample Point	PID	NA						
	SB-12 (3-4')	FID	367.0	3.5	363.5	11.7	1.2	10.5	353.0
Area	Sample Point	PID	NA						
	SB-13 (3-4')	FID	42.9	3.5	39.4	0.0	0.0	<1	39.4
Area	Sample Point	PID	NA						
	SB-14 (3-4')	FID	224.0	3.5	220.0	6.5	1.0	5.5	214.5
Area	Sample Point	PID	NA						
	SB-15 (3-4')	FID	59.4	3.5	55.9	5.1	1.0	4.1	51.8
Area	Sample Point	PID	NA						
	SB-16 (3-4')	FID	146.0	3.5	142.5	9.5	1.0	8.5	134.0

Calibration: Checked calibration @ 09:00, Ambient Reading 4.5 ppm, Methane Reading: 99 ppm. (Std. 99 ppm)  
Zero Air Reading: <1 ppm.

Notes: Weather: Sunny & warm 90 degrees.  
On Site: Christopher Perry and Dynamic drilling crew.  
NA = Not Applicable  
Carbon Filter Used.



## APPENDIX C



# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 1

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-1 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	82	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 1

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-1 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.1	µg/kg	ADM
Chlorobenzene	BDL	6.1	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.1	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.1	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.1	µg/kg	ADM
Ethylbenzene	BDL	6.1	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.1	µg/kg	ADM
Toluene	BDL	6.1	µg/kg	ADM
Xylenes, Total	BDL	6.1	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 1

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-1 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	550	100	µg/kg	JEH
2-Methylnaphthalene	520	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 1

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-1 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/03/01  
Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	1200	100	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 2

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-2 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	82	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 2

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-2 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.1	µg/kg	ADM
Chlorobenzene	BDL	6.1	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.1	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.1	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.1	µg/kg	ADM
Ethylbenzene	BDL	6.1	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.1	µg/kg	ADM
Toluene	BDL	6.1	µg/kg	ADM
Xylenes, Total	BDL	6.1	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 2

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-2 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 05/30/01

Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	520	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	180	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	1000	100	µg/kg	JEH
2-Methylnaphthalene	1100	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 2

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-2 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01

Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	1100	100	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-3 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	80	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-3 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.2	µg/kg	ADM
Chlorobenzene	BDL	6.2	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.2	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.2	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.2	µg/kg	ADM
Ethylbenzene	BDL	6.2	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.2	µg/kg	ADM
Toluene	BDL	6.2	µg/kg	ADM
Xylenes, Total	BDL	6.2	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-3 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	310	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	910	100	µg/kg	JEH
Benzo(a)anthracene	2000	100	µg/kg	JEH
Benzo(a)pyrene	1700	100	µg/kg	JEH
Benzo(b)fluoranthene	2200	130	µg/kg	JEH
Benzo(g,h,i)perylene	940	250	µg/kg	JEH
Benzo(k)fluoranthene	720	300	µg/kg	JEH
Chrysene	1600	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	4200	100	µg/kg	JEH
Fluorene	410	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	840	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	2900	100	µg/kg	JEH
Pyrene	3600	100	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-3 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01  
Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	450	50	mg/kg	CMM
Hydrocarbon Range	C14-C38			CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 4

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-4 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	86	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 4

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-4 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	5.8	µg/kg	ADM
Chlorobenzene	BDL	5.8	µg/kg	ADM
1,2-Dichlorobenzene	BDL	5.8	µg/kg	ADM
1,3-Dichlorobenzene	BDL	5.8	µg/kg	ADM
1,4-Dichlorobenzene	BDL	5.8	µg/kg	ADM
Ethylbenzene	BDL	5.8	µg/kg	ADM
Methyl-tert-butyl ether	BDL	5.8	µg/kg	ADM
Toluene	BDL	5.8	µg/kg	ADM
Xylenes, Total	BDL	5.8	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 4

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-4 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01

Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	470	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	1300	100	µg/kg	JEH
Benzo(a)anthracene	4200	150	µg/kg	JEH
Benzo(a)pyrene	3800	150	µg/kg	JEH
Benzo(b)fluoranthene	4900	150	µg/kg	JEH
Benzo(g,h,i)perylene	2600	250	µg/kg	JEH
Benzo(k)fluoranthene	1700	300	µg/kg	JEH
Chrysene	3900	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	8400	150	µg/kg	JEH
Fluorene	470	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	2700	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	4700	150	µg/kg	JEH
Pyrene	7300	150	µg/kg	JEH



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 4

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-4 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/03/01  
Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	96	10	mg/kg	CMM
Hydrocarbon Range	C14-C38			CMM

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 5

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-5 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	89	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 5

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-5 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	5.6	µg/kg	ADM
Chlorobenzene	BDL	5.6	µg/kg	ADM
1,2-Dichlorobenzene	BDL	5.6	µg/kg	ADM
1,3-Dichlorobenzene	BDL	5.6	µg/kg	ADM
1,4-Dichlorobenzene	BDL	5.6	µg/kg	ADM
Ethylbenzene	BDL	5.6	µg/kg	ADM
Methyl-tert-butyl ether	BDL	5.6	µg/kg	ADM
Toluene	BDL	5.6	µg/kg	ADM
Xylenes, Total	BDL	5.6	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 5

