FLUOR DANIEL GTI

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Regional Office

October 15, 1998

Ms. Sherri Knight
North Carolina Department of Environment and Natural Resources
Winston-Salem Regional Office
585 Waughtown Street
Winston-Salem, NC 27107

Ms. Melanie Wells
Guilford County Health Department
1100 East Wendover Avenue
Greensboro, NC 27405

Subject: **Soil Clean-up Report with Site Closure Request**
Former Bozovich Sunoco
2903 S. Elm Street
Greensboro, NC
NCDWQ Incident #10076
Current Site Ranking: E
Facility DUNS #0275-7516

Elm St Sunoco - Reg UST

Dear Ms. Knight and Ms. Wells:

Fluor Daniel GTI, Inc. (Fluor Daniel GTI) on behalf of our client, Sun Company, is pleased to submit the enclosed Soil Cleanup Report with Site Closure Request, documenting the monitoring activities performed at the site to date. The site closure request is based on historical data and the results of the confirmatory soil sampling performed on August 12, 1998. If there any questions regarding the enclosed report, please contact Mary Relyea at (919) 467-2227.

Sincerely,
FLUOR DANIEL GTI, INC.

LaKeshia M. Holley
LaKeshia M. Holley
Associate Geologist

Mary E. Relyea
Mary E. Relyea
Program Manger

Enclosure

cc: Mr. Dan Shine - Sun Company
Ms. Melanie Wells - Guilford Health Department
file

1000 Perimeter Park Drive, Suite I / Morrisville, NC 27560 USA (919) 467-2227 FAX (919) 467-2299

FLUOR DANIEL GTI

SOIL CLEANUP REPORT WITH SITE CLOSURE REQUEST

Former Bozovich Sunoco
2903 South Elm Street
Greensboro, North Carolina
Groundwater Incident # 10076
Duns # 0275-7516

Fluor Daniel GTI Project #102573

October 15, 1998

Prepared by:
Fluor Daniel GTI, Inc.
1000 Perimeter Park Drive, Suite I
Morrisville, NC 27560
(919) 467-2227

Risk Classification:	Low (E)
Land Use Category:	To be assigned by department
Responsible Party:	Sun Company, Inc. 4041 Market Street Aston, PA 19014 Phone (610) 859-5705 Contact: Daniel Shine
Current Property Owner:	Mid-State Oil Company, Inc. 1820 South Main Street Lexington, NC 27292 Phone (704) 249-0363 Contact: William Shipton
Date Discovered:	December 1992
Estimated Quantity of Release:	Unknown
Source of Release:	Unknown
USTs at Time of Release:	1-1,000 gallon fuel oil tank 3-6,000 gallon gasoline tanks 1-6,000 gallon diesel tank 1-1,000 gallon waste oil tank
Latitude and Longitude:	36.03468 N, 79.79140 W

FLUOR DANIEL GTI, INC.

LaKeshia M. Holley
LaKeshia M. Holley
Associate Geologist

10/14/98

FLUOR DANIEL GTI, INC.

Joe Beaman
Joe Beaman, P.G.
Project Geologist
NC Licensed Geologist #1468

EXECUTIVE SUMMARY

The former Bozovich Sunoco is located at 2903 South Elm Street in Guilford County, North Carolina. Specifically, the site is located off the South Elm-Eugene Street exit of Interstate 85/40, at the intersection of South Elm Street and Seneca Road. The subject site is currently operated as a used car lot.

A release of petroleum hydrocarbons was discovered in December 1992, during the performance of site assessment activities as part of the property divestment. A *Divestment Contamination Report*, prepared by Law Engineering, was submitted to the NCDENR Winston-Salem Regional Office in March 1993. In April 1993, the 1000-gallon fuel oil UST was removed from the site for disposal. A *Tank Excavation Report*, prepared by Griffith Enterprises, was submitted in August 1993. The five remaining USTs, registered to Mid-State Petroleum Company (Mid State) were removed from the site on July 27,1993 by TEKCON, Inc. The UST system removed included 3-6,000 gallon gasoline tanks, 1-6,000 gallon diesel tank, and 1-1,000 gallon waste oil tank. The UST Closure ~~Report was to be~~ completed by Mid State.

Between June 1 and 2, 1993, Fluor Daniel GTI, Inc. (formerly, Groundwater Technology, Inc.) conducted additional investigative activities at the site. Results of the investigation were summarized in a *Comprehensive Site Assessment Report*, submitted in July 1993. To further assess the site, additional source assessment activities were conducted in August 1995. Results of the investigation were summarized in the *Project Update Report*, submitted in September 1995. A *Revised Comprehensive Site Assessment* was submitted in January 1996. On July 16, 1996 a *Comprehensive Site Assessment Addendum* was submitted to the NCDEM Winston-Salem Regional Office. Due to the enactment of the Senate Bill 1317, which suspended investigative activities at sites ranked as a "CDE" or low priority sites, a *Corrective Action Plan* (CAP) was not submitted. The site was ranked as "CDE" or low priority and investigative activities were suspended at the site on July 21, 1996. To date, remedial activities have not been implemented at the site.

Based on current site conditions, land use and potential receptor information, this site was reviewed relative to the low risk criteria. Water supply wells or basements have not been identified in the site vicinity. Although South Buffalo Creek (C class surface water body) is within 500 feet of the site, the most recent groundwater concentrations are 10 times below the surface water standards. The site is surrounded by commercial properties. Groundwater concentrations are below the applicable risk based end points. Based on the above information, NC RBCA Maximum Soil Contamination Concentrations (MSCC) for Industrial/Commercial sites would be the applicable end point to achieve environmental site closure. Therefore, the site would remain a low risk site.

On August 12, 1998, soil confirmation samples were collected in order to determine if regulatory end-point concentrations have been meet. Based on soil analytical results from this post remediation soil sampling event, soil contaminant concentrations were determined to be below the Industrial/Commercial MSCC levels, with the exception of Benzo(a) pyrene. Although, the standard of 0.78 mg/kg for Benzo(a) pyrene was exceeded in soil samples GP-1 (8-10') at a concentration of 2.14 mg/kg and soil sample GP-3 (8-10.5') at a concentration of 2.31 mg/kg. This compound has not been detected in the groundwater

samples collected from the site. Additionally, if leaching of the compound to the groundwater were to occur, the compound would likely be degraded or attenuated via natural processes. In comparing the current site and surrounding conditions coupled with the recent soil analytical data relative to the current NC RBCA guidelines, the site appears to be eligible for closure. Fluor Daniel GTI, Inc., on behalf of the Sun Company, Inc., requests that the site be considered for site closure and that the NCDENR Winston-Salem Regional Office issue a notification of no further action pursuant of 15A NCA2L . 0115(h).

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1.0 EVALUATION OF REMEDIAL ALTERNATIVES

1.1 Introduction

The former Bozovich Sunoco is located in Greensboro, Guilford County, North Carolina. Specifically, the site is located off the South Elm-Eugene Street exit of Interstate 85/40, at the intersection of South Elm Street and Seneca Road. The subject site is currently operating as a used car lot . The site is located in a commercial area and surrounded by other commercial properties. A list of the adjacent property owners is provided in **Table 1**. Currently, on-site structures consist of a store building, a canopy, and two non-operational pump islands. A site map is attached as **Figure 1**.

1.2 Site History and Assessment

A release of petroleum hydrocarbons was discovered at the site in December 1992, during the performance of site assessment activities as part of the property divestment. The results of this initial assessment were presented in a report prepared by Law Engineering, Inc. (Law), *Report of Mid-State Oil Company Divestment Contamination*, dated March 8, 1993 and was submitted to the NCDENR Winston-Salem Regional Office. The scope of work of the initial assessment conducted at the site included a sensitive receptor survey; sampling soils at five locations across the site for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds); the installation of a Type II groundwater monitoring well (currently designed MW-1); and sampling groundwater in the well for dissolved BTEX compounds and TPH. Laboratory analytical results indicated that adsorbed phase petroleum hydrocarbons were detected in soils sampled near the underground storage tanks (USTs) and fuel dispenser islands. Dissolved benzene (13 ug/L) was detected in MW-2. Dissolved TPH (resembling diesel) was also detected in MW-2.

In April 1993, Griffith Enterprises, Inc., removed the 1,000-gallon single wall steel fuel oil UST. The results of the removal activities were presented in the report, *Tank Excavation Assessment Report*, dated August 24, 1993 and was submitted to the NCDENR Winston Salem Regional Office. Laboratory results indicated that TPH as gasoline and diesel were detected above NCDEHNR action levels in the sampled soils. Dissolved benzene (9 ug/L), ethylbenzene (49 ug/L), xylenes (112 ug/L), and lead (1020 ug/L) were detected in the groundwater sample collected from the excavation.

The five remaining underground storage tanks, registered to Mid-State Petroleum Company (Mid State) were removed from the site on July 27,1993 by TEKCON, Inc. The UST system removed included: 3-6,000 gallon gasoline tanks, 1-6,000 gallon diesel tank, and 1-1,000 gallon waste oil tank. The UST Closure Report was to be completed by Mid State.

During June 1 and 2, 1993, Fluor Daniel GTI, Inc., (formerly Groundwater Technology, Inc.) conducted additional investigative activities at the site. These assessment activities included: Installation of three additional Type II groundwater monitoring wells (MW-2 through MW-4) and one Type III well (VMW-5) to evaluate the lateral and vertical extent of dissolved petroleum hydrocarbons; sampling soils in the monitoring well borings for TPH analysis; sampling groundwater in the existing and new monitoring wells for purgeable halocarbons, purgeable aromatic volatile organic compounds (VOCs), and semi-volatile organic compound (SVOC) analysis; and gauging groundwater levels in the wells to evaluate shallow groundwater flow.

The results of these activities were submitted to the NCDENR Winston Salem Regional Office in the *Comprehensive Site Assessment*, dated July 20, 1993. The report indicated that: Liquid-phase hydrocarbons were not detected in any of the site monitoring wells and only low concentrations of TPH (below the NCDEHNR action levels) were detected in the sampled soils. Also, low levels of dissolved petroleum compounds were detected in wells MW-1 through MW-4 and VMW-5. The purgeable halocarbon chloroform, a suspected laboratory contaminant, was also detected in well VMW-5. The overall direction of shallow groundwater flow was to the south-southeast.

To further assess the site, additional activities were conducted. During March 1995 groundwater samples were collected from site monitoring wells MW-1 through MW-4 and VMW-5. The results of this sampling event were presented in the report prepared by Fluor Daniel GTI titled, *Project Update Report,* dated September 29, 1995. The report indicated that dissolved benzene was detected in well MW-1 at a concentration of 4.7 ug/L; dissolved ethylbenzene was detected in well MW-2 at a concentration of 4.4 ug/L; and dissolved MTBE was detected in well MW-2 at a concentration of 200 ug/L.

During August 1995 an additional groundwater monitoring well (MW-6) was installed in the former 1,000-gallon fuel tank basin; soil samples were collected in the former gasoline UST basin for TPH; and groundwater samples were collected in well MW-6 for dissolved SVOCs. Results for the source assessment activities were submitted to NCDEHNR Winston Salem Regional Office in the *Project Update Report*, dated September 29, 1995. The results indicated that TPH was not detected at concentrations above the NCDEHNR action levels in the soils sampled in the former gasoline UST basin. Dissolved SVOCs were not detected in the groundwater sample obtained from well MW-6.

Additional assessment activities were conducted in December 1995 and January 1996. Activities included: sampling soils in the vicinity of the former 1,000-gallon fuel oil UST to evaluate the extent of petroleum impacted soils in the tank basin; sampling groundwater in select monitoring wells to monitor groundwater quality; gauging groundwater levels in the site wells to monitor groundwater flow; and an inflow permeability (slug) test was performed to evaluate the hydraulic conductivity of the saprolite aquifer. Results of the activities were report in the *Revised Comprehensive Site Assessment,* submitted on January 22, 1996. The analytical results from soil samples obtained from borings TB-2 and TB-3 on December 20, 1995 and from borings TB-4 through TB-7 on January 8, 1996 indicate that TPH 3550

(reported by the laboratory as diesel) was detected in boring TB-2 at a concentration of 110 mg/kg. TPH 3550 (reported by the analytical laboratory as an unknown hydrocarbon that is heavier than diesel) was detected in boring TB-3 through TB-7 at concentrations ranging from 15 mg/kg to 970 mg/kg.

As a result of the NCDEHNR action level of 40 mg/kg for TPH 3550 being exceeded in several samples, a Site Sensivitity Evaluation (SSE) was performed to calculate the final cleanup level for TPH 3550 impacted soils at the site. The proposed cleanup level based on the SSE was (960 mg/kgs).

1.3 Risk Level Evaluation

Potable water is supplied to the site and the surrounding area by the municipal water system. Additionally, the City of Greensboro obtains its water from reservoirs located in Guilford County. Area reconnaissance was performed to identify potential sensitive receptors within approximately 1,500 feet of the site in September 1993. Neither private potable nor irrigation wells were identified. Other receptors (subsurface utilities, surface water bodies, etc.) were identified in the vicinity of the site. The closest surface water body, South Buffalo Creek, is located approximately 150 feet south of the site. Previous site visits from 1993-1996 have identified an underground sanitary sewer line near the former 1,000-gallon fuel oil tank basin, and an underground water supply line and storm sewer line in the Elm Street right-of-way. A list of the adjacent property owners is provided in **Table 1.**

The most recent groundwater sampling event was performed on December 20, 1995. Samples were collected from monitoring wells (MW-1, MW-2, and MW-6). Laboratory analytical results indicated that regulated constituents were detected, however, the concentrations are below the NC RBCA Gross Contamination Levels for petroleum related compounds. The mean direction of groundwater flow is toward the south-southeast. A summary of historical groundwater analytical data is included in **Tables 2, 3, and 4.**

1.4 Corrective Action Evaluation

An initial *Comprehensive Site Assessment* (CSA) was prepared on July 20, 1993 and a *Revised Comprehensive Site Assessment* was submitted on January 22, 1996. On July 16, 1996 a *Comprehensive Site Assessment Addendum* was submitted to the NCDEM Winston-Salem Regional Office. A *Correction Action Plan* (CAP) was not submitted, due to enactment of the Senate Bill 1317 on June 21, 1996, which suspended investigative activities at sites ranked as a "CDE" or low priority site. Due to the site being ranked as a "CDE" or a low priority site, investigative activities were suspended at the site on July 21, 1996.