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-5 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	1200	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	2800	100	µg/kg	JEH
Benzo(a)anthracene	6000	140	µg/kg	JEH
Benzo(a)pyrene	5600	140	µg/kg	JEH
Benzo(b)fluoranthene	9800	140	µg/kg	JEH
Benzo(g,h,i)perylene	3400	250	µg/kg	JEH
Benzo(k)fluoranthene	2400	300	µg/kg	JEH
Chrysene	6000	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	13000	140	µg/kg	JEH
Fluorene	1200	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	3900	140	µg/kg	JEH
1-Methylnaphthalene	120	100	µg/kg	JEH
2-Methylnaphthalene	140	100	µg/kg	JEH
Naphthalene	730	100	µg/kg	JEH
Phenanthrene	4200	140	µg/kg	JEH
Pyrene	12000	140	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 5

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-5 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01  
Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	260	50	mg/kg	CMM
Hydrocarbon Range	C8-C38			CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 6

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-6 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	84	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 6

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-6 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.0	µg/kg	ADM
Chlorobenzene	BDL	6.0	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.0	µg/kg	ADM
Ethylbenzene	23	6.0	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.0	µg/kg	ADM
Toluene	8.1	6.0	µg/kg	ADM
Xylenes, Total	21	6.0	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 6

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-6 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	1800	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	500	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	2500	100	µg/kg	JEH
2-Methylnaphthalene	2400	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 6

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-6 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01

Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	4100	200	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 7

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-7 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	75	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 7

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-7 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.7	µg/kg	ADM
Chlorobenzene	BDL	6.7	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.7	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.7	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.7	µg/kg	ADM
Ethylbenzene	BDL	6.7	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.7	µg/kg	ADM
Toluene	BDL	6.7	µg/kg	ADM
Xylenes, Total	6.7	6.7	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 7

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-7 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 7

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-7 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01

Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	70	10	mg/kg	CMM
Hydrocarbon Range	C8-C38			CMM

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 8

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-8 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	83	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 8

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-8 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.0	µg/kg	ADM
Chlorobenzene	BDL	6.0	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.0	µg/kg	ADM
Ethylbenzene	49	6.0	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.0	µg/kg	ADM
Toluene	12	6.0	µg/kg	ADM
Xylenes, Total	170	6.0	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 8

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-8 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 05/31/01

Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	670	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	1700	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 8

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-8 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01  
Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	2100	200	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 9

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-9 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	83	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 9

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-9 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.0	µg/kg	ADM
Chlorobenzene	BDL	6.0	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.0	µg/kg	ADM
Ethylbenzene	BDL	6.0	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.0	µg/kg	ADM
Toluene	BDL	6.0	µg/kg	ADM
Xylenes, Total	BDL	6.0	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 9

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-9 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	150	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	260	100	µg/kg	JEH
Benzo(a)anthracene	940	100	µg/kg	JEH
Benzo(a)pyrene	800	100	µg/kg	JEH
Benzo(b)fluoranthene	1200	130	µg/kg	JEH
Benzo(g,h,i)perylene	600	250	µg/kg	JEH
Benzo(k)fluoranthene	400	300	µg/kg	JEH
Chrysene	870	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	2000	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	600	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	1200	100	µg/kg	JEH
Pyrene	1900	100	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 9

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-9 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01  
Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	83	10	mg/kg	CMM
Hydrocarbon Range	C8-C38			CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 10

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-10 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	84	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 10

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-10 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.0	µg/kg	ADM
Chlorobenzene	BDL	6.0	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.0	µg/kg	ADM
Ethylbenzene	23	6.0	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.0	µg/kg	ADM
Toluene	BDL	6.0	µg/kg	ADM
Xylenes, Total	10	6.0	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 10

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-10 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	270	100	µg/kg	JEH
Acenaphthylene	700	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	1200	100	µg/kg	JEH
Benzo(a)pyrene	1300	100	µg/kg	JEH
Benzo(b)fluoranthene	1400	130	µg/kg	JEH
Benzo(g,h,i)perylene	970	250	µg/kg	JEH
Benzo(k)fluoranthene	800	300	µg/kg	JEH
Chrysene	1100	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	2600	100	µg/kg	JEH
Fluorene	290	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	560	100	µg/kg	JEH
1-Methylnaphthalene	1700	100	µg/kg	JEH
2-Methylnaphthalene	810	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	1300	100	µg/kg	JEH
Pyrene	2700	100	µg/kg	JEH



# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 10

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-10 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01  
Date of Extraction: 06/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	1100	100	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 11

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-11 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	81	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 11

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-11 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.2	µg/kg	ADM
Chlorobenzene	BDL	6.2	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.2	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.2	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.2	µg/kg	ADM
Ethylbenzene	BDL	6.2	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.2	µg/kg	ADM
Toluene	BDL	6.2	µg/kg	ADM
Xylenes, Total	BDL	6.2	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 11

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-11 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	490	100	µg/kg	JEH
Acenaphthylene	750	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	490	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 11

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-11 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/03/01

Date of Extraction: 05/29/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	540	50	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 12

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-12 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	84	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 12

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-12 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	9.7	6.0	µg/kg	ADM
Chlorobenzene	BDL	6.0	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.0	µg/kg	ADM
Ethylbenzene	BDL	6.0	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.0	µg/kg	ADM
Toluene	6.8	6.0	µg/kg	ADM
Xylenes, Total	BDL	6.0	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 12

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-12 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 12

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-12 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/02/01