1.5 Corrective Action Selection and Implementation

Following the effective implementation date of January 2, 1998 for the NCAC 2L .0115, NC Risk Based Corrective Action (NC RBCA) rules, Fluor Daniel GTI reviewed and compared the CSA and site monitoring data to the new rules. Based on the review, the site is categorized as being a low risk site and eligible for closure if current soil contamination levels are below the appropriate Maximum Soil Contamination Concentrations (MSCC).

2.0 SITE REMEDIATION

2.1 On Site Treatment

To date, on site treatment has not been initiated

2.2 Off Site Treatment/Disposal

To date, off site treatment/disposal has not been implemented. Excavated soils during the UST closure on April 27, 1993 were backfilled into the excavation with the addition of clean sand.

3.0 POST-REMEDIATION SAMPLING

On August 12, 1998, soil confirmation samples were collected in order to determine if regulatory end-point concentrations have been meet. Soil samples were collected utilizing a Geoprobe, at the locations designated on **Figure 1**. Boring logs for each Geoprobe boring are included in **Attachment A**. Continuous soil samples were collected in 4 foot intervals using a "Macrocore Sampler" and field screened for organic vapors using a photoionization detector (PID). A soil sample from the interval exhibiting the highest PID reading in each boring was placed in laboratory supplied soil jars and/or Encore samplers using new nitrile gloves. The sample containers were sealed and immediately stored on ice for shipment by overnight courier to Specialized Assays, Inc. of Nashville, Tennessee for laboratory analysis of volatile organic compounds by EPA Method 8260, including methyl-terrtiary-butyl-ether (MTBE) and isopropyl ether (IPE); semi-volatile compounds, by EPA Method 8270, and volatile petroleum hydrocarbons (VPH); and extractable petroleum hydrocarbons (EPH) by the MADEP Method.

One soil sample was selected from each of the four soil borings for laboratory analysis. The locations of the Geoprobe sampling points are provided on **Figure 1.** A copy of the laboratory analytical report is included in **Attachment B**. A summary of the post remediation soil laboratory analytical results are

provided in **Tables 5, 6, and 7.**

Geoprobe sampling point GP-1 was installed on the northern portion of the area surrounding the former fuel oil UST excavation. The boring was advanced to a depth of 10 feet. Soil sample GP-1 (8-10') exhibited the highest PID response and was selected for laboratory analyses. The soil analytical results indicate the presence of the following petroleum hydrocarbon fractions and respective concentrations: C9-C12 Aliphatics - 7.1 mg/kg, VPH C9-C10 Aromatics - 4.6 mg/kg, C19-C36 - 12.1 mg/kg, C11-C22 - 56.5 mg/kg. Additional petroleum related organic compounds were detected from the EPA 8260 and EPA 8270 analyses. Benzo(a) pyrene was detected by EPA 8270 to exceed the NC RCBA MSCC level for Industrial/Commercial sites of 0.78 mg/kg. The concentration detected in sample GP-1(8-10') was 2.14 mg/kg.

Geoprobe sampling point GP-2 was installed immediately east in the vicinity of the former fuel oil UST excavation. The boring was advanced to a depth of 8 feet. Soil sample GP-2 (8-10') exhibited the highest PID response and was selected for laboratory analysis. The soil analytical results indicate the presence of the following petroleum hydrocarbon fractions and respective concentrations: C9-C18 Aliphatics - 136 mg/kg, C19-C36 Aliphatics - 39.5 mg/kg, C11-C22 Aromatics - 170 mg/kg. Additional petroleum related organic compounds were detected from the EPA 8260 analyses. The concentrations detected in sample GP-2 (8-10') are below the NC RCBA MSCC for Industrial/Commercial sites.

Geoprobe sampling point GP-3 was installed south within the vicinity of the former fuel oil UST excavation. The boring was advanced to a depth of 10.5 feet. Soil sample GP-2 (8-10.5') exhibited the highest PID response and was selected for laboratory analysis. The soil analytical results indicate the presence of the following petroleum hydrocarbon fractions and respective concentrations: C9-C18 Aliphatics - 109 mg/kg, C9-C36 Aliphatics - 24 mg/kg, and C11-C22 Aromatics - 109 mg/kg. Additional petroleum related organic compounds were detected by the EPA 8260 and EPA 8270 analyses. Benzo(a) pyrene was detected by EPA 8270 to be above the NC RCBA MSCC level for Industrial/Commercial sites of 0.78 mg/kg. The concentration detected in sample GP-3(8-10.5') was 2.31 mg/kg.

Geoprobe sampling point GP-4 was installed east of the vicinity of the former diesel UST excavation. The boring was advanced to a depth of 16 feet. Soil sample GP-4 (0-4') exhibited the highest PID response and was selected for laboratory analysis. The soil analytical results only indicated the presence of naphthalene at a concentration of 0.0085 mg/kg. The only detected compound present in sample GP-4 is below the NC RCBA MSCC for Industrial/Commercial sites.

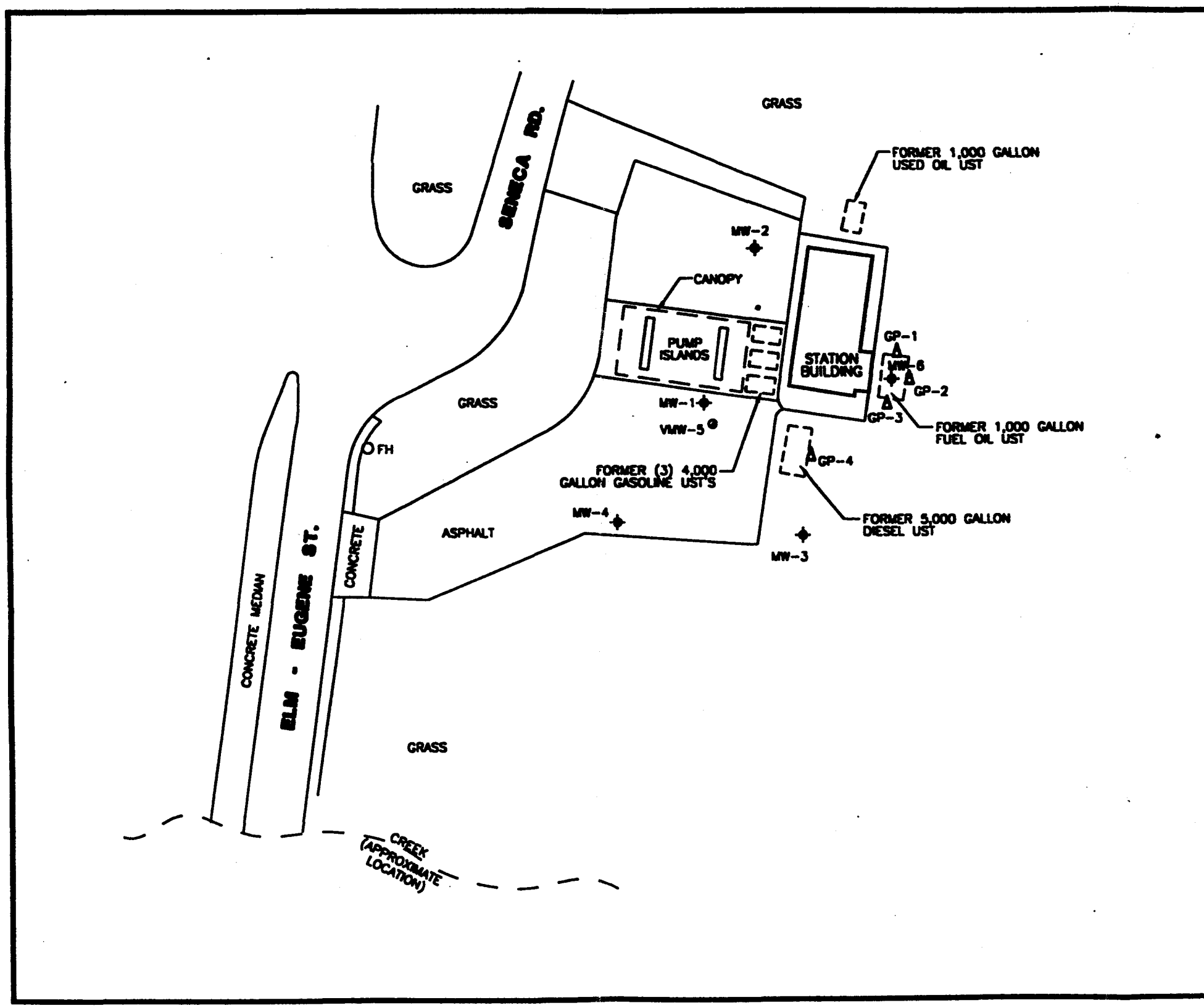
4.0 CONCLUSIONS AND PETITION FOR SITE CLOSURE

On behalf of Sun Company, Fluor Daniel GTI requests that the site be considered for site closure based on the following:

- The site meets the requirements to be characterized as "Low Risk";
- Although South Buffalo Creek (C class surface body) is within 500 feet of the site, the most recent groundwater concentrations are below 10 times the surface water standards. Tables summarizing historical groundwater data are provided in **Tables 2, 3, and 4.**
- The site is located in a commercial area and the adjacent properties are utilized for commercial land uses;
- The detected concentrations of petroleum hydrocarbons in soil samples collected from the site on August 12, 1998 are below the Maximum Soil Contaminant Concentration (MSCC) levels for Industrial/Commercial sites, as well as, MSCC for Residential sites.
- Although, the standard of 0.78 mg/kg for Benzo(a) pyrene was exceeded in soil samples GP-1 (8-10') at a concentration of 2.14 mg/kg and soil sample GP-3 (8-10.5') at a concentration of 2.31 mg/kg, this compound has not been detected in the groundwater samples collected from the site. Additionally, if leaching of the compound to the groundwater were to occur, the compound would likely be degraded or attenuated via natural processes natural processes of degradation and attenuation are considered to be the most appropriate options for the site.

Based on the information presented above, Fluor Daniel GTI, on behalf of the Sun Company, requests that the site be considered for closure and that the NCDENR Winston Salem Regional Office issue a notification of no further action pursuant of 15A NCAC 2L .0115(h). Upon receipt of a notice of no further action, public notice will be provided to owners and/or occupants of properties contiguous to the subject site. Additionally, a final task pre-approval package will be submitted under a separate cover for the abandonment of monitoring wells.

FIGURES



LEGEND

- MONITORING WELL
- VERTICAL DEFINITION MONITORING WELL
- FH FIRE HYDRANT
- PROPOSED GEOPROBE LOCATION

0 50 100
SCALE FEET

N

FLUOR DANIEL GTI
1000 PERIMETER PARK DR
SUITE 1
MORRISVILLE, NC 27560
(919) 467-2227

REV. NO.:	DRAWING DATE:	ACAD FILE:
	9/9/98	2573GPL

GEOPROBE LOCATION MAP

AUGUST 12, 1998

CLIENT:	PM:
SUN COMPANY, INC.	MER
LOCATION: 2903 S. ELM ST. GREENSBORO, NC	PE/RG:

DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
LMH	RHW	102573	

TABLES

TABLE 1
Adjacent Property Owners

Sun Company, Inc.
2903 S. Elm St., Greensboro, NC
DUNS # 0275-7516

Registered Property Owner	Property Owner Address	Direction Relative to Site
M.T. Used Cars, Inc.	2903 S. Elm St.	Site
Howard Johnsons John P. Bryant (General Manager)	110 Seneca Rd.	Northeast and East
Amoco Station Lisa Parker (Owner)	2915 S. Elm - Eugene St.	South
Cricket Inn	2914 S. Elm St.	South West
Texaco Station	2906 S. Elm - Eugene St.	West
NC DOT (I-85/40 Right of Way)	PO Box 25201, Raleigh, NC	North