Date of Extraction: 05/30/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	210	10	mg/kg	CMM
Hydrocarbon Range	C8-C38			CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 13

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-13 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	84	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 13

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-13 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.0	µg/kg	ADM
Chlorobenzene	BDL	6.0	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.0	µg/kg	ADM
Ethylbenzene	BDL	6.0	µg/kg	ADM
Methyl-tert-butyl ether	BDL	6.0	µg/kg	ADM
Toluene	BDL	6.0	µg/kg	ADM
Xylenes, Total	BDL	6.0	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 13

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-13 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	300	100	µg/kg	JEH
Benzo(a)pyrene	310	100	µg/kg	JEH
Benzo(b)fluoranthene	510	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	700	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	450	100	µg/kg	JEH
Pyrene	560	100	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 13

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-13 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/02/01

Date of Extraction: 05/30/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	140	10	mg/kg	CMM
Hydrocarbon Range	C8-C38			CMM

# Envirodyne Inc.

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561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 14

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-14 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	83	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 14

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-14 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	6.0	µg/kg	ADM
Chlorobenzene	BDL	6.0	µg/kg	ADM
1,2-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,3-Dichlorobenzene	BDL	6.0	µg/kg	ADM
1,4-Dichlorobenzene	BDL	6.0	µg/kg	ADM
Ethylbenzene	BDL	6.0	µg/kg	ADM
Methyl-tert-butyl ether	7.6	6.0	µg/kg	ADM
Toluene	BDL	6.0	µg/kg	ADM
Xylenes, Total	6.9	6.0	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 14

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-14 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 05/31/01

Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	BDL	100	µg/kg	JEH



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561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 14

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-14 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/02/01

Date of Extraction: 05/30/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	15	10	mg/kg	CMM
Hydrocarbon Range	C18-C36			CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 15

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-15 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	85	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 15

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-15 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	5.9	µg/kg	ADM
Chlorobenzene	BDL	5.9	µg/kg	ADM
1,2-Dichlorobenzene	BDL	5.9	µg/kg	ADM
1,3-Dichlorobenzene	BDL	5.9	µg/kg	ADM
1,4-Dichlorobenzene	BDL	5.9	µg/kg	ADM
Ethylbenzene	BDL	5.9	µg/kg	ADM
Methyl-tert-butyl ether	BDL	5.9	µg/kg	ADM
Toluene	BDL	5.9	µg/kg	ADM
Xylenes, Total	BDL	5.9	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 15

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-15 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01

Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	BDL	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	BDL	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	BDL	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	BDL	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	BDL	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	400	100	µg/kg	JEH
Phenanthrene	BDL	100	µg/kg	JEH
Pyrene	230	100	µg/kg	JEH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 15

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-15 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/03/01

Date of Extraction: 05/30/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	250	20	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
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561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 16

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-16 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

PARAMETER	RESULT	METHOD	DL	UNITS	DATE	ANALYST
% Solids	87	D2216		%	05/30/01	YJC

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 16

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-16 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/05/01

### 5035/8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL	UNITS	ANALYST
Benzene	BDL	5.7	µg/kg	ADM
Chlorobenzene	BDL	5.7	µg/kg	ADM
1,2-Dichlorobenzene	BDL	5.7	µg/kg	ADM
1,3-Dichlorobenzene	BDL	5.7	µg/kg	ADM
1,4-Dichlorobenzene	BDL	5.7	µg/kg	ADM
Ethylbenzene	BDL	5.7	µg/kg	ADM
Methyl-tert-butyl ether	BDL	5.7	µg/kg	ADM
Toluene	BDL	5.7	µg/kg	ADM
Xylenes, Total	BDL	5.7	µg/kg	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 16

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-16 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 05/31/01  
Date of Extraction: 05/30/01

### 8100 POLYNUCLEAR AROMATIC HYDROCARBONS-SOIL/SOLID

PARAMETER	RESULT	DL	UNITS	ANALYST
Acenaphthene	1500	100	µg/kg	JEH
Acenaphthylene	BDL	100	µg/kg	JEH
Anthracene	BDL	100	µg/kg	JEH
Benzo(a)anthracene	BDL	100	µg/kg	JEH
Benzo(a)pyrene	2000	100	µg/kg	JEH
Benzo(b)fluoranthene	BDL	130	µg/kg	JEH
Benzo(g,h,i)perylene	BDL	250	µg/kg	JEH
Benzo(k)fluoranthene	BDL	300	µg/kg	JEH
Chrysene	1800	300	µg/kg	JEH
Dibenzo(a,h)anthracene	BDL	250	µg/kg	JEH
Fluoranthene	490	100	µg/kg	JEH
Fluorene	BDL	100	µg/kg	JEH
Indeno(1,2,3-c,d)pyrene	1200	100	µg/kg	JEH
1-Methylnaphthalene	BDL	100	µg/kg	JEH
2-Methylnaphthalene	BDL	100	µg/kg	JEH
Naphthalene	BDL	100	µg/kg	JEH
Phenanthrene	5100	100	µg/kg	JEH
Pyrene	4800	100	µg/kg	JEH



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
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June 22, 2001  
Report: 2001/05547C  
Sample No: 2001/05547- 16

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-16 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01


Date of Analysis: 06/03/01

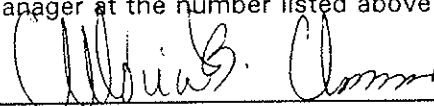
Date of Extraction: 05/30/01

### FL-PRO TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

PARAMETER	RESULT	DL	UNITS	ANALYST
Petroleum Range Organics	2200	200	mg/kg	CMM
Hydrocarbon Range	C8-C36			CMM

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041. Additional Laboratory Certification numbers: E86006, 84269, E83079, E86240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated. Envirodyne certifies that its test results meet all requirements of the NELAC standards. For questions, please call the project manager at the number listed above.