TABLE 2

Summary of Historical Groundwater Analytical Results (ug/L)
EPA Method 602

Sun Company, Inc.
2903 S. Elm Street, Greensboro, NC
DUNS # 0275-7516

Well ID	Sampling Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Isopropyl-ether	Lead EPA 239.2
*NC RBCA GCL Standards		*(5,000 ug/L)	*(257,500 ug/L)	*(29,000 ug/L)	*(87,500 ug/L)	*(200,000 ug/L)	*(70,000 ug/L)	*(15 ug/L)
VD1	06/15/93	0.3	0.3	<RL	0.5	5	<RL	---
MW1	06/15/93	5.0	8.0	<RL	<RL	230	33	---
	09/24/93	1.0	<RL	<RL	0.7	300	---	---
	12/07/93	0.9	<RL	0.3	<RL	410	---	---
	02/15/94	0.7	<RL	<RL	<RL	290	---	---
	06/15/94	7.1	<RL	<RL	<RL	160	---	---
	03/22/95	4.7	<RL	<RL	<RL	130	---	---
	12/20/95	4.1	<RL	<RL	<RL	110	---	4.1
MW2	06/15/93	<RL	<RL	<RL	<RL	290	<RL	---
	09/24/93	<RL	<RL	<RL	0.5	220	---	---
	12/07/93	<RL	<RL	<RL	<RL	270	---	---
	02/15/94	<RL	<RL	<RL	<RL	280	---	---
	06/15/94	<RL	<RL	<RL	<RL	210	---	---
	03/22/95	<RL	<RL	<RL	4.4	200	---	---
	12/20/95	1.5	1.6	1.8	5.0	150	---	17
MW3	06/15/93	<RL	1.0	<RL	<RL	5.0	<RL	---
	09/24/93	0.4	0.9	<RL	0.8	24	---	---
	12/07/93	<RL	<RL	<RL	<RL	19	---	---
	02/15/94	<RL	<RL	<RL	<RL	<RL	---	---
	06/15/94	<RL	<RL	<RL	<RL	12	---	---
	03/22/95	<RL	<RL	<RL	<RL	15	---	---
MW4	06/15/93	<RL	<RL	<RL	<RL	<RL	3.0	---
	09/24/93	<RL	<RL	2	1	<RL	---	---
	12/07/93	<RL	<RL	0.7	0.7	<RL	---	---
	02/15/94	<RL	<RL	<RL	<RL	<RL	---	---
	06/15/94	<RL	<RL	<RL	1.3	<RL	---	---
	03/22/95	<RL	<RL	<RL	<RL	<RL	---	---
VMW5	06/15/93	0.3	0.3	<RL	0.5	5	<RL	---
	09/24/93	<RL	<RL	<RL	<RL	<RL	---	---
	12/07/93	<RL	<RL	<RL	<RL	<RL	---	---
	02/15/94	<RL	<RL	<RL	<RL	<RL	---	---
	06/15/94	<RL	<RL	<RL	<RL	<RL	---	---
	03/22/95	<RL	<RL	<RL	<RL	<RL	---	---
MW-6	12/20/95	1.2	2.3	<RL	<RL	<RL	---	16

Notes:
ug/L - Micrograms per liter
<RL-Below laboratory reporting limit
*NC RBCA Gross Contamination Levels (GCL) Standards

TABLE 3

Summary of Historical Groundwater Analytical Results (ug/L)
EPA Method 601/504

Sun Company, Inc.
2903 S. Elm Street, Greensboro, NC
DUNS # 0275-7516

Well ID	Sampling Date	Chloroform	1,2 Dibromoethane **Method 504**
*NC RBCA GCL Standards		**	*(50 ug/L)
VD-1	06/15/93	11	<RL
MW1	06/15/93	<RL	<RL
MW2	06/15/93	<RL	<RL
MW3	06/15/93	<RL	<RL
MW4	06/15/93	<RL	<RL

Notes:
ug/L - Micrograms per liter
<RL-Below laboratory reporting limit
*NC RBCA Gross Contamination Levels (GCL) Standards
**No NC RBCA GCL Standard Adopted

TABLE 4

Summary of Historical Groundwater Analytical Results (ug/L)
EPA Method 625

Sun Company, Inc.
2903 S. Elm Street, Greensboro, NC
DUNS # 0275-7516

Well ID	Sampling Date	Naphthalene
*NC RBCA GCL Standard		*(15,500 ug/L)
VD1	06/15/93	<RL
MW1	06/15/93	<RL
MW2	06/15/93	<RL
MW3	06/15/93	19
MW4	06/15/93	<RL
MW6	08/19/95	<RL

Notes:
ug/L - Micrograms per liter
<RL-Below laboratory reporting limit
*NC RBCA Gross Contamination Levels (GCL) Standard

Table 5

Summary of Post Remediation Soil Analytical Results
MADEP EPH and VPH

Sun Oil Company, Inc.
2903 South Elm Street, Greensboro, NC
DUNS #0275-7656

Analytical Method	Toxicologically Defined Hydrocarbon Fractions	Analytical Hydrocarbon Fraction	Residential MSCC (mg/kg)	Industrial/ Commercial MSCC (mg/kg)	Sample ID							
					GP-1 (8-10')		GP-2 (4-8')		GP-3 (8-10.5')		GP-4 (0-4')	
					Concentration (mg/kg)	Sum of VPH and EPH	Concentration (mg/kg)	Sum of VPH and EPH	Concentration (mg/kg)	Sum of VPH and EPH	Concentration (mg/kg)	Sum of VPH and EPH
VPH	C5-C8 Aliphatics	C5-C8 Aliphatics	939	24,528	ND	--	ND	--	ND	--	ND	--
VPH	C9-C18 Aliphatics	C9-C12 Aliphatics	9,386	245,280	7.1	28.4	ND	136	ND	109	ND	---
EPH		C9-C18 Aliphatics	9,386	245,280	21.3		136		109		ND	
EPH	C19-C36 Aliphatics	C19-C36 Aliphatics	93,860	Health-Based Level >100%	12.1	12.1	39.5	39.5	24	24	ND	--
VPH	C9-C22 Aromatics	C9-C10 Aromatics	469	12,264	4.6	61.1	ND	170	ND	109	ND	ND
EPH		C11-C22 Aromatics	469	12,264	56.5		170		109		ND	

Notes: ND = Not detected above laboratory quantitation limit
"--" denotes not applicable
NS = Sample analysis not performed

TABLE 6

Summary of Post Remedial Soil Analytical Results
EPA Method 8260

Sun Company, Inc.
2903 South Elm St., Greensboro, NC
DUNS # 0275-7516

Sample ID	Sampling Date	Total Xylenes	Isopropyl-benzene	n-Butyl-benzene	sec-Butyl-benzene	4-Isopropyl-toluene	Acetone	Naphthalene	n-Propyl-benzene	1,2,4-Trimethyl-benzene
NCDENR Standards **		(200,000 mg/kg)	(40,880 mg/kg)	(4,088 mg/kg)	(4,088 mg/kg)	*	*	(1,635 mg/kg)	*	(20,440 mg/kg)
GP-1 (8-10')	08/12/98	0.1706	0.0200	ND	0.0224	0.0200	0.0412	0.3165	0.0365	0.1706
GP-2 (4-8')	08/12/98	ND	ND	ND	ND	ND	0.0429	0.0104	ND	0.0052
GP-3 (8-10.5)	08/12/98	ND	0.0086	0.0148	0.0185	ND	0.0370	0.0765	0.0111	0.0025
GP-4 (0-4')	08/12/98	ND	ND	ND	ND	ND	ND	0.0085	ND	ND

Notes:
NCDENR Standards ** - Maximum Soil Contaminant Concentrations for Commerical Land Use
mg/kg - Micrograms per Kilogram
ND - Not Detected Above Laboratory Quantitation Limits
* - No NCDENR Standard Adopted for Commerical Land Use

TABLE 7

Summary of Post Remedial Soil Analytical Results
EPA Method 8270

Sun Company, Inc.
2903 South Elm St., Greensboro, NC
DUNS # 0275-7516

Sample ID	Sampling Date	Acenaphthene	Anthracene	Benzo (a)anthracene	Benzo (a)pyrene	Benzo (b)fluoranthene	Benzo (g,h,i)perylene	Benzo (k)fluoranthene	Carbazole	Chrysene
*NCDENR Standards		*(24,000 mg/kg)	*(122,000 mg/kg)	*(8 mg/kg)	*(0.78 mg/kg)	*(8 mg/kg)	*(12,264 mg/kg)	*(78 mg/kg)	**	*(780 mg/kg)
GP-1 (8-10')	08/12/98	1.27	1.61	2.35	2.14	2.60	0.424	1.82	0.602	2.40
GP-2 (4-8')	08/12/98	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3 (8-10.5')	08/12/98	1.38	1.72	2.56	2.31	2.67	ND	2.40	0.91	2.67
GP-4 (0-4')	08/12/98	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
*NCDENR Standards - Maximum Soil Contaminant Concentrations for Commerical Land Use
mg/kg - Micrograms per Kilogram
ND - Not Detected Above Laboratory Quantitation Limits
** - No NCDENR Standard Adopted for Commerical Land Use

TABLE 7

Summary of Post Remedial Soil Analytical Results
EPA Method 8270

Sun Company, Inc.
2903 South Elm St., Greensboro, NC
DUNS # 0275-7516

Sample ID	Sampling Date	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	2-Methyl-naphthalene	Phenanthrene	Pyrene
*NCDENR Standards		*(16,400 mg/kg)	*(16,400 mg/kg)	*(8 mg/kg)	*(1,635 mg/kg)	*(12,264 mg/kg)	*(12,264 mg/kg)
GP-1 (8-10')	08/12/98	4.91	1.14	0.511	0.895	4.91	4.82
GP-2 (4-8')	08/12/98	ND	ND	ND	ND	ND	ND
GP-3 (8-10.5')	08/12/98	6.17	1.46	0.514	0.588	7.78	9.26
GP-4 (0-4')	08/12/98	ND	ND	ND	ND	ND	ND

Notes:
*NCDENR Standards - Maximum Soil Contaminant Concentrations for Commerical Land Use
mg/kg - Micrograms per Kilogram
ND - Not Detected Above Laboratory Quantitation Limits
** - No NCDENR Standard Adopted for Commerical Land Use

ATTACHMENT A

Drilling Log

FLUOR DANIEL GTI

Geoprobe Boring **GP-1**

Project *Sun - S. Elm St., Greensboro* Owner *Sun Company, Inc.*
Location *2903 S. Elm St., Greensboro, NC* Proj. No. *102573*
Surface Elev. _____ Total Hole Depth *10 ft.* Diameter *2.0 in.*
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *Geoprobe*
Drill Co. *Probe Technology, Inc.* Method _____
Driller *A. Burney* Log By *L. Holley* Date *8/12/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

Geoprobe sampling location. Boring abandoned after collection of soil samples.

Depth (ft.)	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0					
2	2.0	(0-4')		SM	Brownish-orange sandy silt
4					Brownish-orange sand silty clay
6	2.0	(4-8')		ML	Stained soil (strong petroleum odor 7-8')
8					Silty clay (stained soil 8-9')
	31.0	(8-10')		CL	Very Stained black soil (strong petroleum odor 9-9.5')
10					Geoprobe Refusal (10')
					Sample GP-1 (8-10') forwarded to laboratory for analysis
12					End of boring, backfilled with bentonite pellets followed by grout/asphalt patch (10')
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Geoprobe Boring **GP-2**

Project *Sun - S. Elm St., Greensboro* Owner *Sun Company, Inc.*
Location *2903 S. Elm St., Greensboro, NC* Proj. No. *102573*
Surface Elev. _____ Total Hole Depth *8 ft.* Diameter *2.0 in.*
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *Geoprobe*
Drill Co. *Probe Technology, Inc.* Method _____
Driller *A. Burney* Log By *L. Holley* Date *8/12/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

Geoprobe sampling location. Boring abandoned after collection of soil samples.

Depth (ft.)	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0					
2	0.0	(0-4')			Brownish-orange sandy silt
4				SM	
					Brownish-orange sandy silt
6	9.3	(4-8')			
					Very stained black soil (very strong petroleum odor 6-8')
8					Geoprobe Refusal (8')
					Sample GP-2 (4-8') forwarded to laboratory for analysis
					End of boring, backfilled with bentonite pellets followed by grout/asphalt patch
10					
12					
14					
16					
18					
20					
22					
24					

Drilling Log

FLUOR DANIEL GTI

Geoprobe Boring **GP-3**

Project *Sun - S. Elm St., Greensboro* Owner *Sun Company, Inc.*
Location *2903 S. Elm St., Greensboro, NC* Proj. No. *102573*
Surface Elev. _____ Total Hole Depth *10.5 ft.* Diameter *2.0 in.*
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *Geoprobe*
Drill Co. *Probe Technology, Inc.* Method _____
Driller *A. Burney* Log By *L. Holley* Date *8/12/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

Geoprobe sampling location. Boring abandoned after collection of soil samples

Depth (ft.)	PID (ppm)	Sample ID	Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0						
2	0.0	(0-4')			SM	Brownish-orange sandy silt
4						Brownish-orange sandy silt
6	1.0	(4-8')				Sand silty clay (very stained soil, strong petroleum odor 6-8')
8					ML	Brownish-orange sand silty clay (8-9')
						Very stained soil (strong petroleum odor 9-10.5')
10	1.3	(8-10.5')				Geoprobe refusal (10.5')
						Sample GP-3 (8-10.5') forwarded to laboratory for analysis
12						End of boring, backfilled with bentonite pellets followed by grout/asphalt patch
14						
16						
18						
20						
22						
24						

Drilling Log

FLUOR DANIEL GTI

Geoprobe Boring **GP-4**

Project *Sun - S. Elm St., Greensboro* Owner *Sun Company, Inc.*
Location *2903 S. Elm St., Greensboro, NC* Proj. No. *102573*
Surface Elev. _____ Total Hole Depth *16 ft.* Diameter *2.0 in.*
Top of Casing _____ Water Level Initial _____ Static _____
Screen: Dia _____ Length _____ Type/Size _____
Casing: Dia _____ Length _____ Type _____
Fill Material _____ Rig/Core *Geoprobe*
Drill Co. *Probe Technology, Inc.* Method *A. Burney*
Driller _____ Log By *L. Holley* Date *8/12/98* Permit # _____
Checked By _____ License No. _____

See Site Map For Boring Location

COMMENTS:

Geoprobe sampling location. Boring abandoned after collection of soil samples

Depth (ft.)	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2					
0					
2	0.4	(0-4')		SM	Brownish-gray sandy silt
					Brownish-gray sand silty clay
4				ML	Sample GP-4 (0-4') forwarded to laboratory for analysis
6	0.0	(4-8')			Brownish-gray sandy silt
8				SM	
10	0.0	(8-12')			Brownish-gray silty sand
12				CH	Brownish-orange clay
					Moist soil
				CL	Brownish-gray silty clay (moist soil)
14	0.0	(12-16')			Brownish-orange clay (moist soil)
				CH	
16					End of boring, backfilled with bentonite pellets followed by grout/asphalt patch
18					
20					
22					
24					

ATTACHMENT B

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

COPY

8/18/98

FLUOR DANIEL GTI
KIM TITMUS
MORRISVILLE, NC 27560

The following samples were received on 8/13/98. These samples relate to your project: 102573 SUN OIL. The laboratory project number is 109990.