  
Project Manager

  
Quality Assurance Director



## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

4805 NW 2nd Avenue • Boca Raton, FL 33431  
(561) 989-5225 • Fax (561) 989-5204

PROJECT NUMBER		PROJECT NAME		P.O. NUMBER		SAMPLE TYPE		PRESERVATIVE	
145-001-02		PMT Transfer Facility						T/F T/F T/F T/F	
PROJECT LOCATION		CLIENT ADDRESS		PHONE		FAX		ANALYSES REQUESTED	
3650 SW 47th Ave. Davie, FL		Capitol		ENVIRON				RUSH TAT (SURCHARGE) <input type="checkbox"/>	
CLIENT NAME		CLIENT ADDRESS		PHONE		FAX		DUE DATE:	
Capitol		3650 SW 47th Ave. Davie, FL							
SAMPLE INFORMATION		IDENTIFICATION		TIME		DATE		REMARKS	
NUMBER	DATE	TIME	IDENTIFICATION	TIME	DATE	TIME	DATE	REMARKS	NO. OF CONTAINERS
11	5-29-01	15:45	SB-11						3
12		12:00	SB-12						3
13		15:52	SB-13						3
14		16:15	SB-14						3
15		16:45	SB-15						3
16	5-29-01	17:12	SB-16						3
7									
8									
9									
10									
SAMPLE COLLECTED BY		REINQUISHED BY		DATE		TIME		RECEIVED BY	
Beverly L. Morris		J. Morris		5/29/01		18:30		J. Morris	
SEND REPORT TO (PERSON)		DATE		TIME		RECEIVED BY		TOTAL OF ALL CONTAINERS	
C. Morris		5/29/01		18:30		J. Morris		18	
SAMPLES CONDITION		LOG NUMBER		DATE		TIME		TOTAL OF ALL CONTAINERS	
undisturbed		200105347		5/29/01		18:30		18	

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225  
edyne@bellsouth.net

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 1

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-1 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	9.7	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 2

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-2 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	4.2	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-3 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/13/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	BDL	0.10 µg/L	SPH
Acenaphthylene, SPLP	BDL	0.10 µg/L	SPH
Anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	4.6	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	4.4	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	2.9	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	BDL	0.10 µg/L	SPH
Chrysene, SPLP	3.9	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	BDL	0.10 µg/L	SPH
Fluoranthene, SPLP	4.2	0.10 µg/L	SPH
Fluorene, SPLP	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	1.1	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
Naphthalene, SPLP	2.5	0.10 µg/L	SPH
Phenanthrene, SPLP	7.6	0.10 µg/L	SPH
Pyrene, SPLP	10	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-3 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	3.1	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 4

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-4 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/14/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	3.4	0.10 µg/L	SPH
Acenaphthylene, SPLP	BDL	0.10 µg/L	SPH
Anthracene, SPLP	250	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	110	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	110	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	88	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	70	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	110	0.10 µg/L	SPH
Chrysene, SPLP	150	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	55	0.10 µg/L	SPH
Fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Fluorene, SPLP	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	64	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	48	0.10 µg/L	SPH
Naphthalene, SPLP	BDL	0.10 µg/L	SPH
Phenanthrene, SPLP	140	0.10 µg/L	SPH
Pyrene, SPLP	200	0.10 µg/L	SPH



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 5

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-5 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/14/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	3.6	0.10 µg/L	SPH
Acenaphthylene, SPLP	BDL	0.10 µg/L	SPH
Anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	22	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	5.7	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	BDL	0.10 µg/L	SPH
Chrysene, SPLP	BDL	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	BDL	0.10 µg/L	SPH
Fluoranthene, SPLP	6.1	0.10 µg/L	SPH
Fluorene, SPLP	8.0	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	1.2	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	3.4	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
Naphthalene, SPLP	3.6	0.10 µg/L	SPH
Phenanthrene, SPLP	3.2	0.10 µg/L	SPH
Pyrene, SPLP	6.4	0.10 µg/L	SPH

# Envirodyne Inc.

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## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 6

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-6 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	4.0	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 7

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-8 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/14/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	BDL	0.10 µg/L	SPH
Acenaphthylene, SPLP	1.2	0.10 µg/L	SPH
Anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	29	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	29	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	23	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	17	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	27	0.10 µg/L	SPH
Chrysene, SPLP	46	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	14	0.10 µg/L	SPH
Fluoranthene, SPLP	88	0.10 µg/L	SPH
Fluorene, SPLP	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	17	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
Naphthalene, SPLP	BDL	0.10 µg/L	SPH
Phenanthrene, SPLP	40	0.10 µg/L	SPH
Pyrene, SPLP	55	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 7

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-8 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	5.0	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 8