Sample Identification	Lab Number	Collection Date
GP-1	98-A95746	8/12/98
GP-2	98-A95747	8/12/98
GP-3	98-A95748	8/12/98
GP-4	98-A95749	8/12/98

Quality Control Summary:

All samples were received in good condition, properly preserved, and properly labeled.

All analyses were completed within holding times, and all project and sample QC parameters were within acceptable limits with the exception of sample GP-2 for which BNA surrogates were outside acceptabel limits due to the sample matrix. These values were confirmed.

I certify that the data presented in this report are, to the best of my knowledge, accurate and complete.

Michael H. Dunn, M.S.
Ted J. Duello, Ph.D.
Danny B. Hale, M.S.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95746
Sample ID: GP-1
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 85.
Received condition: Good

Preservative:
Temperature: 4 degrees C

VPH Initial Calibration Date: 8/14/98

Range	MDL	ML	RL
C5-C8 Aliphatics	0.05	0.06	0.10
C9-C12 Aliphatics	0.05	0.06	0.10
C9-C10 Aromatics	0.005	0.010	0.02

Calibrataion Range	Level	CCC
C5-C8 Aliphatics	0.0825	
	0.165	
	0.333	
	0.666	
	0.825	0.999
C9-C12 Aliphatics	0.0605	
	0.121	
	0.242	
	0.484	
	0.605	0.999
C9-C10 Aromatics	0.011	
	0.022	
	0.044	
	0.088	
	0.110	0.999

Continuing Calibration Check Date: 8/17/98

Range	Level	%D
C5-C8 Aliphatics	0.333	4.6
C9-C12 Aliphatics	0.242	3.6
C9-C10 Aromatics	0.044	9.8

COPY 3

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95746
Sample ID: GP-1

EPH Initial Calibration Date: 5/22/98

Range	MDL	ML	RL
C9-C18 Aliphatics	50	75	100
C19-C36 Aliphatics	50	75	100
C11-C22 Aromatics	50	75	100

Calibrataion Range	Level	CCC
C9-C18 Aliphatics	60	
	120	
	240	
	300	
	600	0.997
C19-C36 Aliphatics	80	
	160	
	320	
	400	
	800	0.999
C11-C22 Aromatics	85	
	170	
	340	
	680	
	850	0.999

Continuing Calibration Check Date: 8/17/98

Range	Level	%D
C9-C18 Aliphatics	300	1.0
C19-C36 Aliphatics	400	2.5
C11-C22 Aromatics	425	2.6

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95746
Sample ID: GP-1
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 85.
Received condition: Good

Preservative:
Temperature: 4 degrees C

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VPH C5-C8 Aliphatics	ND	mg/kg	5.9	0.10	50.0	8/16/98	21:57	Ciesielski	VPH-98-1	4611
VPH C9-C12 Aliphatics	7.1	mg/kg	5.9	0.10	50.0	8/16/98	21:57	Ciesielski	VPH-98-1	4611
VPH C9-C10 Aromatics	4.6	mg/kg	1.2	0.02	50.0	8/16/98	21:57	Ciesielski	VPH-98-1	4611
C9-C18 Aliphatics	21.3	mg/kg	11.8	5.0	1.0	8/17/98	22:44	K.Walkup	EPH-98-1	5132
C19-C36 Aliphatics	12.1	mg/kg	11.8	5.0	1.0	8/17/98	22:44	K.Walkup	EPH-98-1	5132
C11-C22 Aromatics	56.5	mg/kg	23.5	5.0	2.0	8/17/98	22:44	K.Walkup	EPH-98-1	5132
EXTRACTABLE ORGANICS										
Acenaphthene	1.27	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Acenaphthylene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Anthracene	1.61	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Benzo(a)anthracene	2.35	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Benzo(a)pyrene	2.14	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Benzo(b)fluoranthene	2.60	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Benzo(g,h,i)perylene	0.424	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Benzo(k)fluoranthene	1.82	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
4-Bromophenylphenylether	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Butylbenzylphthalate	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Carbazole	0.602	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
4-Chloro-3-methylphenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
4-Chloroaniline	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
bis(2-Chloroethoxy)methane	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
bis(2-Chloroethyl)ether	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
bis(2-Chloroisopropyl)ether	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2-Chloronaphthalene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2-Chlorophenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
4-Chlorophenylphenylether	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Chrysene	2.40	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Dibenzofuran	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Dibenz(a,h)anthracene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
1,2-Dichlorobenzene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
1,3-Dichlorobenzene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
1,4-Dichlorobenzene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
3,3'-Dichlorobenzidine	ND	mg/kg	0.971	0.666	1	8/18/98	9:52	M.Goodrich	8270C	5155
2,4-Dichlorophenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Diethylphthalate	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2,4-Dimethylphenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Dimethylphthalate	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Di-n-butylphthalate	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155

COPY 3

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95746
Sample ID: GP-1

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dinitrophenol	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155
2,4-dinitrotoluene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2,6-Dinitrotoluene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Di-n-octylphthalate	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Fluoranthene	4.91	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Fluorene	1.14	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Hexachlorobenzene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Hexachlorobutadiene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Hexachlorocyclopentadiene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Hexachloroethane	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Indeno(1,2,3-cd)pyrene	0.511	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Isophorone	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2-Methylnaphthalene	0.895	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2-Methylphenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
m,p-Methylphenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Naphthalene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2-Nitroaniline	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155
3-Nitroaniline	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155
4-Nitroaniline	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155
Nitrobenzene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2-Nitrophenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
4-Nitrophenol	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155
N-nitrosodi-n-propylamine	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
N-nitrosodiphenylamine	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Pentachlorophenol	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155
Phenanthrene	4.91	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Phenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Pyrene	4.82	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
Bis(2-ethylhexyl)phthalate	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
1,2,4-Trichlorobenzene	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
2,4,5-Trichlorophenol	ND	mg/kg	0.971	0.825	1	8/18/98	9:52	M.Goodrich	8270C	5155
2,4,6-Trichlorophenol	ND	mg/kg	0.388	0.330	1	8/18/98	9:52	M.Goodrich	8270C	5155
VOLATILE ORGANICS										
Acetone	0.0412	mg/kg	0.0118	0.0100	1	8/15/98	18:59	C. Wani	8260B	4234
Benzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Bromobenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Bromochloromethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Bromoform	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Bromomethane	ND	mg/kg	0.0118	0.0100	1	8/15/98	18:59	C. Wani	8260B	4234
2-Butanone	ND	mg/kg	0.0118	0.0100	1	8/15/98	18:59	C. Wani	8260B	4234
n-Butylbenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
sec-Butylbenzene	0.0224	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
t-Butylbenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Carbon Disulfide	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Carbon tetrachloride	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95746
Sample ID: GP-1

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Chlorobenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Chloroethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
2-Chloroethylvinylether	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Chloroform	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Chloromethane	ND	mg/kg	0.0118	0.0100	1	8/15/98	18:59	C. Wani	8260B	4234
2-Chlorotoluene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
4-Chlorotoluene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Dibromochloromethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2-Dibromoethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Dibromomethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2-Dichlorobenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,3-Dichlorobenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,4-Dichlorobenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Dichlorodifluoromethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,1-Dichloroethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2-Dichloroethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,1-Dichloroethene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
cis-1,2-Dichloroethene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
trans-1,2-Dichloroethene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2-Dichloropropane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,3-Dichloropropane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
2,2-Dichloropropane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,1-Dichloropropene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
cis-1,3-Dichloropropene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
trans-1,3-Dichloropropene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Ethylbenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Hexachlorobutadiene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
2-Hexanone	ND	mg/kg	0.0118	0.0100	1	8/15/98	18:59	C. Wani	8260B	4234
Isopropylbenzene	0.0200	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
4-Isopropyltoluene	0.0200	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
4-Methyl-2-pentanone	ND	mg/kg	0.0118	0.0100	1	8/15/98	18:59	C. Wani	8260B	4234
Methylene chloride	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Naphthalene	0.3165	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
n-Propylbenzene	0.0365	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Styrene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Tetrachloroethene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Toluene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2,3-Trichlorobenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2,4-Trichlorobenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,1,1-Trichloroethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,1,2-Trichloroethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Trichloroethene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,2,3-Trichloropropane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95746
Sample ID: GP-1

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2,4-Trimethylbenzene	0.1706	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
1,3,5-Trimethylbenzene	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Vinyl chloride	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Xylenes	0.0071	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Bromodichloromethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Trichlorofluoromethane	ND	mg/kg	0.0024	0.0020	1	8/15/98	18:59	C. Wani	8260B	4234
Methyl-t-butyl ether	ND	mg/kg	0.0059	0.0050	1	8/15/98	18:59	C. Wani	8260B	5267
Isopropylether	ND	mg/kg	0.0059	0.0050	1	8/15/98	18:59	C. Wani	8260B	5267

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
EPH	10.0 gm	1.0 ml	8/17/98	Fitzwater	MADEP
BNA's	30.0 gm	1.0 ml	8/14/98	Fitzwater	3550

Surrogate	% Recovery	Target Range
VPH Surr., PID	99.	70. - 130.
VPH surr., FID	101.	70. - 130.
surr-1,2-Dichloroethane, d4	96.	54. - 148.
surr-Toluene d8	102.	79. - 119.
surr-4-Bromofluorobenzene	91.	78. - 127.
surr-Nitrobenzene-d5	64.	26. - 110.
surr-2-Fluorobiphenyl	63.	25. - 111.
surr-Terphenyl d14	84.	35. - 132.
surr-Phenol d5	82.	23. - 127.
surr-2-Fluorophenol	58.	23. - 117.
surr-2,4,6-Tribromophenol	64.	28. - 118.
EPH Surr-C-35	81.	40. - 140.
EPH Surr-o-terphenyl	102.	40. - 140.
EPH Fractionation Surr. #1	104.	60. - 140.
EPH Fractionation Surr. #2	122.	60. - 140.

All samples have been corrected for dry weight.

SPECIALIZED ASSAYS, INC.

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Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95746
Sample ID: GP-1

Unadjusted hydrocarbon range data exclude concentrations of any surrogate and internal standards eluting in that range.

CERTIFICATION

All QA/QC procedures REQUIRED by the VPH/EPH method(s) were followed.
All performance/acceptance standards for required QA/QC procedures were achieved.

Authorized by:

Theodore J. Duello, Ph.D., QA Officer
Michael H. Dunn, M.S., Technical Dir.
Danny B. Hale, M.S., Laboratory Mgr.

Laboratory Certification Number: 387

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95747
Sample ID: GP-2
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 77.
Received condition: Good

Preservative:
Temperature: 4 degrees C

VPH Initial Calibration Date: 8/14/98

Range	MDL	ML	RL
C5-C8 Aliphatics	0.05	0.06	0.10
C9-C12 Aliphatics	0.05	0.06	0.10
C9-C10 Aromatics	0.005	0.010	0.02

Calibrataion Range	Level	CCC
C5-C8 Aliphatics	0.0825	
	0.165	
	0.333	
	0.666	
	0.825	0.999
C9-C12 Aliphatics	0.0605	
	0.121	
	0.242	
	0.484	
	0.605	0.999
C9-C10 Aromatics	0.011	
	0.022	
	0.044	
	0.088	
	0.110	0.999

Continuing Calibration Check Date: 8/17/98

Range	Level	%D
C5-C8 Aliphatics	0.333	4.6
C9-C12 Aliphatics	0.242	3.6
C9-C10 Aromatics	0.044	9.8

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95747
Sample ID: GP-2

EPH Initial Calibration Date: 5/22/98

Range	MDL	ML	RL
C9-C18 Aliphatics	50	75	100
C19-C36 Aliphatics	50	75	100
C11-C22 Aromatics	50	75	100

Calibrataion Range	Level	CCC
C9-C18 Aliphatics	60	
	120	
	240	
	300	
	600	0.997
C19-C36 Aliphatics	80	
	160	
	320	
	400	
	800	0.999
C11-C22 Aromatics	85	
	170	
	340	
	680	
	850	0.999

Continuing Calibration Check Date: 8/17/98

Range	Level	%D
C9-C18 Aliphatics	300	1.0
C19-C36 Aliphatics	400	2.5
C11-C22 Aromatics	425	2.6

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95747
Sample ID: GP-2
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 77.
Received condition: Good

Preservative:
Temperature: 4 degrees C

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VPH C5-C8 Aliphatics	ND	mg/kg	6.5	0.10	50.0	8/16/98	22:31	Ciesielski	VPH-98-1	4611
VPH C9-C12 Aliphatics	ND	mg/kg	6.5	0.10	50.0	8/16/98	22:31	Ciesielski	VPH-98-1	4611
VPH C9-C10 Aromatics	ND	mg/kg	1.3	0.02	50.0	8/16/98	22:31	Ciesielski	VPH-98-1	4611
C9-C18 Aliphatics	136.	mg/kg	13.0	5.0	1.0	8/18/98	0:18	K.Walkup	EPH-98-1	5132
C19-C36 Aliphatics	39.5	mg/kg	13.0	5.0	1.0	8/18/98	0:18	K.Walkup	EPH-98-1	5132
C11-C22 Aromatics	170.	mg/kg	26.0	5.0	2.0	8/18/98	0:18	K.Walkup	EPH-98-1	5132
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Acenaphthylene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Anthracene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Benzo(a)anthracene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Benzo(a)pyrene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Benzo(b)Fluoranthene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Benzo(g,h,i)perylene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Benzo(k)Fluoranthene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
4-Bromophenylphenylether	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Butylbenzylphthalate	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Carbazole	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
4-Chloro-3-methylphenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
4-Chloroaniline	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
bis(2-Chloroethoxy)methane	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
bis(2-Chloroethyl)ether	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
bis(2-Chloroisopropyl)ether	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2-Chloronaphthalene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2-Chlorophenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
4-Chlorophenylphenylether	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Chrysene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Dibenzofuran	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Dibenz(a,h)anthracene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
1,2-Dichlorobenzene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
1,3-Dichlorobenzene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
1,4-Dichlorobenzene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
3,3'-Dichlorobenzidine	ND	mg/kg	2.16	0.666	1	8/18/98	14:07	M.Goodrich	8270C	5155
2,4-Dichlorophenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Diethylphthalate	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2,4-Dimethylphenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Dimethylphthalate	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Di-n-butylphthalate	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
4,6-Dinitro-2-methylphenol	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155

COPY 3

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95747
Sample ID: GP-2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dinitrophenol	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155
2,4-dinitrotoluene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2,6-Dinitrotoluene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Di-n-octylphthalate	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Fluoranthene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Fluorene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Hexachlorobenzene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Hexachlorobutadiene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Hexachlorocyclopentadiene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Hexachloroethane	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Isophorone	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2-Methylnaphthalene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2-Methylphenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
m,p-Methylphenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Naphthalene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2-Nitroaniline	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155
3-Nitroaniline	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155
4-Nitroaniline	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155
Nitrobenzene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2-Nitrophenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
4-Nitrophenol	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155
N-nitrosodi-n-propylamine	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
N-nitrosodiphenylamine	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Pentachlorophenol	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155
Phenanthrene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Phenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Pyrene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
Bis(2-ethylhexyl)phthalate	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
1,2,4-Trichlorobenzene	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
2,4,5-Trichlorophenol	ND	mg/kg	2.16	0.830	1	8/18/98	14:07	M.Goodrich	8270C	5155
2,4,6-Trichlorophenol	ND	mg/kg	0.866	0.333	1	8/18/98	14:07	M.Goodrich	8270C	5155
VOLATILE ORGANICS										
Acetone	0.0429	mg/kg	0.0130	0.0100	1	8/15/98	19:33	C. Wani	8260B	4234
Benzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Bromobenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Bromochloromethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Bromoform	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Bromomethane	ND	mg/kg	0.0130	0.0100	1	8/15/98	19:33	C. Wani	8260B	4234
2-Butanone	ND	mg/kg	0.0130	0.0100	1	8/15/98	19:33	C. Wani	8260B	4234
n-Butylbenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
sec-Butylbenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
t-Butylbenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Carbon Disulfide	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Carbon tetrachloride	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95747
Sample ID: GP-2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Chlorobenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Chloroethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
2-Chloroethylvinylether	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Chloroform	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Chloromethane	ND	mg/kg	0.0130	0.0100	1	8/15/98	19:33	C. Wani	8260B	4234
2-Chlorotoluene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
4-Chlorotoluene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Dibromochloromethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2-Dibromoethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Dibromomethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2-Dichlorobenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,3-Dichlorobenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,4-Dichlorobenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Dichlorodifluoromethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,1-Dichloroethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2-Dichloroethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,1-Dichloroethene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
cis-1,2-Dichloroethene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
trans-1,2-Dichloroethene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2-Dichloropropane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,3-Dichloropropane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
2,2-Dichloropropane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,1-Dichloropropene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
cis-1,3-Dichloropropene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
trans-1,3-Dichloropropene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Ethylbenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Hexachlorobutadiene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
2-Hexanone	ND	mg/kg	0.0130	0.0100	1	8/15/98	19:33	C. Wani	8260B	4234
Isopropylbenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
4-Isopropyltoluene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
4-Methyl-2-pentanone	ND	mg/kg	0.0130	0.0100	1	8/15/98	19:33	C. Wani	8260B	4234
Methylene chloride	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Naphthalene	0.0104	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
n-Propylbenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Styrene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Tetrachloroethene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Toluene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2,3-Trichlorobenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2,4-Trichlorobenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,1,1-Trichloroethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,1,2-Trichloroethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Trichloroethene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,2,3-Trichloropropane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95747
Sample ID: GP-2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2,4-Trimethylbenzene	0.0052	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
1,3,5-Trimethylbenzene	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Vinyl chloride	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Xylenes	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Bromodichloromethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Trichlorofluoromethane	ND	mg/kg	0.0026	0.0020	1	8/15/98	19:33	C. Wani	8260B	4234
Methyl-t-butyl ether	ND	mg/kg	0.0065	0.0050	1	8/15/98	19:33	C. Wani	8260B	5267
Isopropylether	ND	mg/kg	0.0065	0.0050	1	8/15/98	19:33	C. Wani	8260B	5267

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
EPH	10.0 gm	1.0 ml	8/17/98	Fitzwater	MADEP
BNA's	30.0 gm	2.0 ml	8/14/98	Fitzwater	3550

Surrogate	% Recovery	Target Range
VPH Surr., FID	100.	70. - 130.
VPH surr., FID	103.	70. - 130.
surr-1,2-Dichloroethane, d4	94.	54. - 148.
surr-Toluene d8	100.	79. - 119.
surr-4-BromoFluorobenzene	92.	78. - 127.
surr-Nitrobenzene-d5	16. #	26. - 110.
surr-2-Fluorobiphenyl	16. #	25. - 111.
surr-Terphenyl d14	35.	35. - 132.
surr-Phenol d5	18. #	23. - 127.
surr-2-Fluorophenol	12. #	23. - 117.
surr-2,4,6-Tribromophenol	16. #	28. - 118.
EPH Surr-C-35	83.	40. - 140.
EPH Surr-o-terphenyl	84.	40. - 140.
EPH Fractionation Surr. #1	80.	60. - 140.
EPH Fractionation Surr. #2	74.	60. - 140.

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ANALYTICAL REPORT

Laboratory Number: 98-A95747
Sample ID: GP-2

All samples have been corrected for dry weight.

DNA surrogates are out of range due to the sample matrix.
These values are confirmed.

Unadjusted hydrocarbon range data exclude concentrations of any surrogate and internal standards eluting in that range.

CERTIFICATION

All QA/QC procedures REQUIRED by the VPH/EPH method(s) were followed.
All performance/acceptance standards for required QA/QC procedures were achieved.

Authorized by:

Theodore J. Duello, Ph.D., QA Officer
Michael H. Dunn, M.S., Technical Dir.
Danny B. Hale, M.S., Laboratory Mgr.

Laboratory Certification Number: 387

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95748
Sample ID: GP-3
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 81.
Received condition: Good

Preservative:
Temperature: 4 degrees C

VPH Initial Calibration Date: 8/14/98

Range	MDL	ML	RL
C5-C8 Aliphatics	0.05	0.06	0.10
C9-C12 Aliphatics	0.05	0.06	0.10
C9-C10 Aromatics	0.005	0.010	0.02

Calibrataion Range	Level	CCC
C5-C8 Aliphatics	0.0825	
	0.165	
	0.333	
	0.666	
	0.825	0.999
C9-C12 Aliphatics	0.0605	
	0.121	
	0.242	
	0.484	
	0.605	0.999
C9-C10 Aromatics	0.011	
	0.022	
	0.044	
	0.088	
	0.110	0.999

Continuing Calibration Check Date: 8/14/98

Range	Level	%D
C5-C8 Aliphatics	0.333	4.6
C9-C12 Aliphatics	0.242	3.6
C9-C10 Aromatics	0.044	9.8

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95748
Sample ID: GP-3

EPH Initial Calibration Date: 5/22/98

Range	MDL	ML	RL
C9-C18 Aliphatics	50	75	100
C19-C36 Aliphatics	50	75	100
C11-C22 Aromatics	50	75	100

Calibrataion Range	Level	CCC
C9-C18 Aliphatics	60	
	120	
	240	
	300	
	600	0.997
C19-C36 Aliphatics	80	
	160	
	320	
	400	
	800	0.999
C11-C22 Aromatics	85	
	170	
	340	
	680	
	850	0.999

Continuing Calibration Check Date: 8/17/98

Range	Level	%D
C9-C18 Aliphatics	300	1.0
C19-C36 Aliphatics	400	2.5
C11-C22 Aromatics	425	2.6

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
Phone 1-615-726-0177

REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95748
Sample ID: GP-3
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 81.
Received condition: Good

Preservative:
Temperature: 4 degrees C

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VPH C5-C8 Aliphatics	ND	mg/kg	6.2	0.10	50.0	8/16/98	23:05	Ciesielski	VPH-98-1	4611
VPH C9-C12 Aliphatics	ND	mg/kg	6.2	0.10	50.0	8/16/98	23:05	Ciesielski	VPH-98-1	4611
VPH C9-C10 Aromatics	ND	mg/kg	1.2	0.02	50.0	8/16/98	23:05	Ciesielski	VPH-98-1	4611
C9-C18 Aliphatics	109.	mg/kg	12.3	5.0	1.0	8/18/98	1:53	K.Walkup	EPH-98-1	5132
C19-C36 Aliphatics	24.0	mg/kg	12.3	5.0	1.0	8/18/98	1:53	K.Walkup	EPH-98-1	5132
C11-C22 Aromatics	109.	mg/kg	12.3	5.0	1.0	8/18/98	1:53	K.Walkup	EPH-98-1	5132
EXTRACTABLE ORGANICS										
Acenaphthene	1.38	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Acenaphthylene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Anthracene	1.72	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Benzo(a)anthracene	2.56	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Benzo(a)pyrene	2.31	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Benzo(b)fluoranthene	2.67	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Benzo(g,h,i)perylene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Benzo(k)fluoranthene	2.40	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
4-Bromophenylphenylether	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Butylbenzylphthalate	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Carbazole	0.910	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
4-Chloro-3-methylphenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
4-Chloroaniline	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
bis(2-Chloroethoxy)methane	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
bis(2-Chloroethyl)ether	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
bis(2-Chloroisopropyl)ether	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2-Chloronaphthalene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2-Chlorophenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
4-Chlorophenylphenylether	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Chrysene	2.67	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Dibenzofuran	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Dibenz(a,h)anthracene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
1,2-Dichlorobenzene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
1,3-Dichlorobenzene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
1,4-Dichlorobenzene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
3,3'-Dichlorobenzidine	ND	mg/kg	1.02	0.666	1	8/18/98	11:05	M.Goodrich	8270C	5155
2,4-Dichlorophenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Diethylphthalate	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2,4-Dimethylphenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Dimethylphthalate	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Di-n-butylphthalate	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
4,6-Dinitro-2-methylphenol	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155

COPY 3

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95748
Sample ID: GP-3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dinitrophenol	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155
2,4-dinitrotoluene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2,6-Dinitrotoluene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Di-n-octylphthalate	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Fluoranthene	6.17	mg/kg	2.06	0.333	5	8/18/98	11:05	M.Goodrich	8270C	5155
Fluorene	1.46	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Hexachlorobenzene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Hexachlorobutadiene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Hexachlorocyclopentadiene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Hexachloroethane	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Indeno(1,2,3-cd)pyrene	0.514	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Isophorone	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2-Methylnaphthalene	0.588	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2-Methylphenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
m,p-Methylphenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Naphthalene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2-Nitroaniline	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155
3-Nitroaniline	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155
4-Nitroaniline	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155
Nitrobenzene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2-Nitrophenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
4-Nitrophenol	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155
N-nitrosodi-n-propylamine	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
N-nitrosodiphenylamine	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Pentachlorophenol	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155
Phenanthrene	7.78	mg/kg	2.06	0.333	5	8/18/98	11:05	M.Goodrich	8270C	5155
Phenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
Pyrene	9.26	mg/kg	2.06	0.333	5	8/18/98	11:05	M.Goodrich	8270C	5155
Bis(2-ethylhexyl)phthalate	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
1,2,4-Trichlorobenzene	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
2,4,5-Trichlorophenol	ND	mg/kg	1.02	0.825	1	8/18/98	11:05	M.Goodrich	8270C	5155
2,4,6-Trichlorophenol	ND	mg/kg	0.407	0.330	1	8/18/98	11:05	M.Goodrich	8270C	5155
VOLATILE ORGANICS										
Acetone	0.0370	mg/kg	0.0123	0.0100	1	8/15/98	21:48	C. Wani	8260B	4234
Benzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Bromobenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Bromochloromethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Bromoform	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Bromomethane	ND	mg/kg	0.0123	0.0100	1	8/15/98	21:48	C. Wani	8260B	4234
2-Butanone	ND	mg/kg	0.0123	0.0100	1	8/15/98	21:48	C. Wani	8260B	4234
n-Butylbenzene	0.0148	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
sec-Butylbenzene	0.0185	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
t-Butylbenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Carbon Disulfide	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Carbon tetrachloride	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95748
Sample ID: GP-3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Chlorobenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Chloroethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
2-Chloroethylvinylether	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Chloroform	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Chloromethane	ND	mg/kg	0.0123	0.0100	1	8/15/98	21:48	C. Wani	8260B	4234
2-Chlorotoluene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
4-Chlorotoluene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Dibromochloromethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2-Dibromoethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Dibromomethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2-Dichlorobenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,3-Dichlorobenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,4-Dichlorobenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Dichlorodifluoromethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,1-Dichloroethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2-Dichloroethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,1-Dichloroethene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
cis-1,2-Dichloroethene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
trans-1,2-Dichloroethene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2-Dichloropropane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,3-Dichloropropane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
2,2-Dichloropropane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,1-Dichloropropene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
cis-1,3-Dichloropropene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
trans-1,3-Dichloropropene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Ethylbenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Hexachlorobutadiene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
2-Hexanone	ND	mg/kg	0.0123	0.0100	1	8/15/98	21:48	C. Wani	8260B	4234
Isopropylbenzene	0.0086	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
4-Isopropyltoluene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
4-Methyl-2-pentanone	ND	mg/kg	0.0123	0.0100	1	8/15/98	21:48	C. Wani	8260B	4234
Methylene chloride	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Naphthalene	0.0765	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
n-Propylbenzene	0.0111	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Styrene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Tetrachloroethene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Toluene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2,3-Trichlorobenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2,4-Trichlorobenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,1,1-Trichloroethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,1,2-Trichloroethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Trichloroethene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,2,3-Trichloropropane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95748
Sample ID: GP-3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2,4-Trimethylbenzene	0.0025	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
1,3,5-Trimethylbenzene	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Vinyl chloride	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Xylenes	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Bromodichloromethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Trichlorofluoromethane	ND	mg/kg	0.0025	0.0020	1	8/15/98	21:48	C. Wani	8260B	4234
Methyl-t-butyl ether	ND	mg/kg	0.0062	0.0050	1	8/15/98	21:48	C. Wani	8260B	5267
Isopropylether	ND	mg/kg	0.0062	0.0050	1	8/15/98	21:48	C. Wani	8260B	5267