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-9 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/14/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	BDL	0.10 µg/L	SPH
Acenaphthylene, SPLP	1.6	0.10 µg/L	SPH
Anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	3.9	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	12	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	5.8	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	6.2	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	BDL	0.10 µg/L	SPH
Chrysene, SPLP	12	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	5.3	0.10 µg/L	SPH
Fluoranthene, SPLP	32	0.10 µg/L	SPH
Fluorene, SPLP	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	1.1	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
Naphthalene, SPLP	5.9	0.10 µg/L	SPH
Phenanthrene, SPLP	9.5	0.10 µg/L	SPH
Pyrene, SPLP	18	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 9

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-10 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/14/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	BDL	0.10 µg/L	SPH
Acenaphthylene, SPLP	BDL	0.10 µg/L	SPH
Anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	3.5	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	BDL	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	1.7	0.10 µg/L	SPH
Chrysene, SPLP	BDL	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	BDL	0.10 µg/L	SPH
Fluoranthene, SPLP	4.2	0.10 µg/L	SPH
Fluorene, SPLP	34	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	1.6	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	2.5	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
Naphthalene, SPLP	BDL	0.10 µg/L	SPH
Phenanthrene, SPLP	1.8	0.10 µg/L	SPH
Pyrene, SPLP	5.0	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 9

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-10 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	4.4	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 10

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-11 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	17	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 11

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-12 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/12/01

### 1312/8021 AROMATIC ORGANIC COMPOUNDS, SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene, S.P.L.P.	BDL	1.0 µg/L	ADM
Chlorobenzene, S.P.L.P.	BDL	1.0 µg/L	ADM
1,2-Dichlorobenzene, S.P.L.P.	BDL	1.0 µg/L	ADM
1,3-Dichlorobenzene, S.P.L.P.	BDL	1.0 µg/L	ADM
1,4-Dichlorobenzene, S.P.L.P.	BDL	1.0 µg/L	ADM
Ethylbenzene, S.P.L.P.	BDL	1.0 µg/L	ADM
Methyl-tert-butyl ether, S.P.L.P.	BDL	1.0 µg/L	ADM
Toluene, S.P.L.P.	BDL	1.0 µg/L	ADM
Xylenes, Total, S.P.L.P.	BDL	1.0 µg/L	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 12

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-13 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/14/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	BDL	0.10 µg/L	SPH
Acenaphthylene, SPLP	BDL	0.10 µg/L	SPH
Anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	BDL	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	BDL	0.10 µg/L	SPH
Chrysene, SPLP	BDL	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	BDL	0.10 µg/L	SPH
Fluoranthene, SPLP	BDL	0.10 µg/L	SPH
Fluorene, SPLP	3.8	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	BDL	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
Naphthalene, SPLP	BDL	0.10 µg/L	SPH
Phenanthrene, SPLP	BDL	0.10 µg/L	SPH
Pyrene, SPLP	BDL	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 13

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-16 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/14/01

Date of Extraction: 06/12/01

### 1312/8310 POLYNUCLEAR AROMATIC HYDROCARBONS SPLP

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene, SPLP	BDL	0.10 µg/L	SPH
Acenaphthylene, SPLP	2.4	0.10 µg/L	SPH
Anthracene, SPLP	BDL	0.10 µg/L	SPH
Benzo(a)anthracene, SPLP	28	0.10 µg/L	SPH
Benzo(b)fluoranthene, SPLP	50	0.10 µg/L	SPH
Benzo(g,h,i)perylene, SPLP	16	0.10 µg/L	SPH
Benzo(k)fluoranthene, SPLP	13	0.10 µg/L	SPH
Benzo(a)pyrene, SPLP	19	0.10 µg/L	SPH
Chrysene, SPLP	31	0.10 µg/L	SPH
Dibenzo(a,h)anthracene, SPLP	4.6	0.10 µg/L	SPH
Fluoranthene, SPLP	110	0.10 µg/L	SPH
Fluorene, SPLP	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene, SPLP	11	0.10 µg/L	SPH
1-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
2-Methylnaphthalene, SPLP	BDL	0.10 µg/L	SPH
Naphthalene, SPLP	BDL	0.10 µg/L	SPH
Phenanthrene, SPLP	BDL	0.10 µg/L	SPH
Pyrene, SPLP	99	0.10 µg/L	SPH

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225  
edyne@bellsouth.net

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

July 2, 2001  
Report: 2001/06450  
Sample No: 2001/06450- 13

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: SB-16 (3-4')

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/16/01

Date of Extraction: 06/12/01

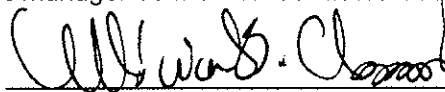
### 1312/FL-PRO WITH HYDROCARBON RANGE

PARAMETER	RESULT	DL UNITS	ANALYST
Petroleum Range Organics, SPLP	4.0	1.70 mg/L	CMM
Hydrocarbon Range	C8-C36		CMM

Analysis contained herein conform to EPA, Standard Methods and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041. Additional Laboratory Certification numbers: E86006, 84629, E83079, E86240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated. Envirodyne certifies that its test results meet all requirements of the NELAC Standards. For questions, please call the project manager at the number listed above.