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
EPH	10.0 gm	1.0 ml	8/17/98	Fitzwater	MADEP
BNA's	30.0 gm	1.0 ml	8/14/98	Fitzwater	3550

Surrogate	% Recovery	Target Range
VPH Surr., PID	99.	70. - 130.
VPH surr., FID	100.	70. - 130.
surr-1,2-Dichloroethane, d4	105.	54. - 148.
surr-Toluene d8	102.	79. - 119.
surr-4-Bromofluorobenzene	91.	78. - 127.
surr-Nitrobenzene-d5	49.	26. - 110.
surr-2-Fluorobiphenyl	52.	25. - 111.
surr-Terphenyl d14	79.	35. - 132.
surr-Phenol d5	67.	23. - 127.
surr-2-Fluorophenol	44.	23. - 117.
surr-2,4,6-Tribromophenol	52.	28. - 118.
EPH Surr-C-35	84.	40. - 140.
EPH Surr-o-terphenyl	74.	40. - 140.
EPH Fractionation Surr. #1	82.	60. - 140.
EPH Fractionation Surr. #2	70.	60. - 140.

All samples have been corrected for dry weight.

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ANALYTICAL REPORT

Laboratory Number: 98-A95748
Sample ID: GP-3

Unadjusted hydrocarbon range data exclude concentrations of any surrogate and internal standards eluting in that range.

CERTIFICATION

All QA/QC procedures REQUIRED by the VPH/EPH method(s) were followed.
All performance/acceptance standards for required QA/QC procedures were achieved.

Authorized by: _____
Theodore J. Duello, Ph.D., QA Officer
Michael H. Dunn, M.S., Technical Dir.
Danny B. Hale, M.S., Laboratory Mgr.

Laboratory Certification Number: 387

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
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REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95749
Sample ID: GP-4
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 94.
Received condition: Good

Preservative:
Temperature: 4 degrees C

VPH Initial Calibration Date: 8/14/98

Range	MDL	ML	RL
C5-C8 Aliphatics	0.05	0.06	0.10
C9-C12 Aliphatics	0.05	0.06	0.10
C9-C10 Aromatics	0.005	0.010	0.02

Calibrataion Range	Level	CCC
C5-C8 Aliphatics	0.0825	
	0.165	
	0.333	
	0.666	
	0.825	0.999
C9-C12 Aliphatics	0.0605	
	0.121	
	0.242	
	0.484	
	0.605	0.999
C9-C10 Aromatics	0.011	
	0.022	
	0.044	
	0.088	
	0.110	0.999

Continuing Calibration Check Date: 8/17/98

Range	Level	%D
C5-C8 Aliphatics	0.333	4.6
C9-C12 Aliphatics	0.242	3.6
C9-C10 Aromatics	0.044	9.8

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95749
Sample ID: GP-4

EPH Initial Calibration Date: 5/22/98

Range	MDL	ML	RL
C9-C18 Aliphatics	50	75	100
C19-C36 Aliphatics	50	75	100
C11-C22 Aromatics	50	75	100

Calibrataion Range	Level	CCC
C9-C18 Aliphatics	60	
	120	
	240	
	300	
	600	0.997
C19-C36 Aliphatics	80	
	160	
	320	
	400	
	800	0.999
C11-C22 Aromatics	85	
	170	
	340	
	680	
	850	0.999

Continuing Calibration Check Date: 8/18/98

Range	Level	%D
C9-C18 Aliphatics	300	9.1
C19-C36 Aliphatics	400	7.8
C11-C22 Aromatics	425	5.2

SPECIALIZED ASSAYS, INC.

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REPORT OF ANALYSIS

FLUOR DANIEL GTI 7979
KIM TITMUS
1000 PERIMETER PARK DR, STE I
MORRISVILLE NC 27560

Lab Number: 98-A95749
Sample ID: GP-4
Collected: 8/12/98
Received: 8/13/98
Reported: 8/18/98

Matrix: Soil
% Dry Weight: 94.
Received condition: Good

Preservative:
Temperature: 4 degrees C

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VPH C5-C8 Aliphatics	ND	mg/kg	5.3	0.10	50.0	8/16/98	23:39	Ciesielski	VPH-98-1	4611
VPH C9-C12 Aliphatics	ND	mg/kg	5.3	0.10	50.0	8/16/98	23:39	Ciesielski	VPH-98-1	4611
VPH C9-C10 Aromatics	ND	mg/kg	1.1	0.02	50.0	8/16/98	23:39	Ciesielski	VPH-98-1	4611
C9-C18 Aliphatics	ND	mg/kg	10.6	5.0	1.0	8/18/98	5:01	K.Walkup	EPH-98-1	5132
C19-C36 Aliphatics	ND	mg/kg	10.6	5.0	1.0	8/18/98	5:01	K.Walkup	EPH-98-1	5132
C11-C22 Aromatics	ND	mg/kg	10.6	5.0	1.0	8/18/98	5:01	K.Walkup	EPH-98-1	5132
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Acenaphthylene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Anthracene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Benzo(a)anthracene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Benzo(a)pyrene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Benzo(b)fluoranthene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Benzo(g,h,i)perylene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Benzo(k)fluoranthene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
4-Bromophenylphenylether	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Butylbenzylphthalate	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Carbazole	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
4-Chloro-3-methylphenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
4-Chloroaniline	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
bis(2-Chloroethoxy)methane	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
bis(2-Chloroethyl)ether	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
bis(2-Chloroisopropyl)ether	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2-Chloronaphthalene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2-Chlorophenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
4-Chlorophenylphenylether	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Chrysene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Dibenzofuran	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Dibenz(a,h)anthracene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
1,2-Dichlorobenzene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
1,3-Dichlorobenzene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
1,4-Dichlorobenzene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
3,3'-Dichlorobenzidine	ND	mg/kg	0.878	0.666	1	8/18/98	11:42	M.Goodrich	8270C	5155
2,4-Dichlorophenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Diethylphthalate	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2,4-Dimethylphenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Dimethylphthalate	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Di-n-butylphthalate	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95749
Sample ID: GP-4

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dinitrophenol	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155
2,4-dinitrotoluene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2,6-Dinitrotoluene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Di-n-octylphthalate	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Fluoranthene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Fluorene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Hexachlorobenzene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Hexachlorobutadiene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Hexachlorocyclopentadiene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Hexachloroethane	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Isophorone	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2-Methylnaphthalene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2-Methylphenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
m,p-Methylphenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Naphthalene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2-Nitroaniline	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155
3-Nitroaniline	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155
4-Nitroaniline	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155
Nitrobenzene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2-Nitrophenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
4-Nitrophenol	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155
N-nitrosodi-n-propylamine	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
N-nitrosodiphenylamine	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Pentachlorophenol	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155
Phenanthrene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Phenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Pyrene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
Bis(2-ethylhexyl)phthalate	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
1,2,4-Trichlorobenzene	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
2,4,5-Trichlorophenol	ND	mg/kg	0.878	0.825	1	8/18/98	11:42	M.Goodrich	8270C	5155
2,4,6-Trichlorophenol	ND	mg/kg	0.351	0.330	1	8/18/98	11:42	M.Goodrich	8270C	5155
VOLATILE ORGANICS										
Acetone	ND	mg/kg	0.0106	0.0100	1	8/15/98	22:21	C. Wani	8260B	4234
Benzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Bromobenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Bromochloromethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Bromoform	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Bromomethane	ND	mg/kg	0.0106	0.0100	1	8/15/98	22:21	C. Wani	8260B	4234
2-Butanone	ND	mg/kg	0.0106	0.0100	1	8/15/98	22:21	C. Wani	8260B	4234
n-Butylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
sec-Butylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
t-Butylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Carbon Disulfide	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Carbon tetrachloride	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 98-A95749
Sample ID: GP-4

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Chlorobenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Chloroethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
2-Chloroethylvinylether	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Chloroform	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Chloromethane	ND	mg/kg	0.0106	0.0100	1	8/15/98	22:21	C. Wani	8260B	4234
2-Chlorotoluene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
4-Chlorotoluene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Dibromochloromethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2-Dibromoethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Dibromomethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2-Dichlorobenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,3-Dichlorobenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,4-Dichlorobenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Dichlorodifluoromethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,1-Dichloroethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2-Dichloroethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,1-Dichloroethene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
cis-1,2-Dichloroethene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
trans-1,2-Dichloroethene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2-Dichloropropane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,3-Dichloropropane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
2,2-Dichloropropane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,1-Dichloropropene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
cis-1,3-Dichloropropene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
trans-1,3-Dichloropropene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Ethylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Hexachlorobutadiene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
2-Hexanone	ND	mg/kg	0.0106	0.0100	1	8/15/98	22:21	C. Wani	8260B	4234
Isopropylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
4-Isopropyltoluene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
4-Methyl-2-pentanone	ND	mg/kg	0.0106	0.0100	1	8/15/98	22:21	C. Wani	8260B	4234
Methylene chloride	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Naphthalene	0.0085	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
n-Propylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Styrene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Tetrachloroethene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Toluene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2,3-Trichlorobenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2,4-Trichlorobenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,1,1-Trichloroethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,1,2-Trichloroethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Trichloroethene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,2,3-Trichloropropane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A95749
Sample ID: GP-4

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2,4-Trimethylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
1,3,5-Trimethylbenzene	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Vinyl chloride	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Xylenes	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Bromodichloromethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Trichlorofluoromethane	ND	mg/kg	0.0021	0.0020	1	8/15/98	22:21	C. Wani	8260B	4234
Methyl-t-butyl ether	ND	mg/kg	0.0053	0.0050	1	8/15/98	22:21	C. Wani	8260B	5267
Isopropylether	ND	mg/kg	0.0053	0.0050	1	8/15/98	22:21	C. Wani	8260B	5267

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
EPH	10.0 gm	1.0 ml	8/17/98	Fitzwater	MADEP
BNA's	30.0 gm	1.0 ml	8/14/98	Fitzwater	3550

Surrogate	% Recovery	Target Range
VPH Surr., PID	99.	70. - 130.
VPH surr., FID	94.	70. - 130.
surr-1,2-Dichloroethane, d4	100.	54. - 148.
surr-Toluene d8	99.	79. - 119.
surr-4-Bromofluorobenzene	93.	78. - 127.
surr-Nitrobenzene-d5	53.	26. - 110.
surr-2-Fluorobiphenyl	52.	25. - 111.
surr-Terphenyl d14	78.	35. - 132.
surr-Phenol d5	71.	23. - 127.
surr-2-Fluorophenol	47.	23. - 117.
surr-2,4,6-Tribromophenol	60.	28. - 118.
EPH Surr-C-35	82.	40. - 140.
EPH Surr-o-terphenyl	114.	40. - 140.
EPH Fractionation Surr. #1	103.	60. - 140.
EPH Fractionation Surr. #2	86.	60. - 140.

All samples have been corrected for dry weight.

SPECIALIZED ASSAYS, INC.

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ANALYTICAL REPORT

Laboratory Number: 98-A95749
Sample ID: GP-4

Unadjusted hydrocarbon range data exclude concentrations of any surrogate and internal standards eluting in that range.

CERTIFICATION

All QA/QC procedures REQUIRED by the VPH/EPH method(s) were followed.
All performance/acceptance standards for required QA/QC procedures were achieved.

Authorized by: _____
Theodore J. Duello, Ph.D., QA Officer
Michael H. Dunn, M.S., Technical Dir.
Danny B. Hale, M.S., Laboratory Mgr.

Laboratory Certification Number: 387

SPECIALIZED ASSAYS, INC.