Project Manager



Quality Assurance Director

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

PROJECT NUMBER	PROJECT NAME	P.O. NUMBER	SAMPLE TYPE	PRESERVATIVE	ANALYSES REQUESTED	NO. OF CONTAINERS	RUSH TAT (SURCHARGE)	DUE DATE	REMARKS	
145-001-02	PM I Transfer Facility									
PROJECT LOCATION: 3650 San 47th Ave, Duval, FL. CLIENT NAME: Global CLIENT ADDRESS: 230 S. Ocean Blvd. Suite 26C Daytona Beach, FL. ENVIRONMENTAL PHONE (61) 266-0096 FAX (61) 266-0092										
SAMPLE INFORMATION										
NUMBER	DATE	TIME	IDENTIFICATION		SOLID		LIQUID		NON-AQUEOUS LIQUID	
1	5-29-01	10:40	SB-1		✓	✓	✓	✓	✓	✓
2		11:15	SB-2		✓	✓	✓	✓	✓	✓
3		14:08	SB-3		✓	✓	✓	✓	✓	✓
4		17:00	SB-4		✓	✓	✓	✓	✓	✓
5		14:17	SB-5		✓	✓	✓	✓	✓	✓
6		13:54	SB-6		✓	✓	✓	✓	✓	✓
7		14:30	SB-7		✓	✓	✓	✓	✓	✓
8		13:22	SB-8		✓	✓	✓	✓	✓	✓
9		15:07	SB-9		✓	✓	✓	✓	✓	✓
10	5-29-01	14:43	SB-10		✓	✓	✓	✓	✓	✓
SAMPLE COLLECTED BY: Kevin L. Williams SEND REPORT TO (PERSON): Christina Pacey SAMPLES CONDITION: 40C LOG NUMBER: 06450 2001/053377										
ARE THESE SAMPLES LISTED OR CHARACTERISTIC HAZARDOUS WASTE? <input type="checkbox"/> YES <input type="checkbox"/> NO ARE THESE SAMPLES FROM <input type="checkbox"/> PETROLEUM <input type="checkbox"/> DRY CLEANER OR <input type="checkbox"/> OTHER SITE?										
RELINQUISHED BY: [Signature] DATE: 5/29/01 TIME: 18:30 RECEIVED BY: [Signature] DATE: 5/29/01 TIME: 18:30										
TOTAL OF ALL CONTAINERS: 30										

PROJECT NUMBER <u>145-001-02</u>		PROJECT NAME <u>PLI Transfer Facility</u>		P.O. NUMBER		SAMPLE TYPE		PRESERVATIVE		ANALYSES REQUESTED		RUSH TAT (SURCHARGE)			
PROJECT LOCATION <u>3650 Sw 47th Ave. Davie, FL.</u>		CLIENT NAME <u>Calo BNL</u>		CLIENT ADDRESS <u>ENVIRONMENTAL</u>		PHONE <u></u>		FAX <u></u>		NO. OF CONTAINERS		DUE DATE			
SAMPLE INFORMATION										REMARKS					
SAMPLE NUMBER	DATE	TIME	IDENTIFICATION	SOLID	LIQUID	AIR	NON-AQUEOUS LIQUID	80/100	80/100	SP/P 830	SP/P 830	SP/P 830	SP/P 830		
11	5-29-01	15:45	SB-11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
12		12:00	SB-12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
13		15:52	SB-13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
14		16:15	SB-14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
15		16:45	SB-15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
16	5-29-01	17:12	SB-16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
7															
8															
9															
10															
SAMPLE COLLECTED BY <u>Beach L. Morris</u>										ARE THESE SAMPLES LISTED OR CHARACTERISTIC HAZARDOUS WASTE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL OF ALL CONTAINERS <u>18</u>	
SEND REPORT TO (PERSON) <u>Mr. Steve Pinner</u>										RECEIVED BY <u>[Signature]</u>				DATE <u>5/29/01</u>	
SAMPLES CONDITION <u>undisturbed 40C</u>										DATE <u>5/29/01</u>				TIME <u>18:30</u>	
LOG NUMBER <u>2001/05347</u>										DATE <u>5/29/01</u>				TIME <u>18:30</u>	

## APPENDIX D



# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 1

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: MW-1

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/01/01

### 8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	1.0 µg/L	ADM
Chlorobenzene	BDL	1.0 µg/L	ADM
1,2-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,3-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,4-Dichlorobenzene	BDL	1.0 µg/L	ADM
Ethylbenzene	BDL	1.0 µg/L	ADM
Methyl-tert-butyl ether	2.0	1.0 µg/L	ADM
Toluene	BDL	1.0 µg/L	ADM
Xylenes, Total	BDL	1.0 µg/L	ADM



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 1

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: MW-1

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01

Date of Extraction: 05/31/01

### 8310 POLYNUCLEAR AROMATIC HYDROCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene	BDL	0.10 µg/L	SPH
Acenaphthylene	BDL	0.10 µg/L	SPH
Anthracene	BDL	0.10 µg/L	SPH
Benzo(a)anthracene	BDL	0.10 µg/L	SPH
Benzo(b)fluoranthene	BDL	0.10 µg/L	SPH
Benzo(g,h,i)perylene	0.33	0.10 µg/L	SPH
Benzo(k)fluoranthene	0.24	0.10 µg/L	SPH
Benzo(a)pyrene	0.39	0.10 µg/L	SPH
Chrysene	BDL	0.10 µg/L	SPH
Dibenzo(a,h)anthracene	BDL	0.10 µg/L	SPH
Fluoranthene	2.4	0.10 µg/L	SPH
Fluorene	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene	0.17	0.10 µg/L	SPH
1-Methylnaphthalene	1.7	0.10 µg/L	SPH
2-Methylnaphthalene	3.4	0.10 µg/L	SPH
Naphthalene	BDL	0.10 µg/L	SPH
Phenanthrene	BDL	0.10 µg/L	SPH
Pyrene	BDL	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 2