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Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch
VPH C5-C8 Aliphatics	mg/kg	< 0.100	0.313	0.300	104.33	70. - 130.	4611
VPH C5-C8 Aliphatics	mg/kg	< 0.100	0.317	0.300	105.67	70. - 130.	4611
VPH C9-C12 Aliphatics	mg/kg	< 0.100	0.228	0.220	103.64	70. - 130.	4611
VPH C9-C12 Aliphatics	mg/kg	< 0.100	0.228	0.220	103.64	70. - 130.	4611
VPH C9-C10 Aromatics	mg/kg	< 0.020	0.369	0.400	92.25	70. - 130.	4611
VPH C9-C10 Aromatics	mg/kg	< 0.020	0.364	0.400	91.00	70. - 130.	4611
C9-C18 Aliphatics	mg/kg	< 10.0	11.4	15.0	76.00	60. - 140.	5132
C9-C18 Aliphatics	mg/kg	< 10.0	13.4	15.0	89.33	60. - 140.	5132
C19-C36 Aliphatics	mg/kg	< 10.0	16.8	20.0	84.00	60. - 140.	5132
C19-C36 Aliphatics	mg/kg	< 10.0	18.7	20.0	93.50	60. - 140.	5132
C11-C22 Aromatics	mg/kg	< 10.0	30.3	42.5	71.29	60. - 140.	5132
C11-C22 Aromatics	mg/kg	< 10.0	35.7	42.5	84.00	60. - 140.	5132
Acenaphthene	mg/kg	< 0.330	1.66	3.33	49.85	35. - 122.	5155
4-Chloro-3-methylphenol	mg/kg	< 0.330	1.59	3.33	47.75	24. - 117.	5155
2-Chlorophenol	mg/kg	< 0.330	1.62	3.33	48.65	18. - 120.	5155
1,4-Dichlorobenzene	mg/kg	< 0.330	1.55	3.33	46.55	25. - 118.	5155
2,4-dinitrotoluene	mg/kg	< 0.330	1.65	3.33	49.55	21. - 118.	5155
4-Nitrophenol	mg/kg	< 0.825	1.42	3.33	42.64	30. - 136.	5155
N-nitrosodi-n-propylamine	mg/kg	< 0.330	2.37	3.33	71.17	29. - 133.	5155
Pentachlorophenol	mg/kg	< 0.825	1.64	3.33	49.25	25. - 126.	5155
Phenol	mg/kg	< 0.330	2.01	3.33	60.36	23. - 125.	5155
Pyrene	mg/kg	< 0.330	1.39	3.33	41.74	32. - 124.	5155
1,2,4-Trichlorobenzene	mg/kg	< 0.330	1.74	3.33	52.25	30. - 114.	5155
Benzene	mg/kg	< 0.0020	0.0510	0.0500	102.00	58. - 135.	4234
Chlorobenzene	mg/kg	< 0.0020	0.0480	0.0500	96.00	54. - 136.	4234
1,1-Dichloroethene	mg/kg	< 0.0020	0.0540	0.0500	108.00	58. - 138.	4234
Toluene	mg/kg	< 0.0020	0.0500	0.0500	100.00	56. - 135.	4234
Trichloroethene	mg/kg	< 0.0020	0.0480	0.0500	96.00	52. - 143.	4234

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VPH C5-C8 Aliphatics	mg/kg	0.313	0.317	1.27	20.	4611
VPH C9-C12 Aliphatics	mg/kg	0.228	0.228	0.00	20.	4611
VPH C9-C10 Aromatics	mg/kg	0.369	0.364	1.36	20.	4611
C9-C18 Aliphatics	mg/kg	11.4	13.4	16.13	20.	5132
C19-C36 Aliphatics	mg/kg	16.8	18.7	10.70	20.	5132
C11-C22 Aromatics	mg/kg	30.3	35.7	16.36	20.	5132
Acenaphthene	mg/kg	1.66	1.74	4.71	24.	5155
4-Chloro-3-methylphenol	mg/kg	1.59	1.63	2.48	24.	5155
2-Chlorophenol	mg/kg	1.62	1.66	2.44	33.	5155
1,4-Dichlorobenzene	mg/kg	1.55	1.60	3.17	26.	5155
2,4-dinitrotoluene	mg/kg	1.65	1.76	6.45	27.	5155
4-Nitrophenol	mg/kg	1.42	1.57	10.03	41.	5155
N-nitrosodi-n-propylamine	mg/kg	2.37	2.46	3.79	35.	5155

COPY 3

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Pentachlorophenol	mg/kg	1.64	1.78	8.19	45.	5155
Phenol	mg/kg	2.01	2.09	3.90	27.	5155
Pyrene	mg/kg	1.39	1.46	4.91	19.	5155
1,2,4-Trichlorobenzene	mg/kg	1.74	1.79	2.83	38.	5155
Benzene	mg/kg	0.0510	0.0490	4.00	17.	4234
Chlorobenzene	mg/kg	0.0480	0.0470	2.11	14.	4234
1,1-Dichloroethene	mg/kg	0.0540	0.0530	1.87	19.	4234
Toluene	mg/kg	0.0500	0.0490	2.02	18.	4234
Trichloroethene	mg/kg	0.0480	0.0480	0.00	18.	4234

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Acenaphthene	mg/kg	3.33	2.53	76.	60 - 140	5155
Acenaphthylene	mg/kg	3.33	2.43	73.	60 - 140	5155
Anthracene	mg/kg	3.33	2.69	81.	60 - 140	5155
Benzo(a)anthracene	mg/kg	3.33	2.73	82.	60 - 140	5155
Benzo(a)pyrene	mg/kg	3.33	2.72	82.	60 - 140	5155
Benzo(b)fluoranthene	mg/kg	3.33	2.47	74.	60 - 140	5155
Benzo(g,h,i)perylene	mg/kg	3.33	2.70	81.	60 - 140	5155
Benzo(k)fluoranthene	mg/kg	3.33	2.68	80.	60 - 140	5155
4-Bromophenylphenylether	mg/kg	3.33	2.56	77.	60 - 140	5155
Butylbenzylphthalate	mg/kg	3.33	2.72	82.	60 - 140	5155
Carbazole	mg/kg	3.33	2.30	69.	60 - 140	5155
4-Chloro-3-methylphenol	mg/kg	3.33	2.46	74.	60 - 140	5155
4-Chloroaniline	mg/kg	3.33	2.28	68.	60 - 140	5155
bis(2-Chloroethoxy)methane	mg/kg	3.33	2.69	81.	60 - 140	5155
bis(2-Chloroethyl)ether	mg/kg	3.33	2.67	80.	60 - 140	5155
bis(2-Chloroisopropyl)ether	mg/kg	3.33	2.91	87.	60 - 140	5155
2-Chloronaphthalene	mg/kg	3.33	2.42	73.	60 - 140	5155
2-Chlorophenol	mg/kg	3.33	2.52	76.	60 - 140	5155
4-Chlorophenylphenylether	mg/kg	3.33	2.69	81.	60 - 140	5155
Chrysene	mg/kg	3.33	2.81	84.	60 - 140	5155
Dibenzofuran	mg/kg	3.33	2.53	76.	60 - 140	5155
Dibenz(a,h)anthracene	mg/kg	3.33	2.68	80.	60 - 140	5155
1,2-Dichlorobenzene	mg/kg	3.33	3.19	96.	60 - 140	5155
1,3-Dichlorobenzene	mg/kg	3.33	2.45	74.	60 - 140	5155
1,4-Dichlorobenzene	mg/kg	3.33	2.49	75.	60 - 140	5155
3,3'-Dichlorobenzidine	mg/kg	3.33	< 1.65	N/A	60 - 140	5155
2,4-Dichlorophenol	mg/kg	3.33	2.61	78.	60 - 140	5155
Diethylphthalate	mg/kg	3.33	2.42	73.	60 - 140	5155
2,4-Dimethylphenol	mg/kg	3.33	2.67	80.	60 - 140	5155
Dimethylphthalate	mg/kg	3.33	2.47	74.	60 - 140	5155
Di-n-butylphthalate	mg/kg	3.33	2.54	76.	60 - 140	5155
4,6-Dinitro-2-methylphenol	mg/kg	3.33	2.66	80.	60 - 140	5155

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
2,4-Dinitrophenol	ng/kg	3.33	2.00	60.	60 - 140	5155
2,4-dinitrotoluene	ng/kg	3.33	2.51	75.	60 - 140	5155
2,6-Dinitrotoluene	ng/kg	3.33	2.55	77.	60 - 140	5155
Di-n-octylphthalate	ng/kg	3.33	2.60	78.	60 - 140	5155
Fluoranthene	ng/kg	3.33	2.50	75.	60 - 140	5155
Fluorene	ng/kg	3.33	2.63	79.	60 - 140	5155
Hexachlorobenzene	ng/kg	3.33	2.67	80.	60 - 140	5155
Hexachlorobutadiene	ng/kg	3.33	2.63	79.	60 - 140	5155
Hexachlorocyclopentadiene	ng/kg	3.33	2.23	67.	60 - 140	5155
Hexachloroethane	ng/kg	3.33	3.38	102.	60 - 140	5155
Indeno(1,2,3-cd)pyrene	ng/kg	3.33	2.74	82.	60 - 140	5155
Isophorone	ng/kg	3.33	2.59	78.	60 - 140	5155
2-Methylnaphthalene	ng/kg	3.33	2.60	78.	60 - 140	5155
2-Methylphenol	ng/kg	3.33	2.96	89.	60 - 140	5155
m,p-Methylphenol	ng/kg	3.33	3.26	98.	60 - 140	5155
Naphthalene	ng/kg	3.33	2.53	76.	60 - 140	5155
2-Nitroaniline	ng/kg	3.33	2.38	71.	60 - 140	5155
3-Nitroaniline	ng/kg	3.33	2.38	71.	60 - 140	5155
4-Nitroaniline	ng/kg	3.33	2.08	62.	60 - 140	5155
Nitrobenzene	ng/kg	3.33	2.53	76.	60 - 140	5155
2-Nitrophenol	ng/kg	3.33	2.53	76.	60 - 140	5155
4-Nitrophenol	ng/kg	3.33	2.07	62.	60 - 140	5155
N-nitrosodi-n-propylamine	ng/kg	3.33	3.43	103.	60 - 140	5155
N-nitrosodiphenylamine	ng/kg	3.33	2.77	83.	60 - 140	5155
Pentachlorophenol	ng/kg	3.33	2.33	70.	60 - 140	5155
Phenanthrene	ng/kg	3.33	2.71	81.	60 - 140	5155
Phenol	ng/kg	3.33	3.17	95.	60 - 140	5155
Pyrene	ng/kg	3.33	2.88	86.	60 - 140	5155
Bis(2-ethylhexyl)phthalate	ng/kg	3.33	2.74	82.	60 - 140	5155
1,2,4-Trichlorobenzene	ng/kg	3.33	2.58	77.	60 - 140	5155
2,4,5-Trichlorophenol	ng/kg	3.33	2.48	74.	60 - 140	5155
2,4,6-Trichlorophenol	ng/kg	3.33	2.37	71.	60 - 140	5155
Acetone	mg/kg	0.0500	0.0530	106.	70 - 130	4234
Benzene	mg/kg	0.0500	0.0510	102.	70 - 130	4234
Bromobenzene	mg/kg	0.0500	0.0500	100.	70 - 130	4234
Bromochloromethane	mg/kg	0.0500	0.0610	122.	70 - 130	4234
Bromoform	mg/kg	0.0500	0.0610	122.	70 - 130	4234
Bromomethane	mg/kg	0.0500	0.0570	114.	70 - 130	4234
2-Butanone	mg/kg	0.0500	0.0550	110.	70 - 130	4234
n-Butylbenzene	mg/kg	0.0500	0.0410	82.	70 - 130	4234
sec-Butylbenzene	mg/kg	0.0500	0.0470	94.	70 - 130	4234
t-Butylbenzene	mg/kg	0.0500	0.0490	98.	70 - 130	4234
Carbon Disulfide	mg/kg	0.0500	0.0550	110.	70 - 130	4234
Carbon tetrachloride	mg/kg	0.0500	0.0470	94.	70 - 130	4234
Chlorobenzene	mg/kg	0.0500	0.0500	100.	70 - 130	4234
Chloroethane	mg/kg	0.0500	0.0510	102.	70 - 130	4234

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
2-Chloroethylvinylether	mg/kg	0.0500	0.0390	78.	70 - 130	4234
Chloroform	mg/kg	0.0500	0.0520	104.	70 - 130	4234
Chloromethane	mg/kg	0.0500	0.0460	92.	70 - 130	4234
2-Chlorotoluene	mg/kg	0.0500	0.0460	92.	70 - 130	4234
4-Chlorotoluene	mg/kg	0.0500	0.0470	94.	70 - 130	4234
1,2-Dibromo-3-chloropropane	mg/kg	0.0500	0.0550	110.	70 - 130	4234
Dibromochloromethane	mg/kg	0.0500	0.0530	106.	70 - 130	4234
1,2-Dibromoethane	mg/kg	0.0500	0.0550	110.	70 - 130	4234
Dibromomethane	mg/kg	0.0500	0.0570	114.	70 - 130	4234
1,2-Dichlorobenzene	mg/kg	0.0500	0.0440	88.	70 - 130	4234
1,3-Dichlorobenzene	mg/kg	0.0500	0.0480	96.	70 - 130	4234
1,4-Dichlorobenzene	mg/kg	0.0500	0.0480	96.	70 - 130	4234
Dichlorodifluoromethane	mg/kg	0.0500	0.0510	102.	70 - 130	4234
1,1-Dichloroethane	mg/kg	0.0500	0.0550	110.	70 - 130	4234
1,2-Dichloroethane	mg/kg	0.0500	0.0480	96.	70 - 130	4234
1,1-Dichloroethene	mg/kg	0.0500	0.0540	108.	70 - 130	4234
cis-1,2-Dichloroethene	mg/kg	0.0500	0.0540	108.	70 - 130	4234
trans-1,2-Dichloroethene	mg/kg	0.0500	0.0530	106.	70 - 130	4234
1,2-Dichloropropane	mg/kg	0.0500	0.0470	94.	70 - 130	4234
1,3-Dichloropropane	mg/kg	0.0500	0.0500	100.	70 - 130	4234
2,2-Dichloropropane	mg/kg	0.0500	0.0460	92.	70 - 130	4234
1,1-Dichloropropene	mg/kg	0.0500	0.0470	94.	70 - 130	4234
cis-1,3-Dichloropropene	mg/kg	0.0500	0.0470	94.	70 - 130	4234
trans-1,3-Dichloropropene	mg/kg	0.0500	0.0450	90.	70 - 130	4234
Ethylbenzene	mg/kg	0.0500	0.0480	96.	70 - 130	4234
Hexachlorobutadiene	mg/kg	0.0500	0.0470	94.	70 - 130	4234
2-Hexanone	mg/kg	0.0500	0.0550	110.	70 - 130	4234
Isopropylbenzene	mg/kg	0.0500	0.0480	96.	70 - 130	4234
4-Isopropyltoluene	mg/kg	0.0500	0.0440	88.	70 - 130	4234
4-Methyl-2-pentanone	mg/kg	0.0500	0.0560	112.	70 - 130	4234
Methylene chloride	mg/kg	0.0500	0.0450	90.	70 - 130	4234
Naphthalene	mg/kg	0.0500	0.0600	120.	70 - 130	4234
n-Propylbenzene	mg/kg	0.0500	0.0470	94.	70 - 130	4234
Styrene	mg/kg	0.0500	0.0480	96.	70 - 130	4234
1,1,1,2-Tetrachloroethane	mg/kg	0.0500	0.0500	100.	70 - 130	4234
1,1,2,2-Tetrachloroethane	mg/kg	0.0500	0.0510	102.	70 - 130	4234
Tetrachloroethene	mg/kg	0.0500	0.0500	100.	70 - 130	4234
Toluene	mg/kg	0.0500	0.0510	102.	70 - 130	4234
1,2,3-Trichlorobenzene	mg/kg	0.0500	0.0450	90.	70 - 130	4234
1,2,4-Trichlorobenzene	mg/kg	0.0500	0.0390	78.	70 - 130	4234
1,1,1-Trichloroethane	mg/kg	0.0500	0.0470	94.	70 - 130	4234
1,1,2-Trichloroethane	mg/kg	0.0500	0.0580	116.	70 - 130	4234
Trichloroethene	mg/kg	0.0500	0.0510	102.	70 - 130	4234
1,2,3-Trichloropropane	mg/kg	0.0500	0.0510	102.	70 - 130	4234
1,2,4-Trimethylbenzene	mg/kg	0.0500	0.0440	88.	70 - 130	4234
1,3,5-Trimethylbenzene	mg/kg	0.0500	0.0450	90.	70 - 130	4234

SPECIALIZED ASSAYS, INC.

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PROJECT QUALITY CONTROL DATA

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Vinyl chloride	mg/kg	0.0500	0.0550	110.	70 - 130	4234
Xylenes	mg/kg	0.1500	0.1370	91.	70 - 130	4234
Bromodichloromethane	mg/kg	0.0500	0.0490	98.	70 - 130	4234
Trichlorofluoromethane	mg/kg	0.0500	0.0520	104.	70 - 130	4234

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
VPH C5-C8 Aliphatics	< 0.100	mg/kg	4611
VPH C9-C12 Aliphatics	< 0.100	mg/kg	4611
VPH C9-C10 Aromatics	< 0.020	mg/kg	4611
C9-C18 Aliphatics	< 10.0	mg/kg	5132
C19-C36 Aliphatics	< 10.0	mg/kg	5132
C11-C22 Aromatics	< 10.0	mg/kg	5132
Acenaphthene	< 0.330	mg/kg	5155
Acenaphthylene	< 0.330	mg/kg	5155
Anthracene	< 0.330	mg/kg	5155
Benzo(a)anthracene	< 0.330	mg/kg	5155
Benzo(a)pyrene	< 0.330	mg/kg	5155
Benzo(b)fluoranthene	< 0.330	mg/kg	5155
Benzo(g,h,i)perylene	< 0.330	mg/kg	5155
Benzo(k)fluoranthene	< 0.330	mg/kg	5155
4-Bromophenylphenylether	< 0.330	mg/kg	5155
Butylbenzylphthalate	< 0.330	mg/kg	5155
Carbazole	< 0.330	mg/kg	5155
4-Chloro-3-methylphenol	< 0.330	mg/kg	5155
4-Chloroaniline	< 0.330	mg/kg	5155
bis(2-Chloroethoxy)methane	< 0.330	mg/kg	5155
bis(2-Chloroethyl)ether	< 0.330	mg/kg	5155
bis(2-Chloroisopropyl)ether	< 0.330	mg/kg	5155
2-Chloronaphthalene	< 0.330	mg/kg	5155
2-Chlorophenol	< 0.330	mg/kg	5155
4-Chlorophenylphenylether	< 0.330	mg/kg	5155
Chrysene	< 0.330	mg/kg	5155
Dibenzofuran	< 0.330	mg/kg	5155
Dibenz(a,h)anthracene	< 0.330	mg/kg	5155
1,2-Dichlorobenzene	< 0.330	mg/kg	5155
1,3-Dichlorobenzene	< 0.330	mg/kg	5155
1,4-Dichlorobenzene	< 0.330	mg/kg	5155
3,3'-Dichlorobenzidine	< 0.825	mg/kg	5155
2,4-Dichlorophenol	< 0.330	mg/kg	5155
Diethylphthalate	< 0.330	mg/kg	5155
2,4-Dimethylphenol	< 0.330	mg/kg	5155
Dimethylphthalate	< 0.330	mg/kg	5155
Di-n-butylphthalate	< 0.330	mg/kg	5155

COPY 3

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
4,6-Dinitro-2-methylphenol	< 0.825	mg/kg	5155
2,4-Dinitrophenol	< 0.825	mg/kg	5155
2,4-dinitrotoluene	< 0.330	mg/kg	5155
2,6-Dinitrotoluene	< 0.330	mg/kg	5155
Di-n-octylphthalate	< 0.330	mg/kg	5155
Fluoranthene	< 0.330	mg/kg	5155
Fluorene	< 0.330	mg/kg	5155
Hexachlorobenzene	< 0.330	mg/kg	5155
Hexachlorobutadiene	< 0.330	mg/kg	5155
Hexachlorocyclopentadiene	< 0.330	mg/kg	5155
Hexachloroethane	< 0.330	mg/kg	5155
Indeno(1,2,3-cd)pyrene	< 0.330	mg/kg	5155
Isophorone	< 0.330	mg/kg	5155
2-Methylnaphthalene	< 0.330	mg/kg	5155
2-Methylphenol	< 0.330	mg/kg	5155
m,p-Methylphenol	< 0.330	mg/kg	5155
Naphthalene	< 0.330	mg/kg	5155
2-Nitroaniline	< 0.825	mg/kg	5155
3-Nitroaniline	< 0.825	mg/kg	5155
4-Nitroaniline	< 0.825	mg/kg	5155
Nitrobenzene	< 0.330	mg/kg	5155
2-Nitrophenol	< 0.330	mg/kg	5155
4-Nitrophenol	< 0.825	mg/kg	5155
N-nitrosodi-n-propylamine	< 0.330	mg/kg	5155
N-nitrosodiphenylamine	< 0.330	mg/kg	5155
Pentachlorophenol	< 0.825	mg/kg	5155
Phenanthrene	< 0.330	mg/kg	5155
Phenol	< 0.330	mg/kg	5155
Pyrene	< 0.330	mg/kg	5155
Bis(2-ethylhexyl)phthalate	< 0.330	mg/kg	5155
1,2,4-Trichlorobenzene	< 0.330	mg/kg	5155
2,4,5-Trichlorophenol	< 0.825	mg/kg	5155
2,4,6-Trichlorophenol	< 0.330	mg/kg	5155
Acetone	< 0.0100	mg/kg	4234
Benzene	< 0.0020	mg/kg	4234
Bromobenzene	< 0.0020	mg/kg	4234
Bromochloromethane	< 0.0020	mg/kg	4234
Bromoform	< 0.0020	mg/kg	4234
Bromomethane	< 0.0100	mg/kg	4234
2-Butanone	< 0.0100	mg/kg	4234
n-Butylbenzene	< 0.0020	mg/kg	4234
sec-Butylbenzene	< 0.0020	mg/kg	4234
t-Butylbenzene	< 0.0020	mg/kg	4234
Carbon Disulfide	< 0.0020	mg/kg	4234
Carbon tetrachloride	< 0.0020	mg/kg	4234
Chlorobenzene	< 0.0020	mg/kg	4234

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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
Chloroethane	< 0.0020	mg/kg	4234
2-Chloroethylvinylether	< 0.0020	mg/kg	4234
Chloroform	< 0.0020	mg/kg	4234
Chloromethane	< 0.0100	mg/kg	4234
2-Chlorotoluene	< 0.0020	mg/kg	4234
4-Chlorotoluene	< 0.0020	mg/kg	4234
1,2-Dibromo-3-chloropropane	< 0.0020	mg/kg	4234
Dibromochloromethane	< 0.0020	mg/kg	4234
1,2-Dibromoethane	< 0.0020	mg/kg	4234
Dibromomethane	< 0.0020	mg/kg	4234
1,2-Dichlorobenzene	< 0.0020	mg/kg	4234
1,3-Dichlorobenzene	< 0.0020	mg/kg	4234
1,4-Dichlorobenzene	< 0.0020	mg/kg	4234
Dichlorodifluoromethane	< 0.0020	mg/kg	4234
1,1-Dichloroethane	< 0.0020	mg/kg	4234
1,2-Dichloroethane	< 0.0020	mg/kg	4234
1,1-Dichloroethene	< 0.0020	mg/kg	4234
cis-1,2-Dichloroethene	< 0.0020	mg/kg	4234
trans-1,2-Dichloroethene	< 0.0020	mg/kg	4234
1,2-Dichloropropane	< 0.0020	mg/kg	4234
1,3-Dichloropropane	< 0.0020	mg/kg	4234
2,2-Dichloropropane	< 0.0020	mg/kg	4234
1,1-Dichloropropene	< 0.0020	mg/kg	4234
cis-1,3-Dichloropropene	< 0.0020	mg/kg	4234
trans-1,3-Dichloropropene	< 0.0020	mg/kg	4234
Ethylbenzene	< 0.0020	mg/kg	4234
Hexachlorobutadiene	< 0.0020	mg/kg	4234
2-Hexanone	< 0.0100	mg/kg	4234
Isopropylbenzene	< 0.0020	mg/kg	4234
4-Isopropyltoluene	< 0.0020	mg/kg	4234
4-Methyl-2-pentanone	< 0.0100	mg/kg	4234
Methylene chloride	< 0.0020	mg/kg	4234
Naphthalene	< 0.0020	mg/kg	4234
n-Propylbenzene	< 0.0020	mg/kg	4234
Styrene	< 0.0020	mg/kg	4234
1,1,1,2-Tetrachloroethane	< 0.0020	mg/kg	4234
1,1,2,2-Tetrachloroethane	< 0.0020	mg/kg	4234
Tetrachloroethene	< 0.0020	mg/kg	4234
Toluene	< 0.0020	mg/kg	4234
1,2,3-Trichlorobenzene	< 0.0020	mg/kg	4234
1,2,4-Trichlorobenzene	< 0.0020	mg/kg	4234
1,1,1-Trichloroethane	< 0.0020	mg/kg	4234
1,1,2-Trichloroethane	< 0.0020	mg/kg	4234
Trichloroethene	< 0.0020	mg/kg	4234
1,2,3-Trichloropropane	< 0.0020	mg/kg	4234
1,2,4-Trimethylbenzene	< 0.0020	mg/kg	4234

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PROJECT QUALITY CONTROL DATA

Blank Data

Analyte	Blank Value	Units	Q.C. Batch
1,3,5-Trimethylbenzene	< 0.0020	ng/kg	4234
Vinyl chloride	< 0.0020	ng/kg	4234
Xylenes	< 0.0020	ng/kg	4234
Bromodichloromethane	< 0.0020	ng/kg	4234
Trichlorofluoromethane	< 0.0020	ng/kg	4234

SPECIALIZED ASSAYS
ENVIRONMENTAL

7A- 022999

2960 Foster Creighton Drive
Nashville, TN 37204
615-726-0177, 800-765-0980
FAX 615/726-3404

Specialized Assays: (800) 765-0980

REFERRING CLIENT

Account: 7979
Fluor Daniel GTI
Kim Titmus
1000 Perimeter Park Drive Suite 1
Morrisville, NC 27560
Ph: 919-467-2227 Fax: 919-467-2299

BILLING CONTROL NUMBER (FOR LAB USE ONLY): 109990

PROJECT #: 102573

P.O. #: 272204

SAMPLERS (Signature-Please Print): Lakeshia Holley - Lakeshia Holley

PROJECT NAME: Sun Oil - 2903 South Elm Street Greensboro, NC

FOR LAB USE ONLY ACC#	SAMPLE DESCRIPTION	DATE	TIME	COMP	GRAB	# OF CONT	ANALYSIS REQUESTED
95746	GP-1 (8-10')	8/12/98	3:25 p.m.		✓	4	MA VPH, MA EPH/ 8260w/ MTBE+IPE, 8270
47	GP-2 (4-8')	8/12/98	3:35 p.m.		✓	4	MA VPH, MA EPH, 8260w/MTBE+IPE, 8270
48	GP-3 (8-10½)	8/12/98	3:50 p.m.		✓	4	MA VPH, MA EPH; 8260 w/MTBE+IPE, 8270
95749	GP-4 (0-4')	8/12/98	3:56 p.m.		✓	4	MA VPH, MA EPH, 8260 w/MTBE+IPE, 8270

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Received for Laboratory by	Date / Time
Lakeshia Holley	8/12/98 5:45pm.		M. Beasley	8/13/98 9:00
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Remarks: 4°C	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	QT# 012698KE99	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	SAI Project #:	

For further assistance in completing the chain of custody form please refer to the instructions found on the opposite si