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: MW-3

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/01/01

### 8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	1.0 µg/L	ADM
Chlorobenzene	BDL	1.0 µg/L	ADM
1,2-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,3-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,4-Dichlorobenzene	BDL	1.0 µg/L	ADM
Ethylbenzene	BDL	1.0 µg/L	ADM
Methyl-tert-butyl ether	3.3	1.0 µg/L	ADM
Toluene	BDL	1.0 µg/L	ADM
Xylenes, Total	BDL	1.0 µg/L	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 2

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: MW-3

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/04/01  
Date of Extraction: 05/31/01

### 8310 POLYNUCLEAR AROMATIC HYDROCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene	BDL	0.10 µg/L	SPH
Acenaphthylene	BDL	0.10 µg/L	SPH
Anthracene	1.0	0.10 µg/L	SPH
Benzo(a)anthracene	BDL	0.10 µg/L	SPH
Benzo(b)fluoranthene	BDL	0.10 µg/L	SPH
Benzo(g,h,i)perylene	BDL	0.10 µg/L	SPH
Benzo(k)fluoranthene	BDL	0.10 µg/L	SPH
Benzo(a)pyrene	BDL	0.10 µg/L	SPH
Chrysene	BDL	0.10 µg/L	SPH
Dibenzo(a,h)anthracene	BDL	0.10 µg/L	SPH
Fluoranthene	BDL	0.10 µg/L	SPH
Fluorene	9.0	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene	BDL	0.10 µg/L	SPH
1-Methylnaphthalene	0.50	0.10 µg/L	SPH
2-Methylnaphthalene	BDL	0.10 µg/L	SPH
Naphthalene	BDL	0.10 µg/L	SPH
Phenanthrene	BDL	0.10 µg/L	SPH
Pyrene	BDL	0.10 µg/L	SPH

# Envirodyne Inc.

4805 N.W. 2nd Avenue  
Boca Raton, FL 33431  
561-989-5225

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: MW-5

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/01/01

### 8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	1.0 µg/L	ADM
Chlorobenzene	BDL	1.0 µg/L	ADM
1,2-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,3-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,4-Dichlorobenzene	BDL	1.0 µg/L	ADM
Ethylbenzene	BDL	1.0 µg/L	ADM
Methyl-tert-butyl ether	29	1.0 µg/L	ADM
Toluene	BDL	1.0 µg/L	ADM
Xylenes, Total	BDL	1.0 µg/L	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 3

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: MW-5

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01

Date of Extraction: 05/31/01

### 8310 POLYNUCLEAR AROMATIC HYDROCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene	BDL	0.10 µg/L	SPH
Acenaphthylene	BDL	0.10 µg/L	SPH
Anthracene	BDL	0.10 µg/L	SPH
Benzo(a)anthracene	BDL	0.10 µg/L	SPH
Benzo(b)fluoranthene	BDL	0.10 µg/L	SPH
Benzo(g,h,i)perylene	BDL	0.10 µg/L	SPH
Benzo(k)fluoranthene	BDL	0.10 µg/L	SPH
Benzo(a)pyrene	BDL	0.10 µg/L	SPH
Chrysene	BDL	0.10 µg/L	SPH
Dibenzo(a,h)anthracene	BDL	0.10 µg/L	SPH
Fluoranthene	BDL	0.10 µg/L	SPH
Fluorene	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene	BDL	0.10 µg/L	SPH
1-Methylnaphthalene	BDL	0.10 µg/L	SPH
2-Methylnaphthalene	BDL	0.10 µg/L	SPH
Naphthalene	BDL	0.10 µg/L	SPH
Phenanthrene	BDL	0.10 µg/L	SPH
Pyrene	BDL	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 4

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: ATMW-14

Collected by: Bevin L. Morris

Collected on: 05/29/01

Received on: 05/29/01

Date of Analysis: 06/01/01

### 8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	1.0 µg/L	ADM
Chlorobenzene	BDL	1.0 µg/L	ADM
1,2-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,3-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,4-Dichlorobenzene	BDL	1.0 µg/L	ADM
Ethylbenzene	BDL	1.0 µg/L	ADM
Methyl-tert-butyl ether	BDL	1.0 µg/L	ADM
Toluene	BDL	1.0 µg/L	ADM
Xylenes, Total	BDL	1.0 µg/L	ADM

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 4

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: ATMW-14

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01

Date of Extraction: 05/31/01

### 8310 POLYNUCLEAR AROMATIC HYDROCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene	BDL	0.10 µg/L	SPH
Acenaphthylene	BDL	0.10 µg/L	SPH
Anthracene	BDL	0.10 µg/L	SPH
Benzo(a)anthracene	0.24	0.10 µg/L	SPH
Benzo(b)fluoranthene	0.41	0.10 µg/L	SPH
Benzo(g,h,i)perylene	0.44	0.10 µg/L	SPH
Benzo(k)fluoranthene	0.35	0.10 µg/L	SPH
Benzo(a)pyrene	0.38	0.10 µg/L	SPH
Chrysene	0.35	0.10 µg/L	SPH
Dibenzo(a,h)anthracene	0.38	0.10 µg/L	SPH
Fluoranthene	BDL	0.10 µg/L	SPH
Fluorene	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene	0.36	0.10 µg/L	SPH
1-Methylnaphthalene	0.31	0.10 µg/L	SPH
2-Methylnaphthalene	BDL	0.10 µg/L	SPH
Naphthalene	BDL	0.10 µg/L	SPH
Phenanthrene	BDL	0.10 µg/L	SPH
Pyrene	BDL	0.10 µg/L	SPH

## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 5

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: ATMW-15

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/01/01

### 8021B AROMATIC VOLATILE ORGANICS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	1.0 µg/L	ADM
Chlorobenzene	BDL	1.0 µg/L	ADM
1,2-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,3-Dichlorobenzene	BDL	1.0 µg/L	ADM
1,4-Dichlorobenzene	BDL	1.0 µg/L	ADM
Ethylbenzene	BDL	1.0 µg/L	ADM
Methyl-tert-butyl ether	4.5	1.0 µg/L	ADM
Toluene	BDL	1.0 µg/L	ADM
Xylenes, Total	BDL	1.0 µg/L	ADM



## CERTIFICATE OF ANALYSIS

Global Environmental Services  
250 S. Ocean Boulevard Suite #266  
Delray Beach, FL 33483

June 6, 2001  
Report: 2001/05546  
Sample No: 2001/05546- 5

Attention: Christopher L. Perry, P.G.

Project: 145-001-02 PMI Transfer Facility  
3650 SW 47th Avenue Davie, FL

SAMPLE ID: ATMW-15

Collected by: Bevin L. Morris

Collected on: 05/29/01  
Received on: 05/29/01

Date of Analysis: 06/04/01  
Date of Extraction: 05/31/01

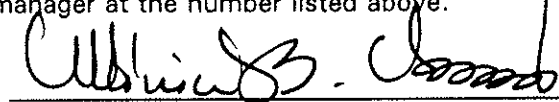
### 8310 POLYNUCLEAR AROMATIC HYDROCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Acenaphthene	BDL	0.10 µg/L	SPH
Acenaphthylene	BDL	0.10 µg/L	SPH
Anthracene	BDL	0.10 µg/L	SPH
Benzo(a)anthracene	0.26	0.10 µg/L	SPH
Benzo(b)fluoranthene	0.98	0.10 µg/L	SPH
Benzo(g,h,i)perylene	0.36	0.10 µg/L	SPH
Benzo(k)fluoranthene	0.15	0.10 µg/L	SPH
Benzo(a)pyrene	0.36	0.10 µg/L	SPH
Chrysene	0.29	0.10 µg/L	SPH
Dibenzo(a,h)anthracene	BDL	0.10 µg/L	SPH
Fluoranthene	BDL	0.10 µg/L	SPH
Fluorene	BDL	0.10 µg/L	SPH
Indeno(1,2,3-c,d)pyrene	0.26	0.10 µg/L	SPH
1-Methylnaphthalene	BDL	0.10 µg/L	SPH
2-Methylnaphthalene	BDL	0.10 µg/L	SPH
Naphthalene	BDL	0.10 µg/L	SPH
Phenanthrene	BDL	0.10 µg/L	SPH
Pyrene	1.1	0.10 µg/L	SPH

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041. Additional Laboratory Certification numbers: E86006, 84269, E83079, E86240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated. Envirodyne certifies that its test results meet all requirements of the NELAC Standards. For questions, please call the project manager at the number listed above.



Project Manager



Quality Assurance Director

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Page 1 of 1

4805 NW 2nd Avenue • Boca Raton, FL 33431  
(561) 989-5225 • Fax (561) 989-5204

PROJECT NUMBER 145-001-02		PROJECT NAME PMI Transfer Facility		P.O. NUMBER		SAMPLE TYPE		PRESERVATIVE		
PROJECT LOCATION 3650 SW 47 Ave Davie, FL.		CLIENT ADDRESS 250 S. Ocean Blvd. Suite 206 Delray Beach, FL.		PHONE (561) 266-0096 FAX (561) 266-0092		ANALYSES REQUESTED		RUSH TAT (SURCHARGE) <input type="checkbox"/>		
CLIENT NAME Global Environmental Services		CLIENT ADDRESS		PHONE		FAX		DUE DATE:		
SAMPLE INFORMATION										
NUMBER	DATE	TIME	IDENTIFICATION							
1	5-29-01	16:35	mw-1							
2		15:20	mw-3							
3		16:58	mw-5							
4		16:05	ATmw-14							
5	5-29-01	14:35	ATmw-15							
6										
7										
8										
9										
10										
SAMPLE COLLECTED BY Karen L. Harris			ARE THESE SAMPLES LISTED OR CHARACTERISTIC HAZARDOUS WASTE? <input type="checkbox"/> YES <input type="checkbox"/> NO							
SEND REPORT TO (PERSON) Charlesman Power			ARE THESE SAMPLES FROM <input type="checkbox"/> PETROLEUM <input type="checkbox"/> DRY CLEANER OR <input type="checkbox"/> OTHER SITE?							
SAMPLES CONDITION undist 4°C			RELINQUISHED BY Jerome		DATE 5/29/01		TIME 18:30		RECEIVED BY Jeffrey Jang	
LOG NUMBER 200105546			1		3		5		TOTAL OF ALL CONTAINERS 15	
			DATE 5/29/01		TIME 1830		DATE 5/29/01		TIME 1830	