

2021 Hazardous Waste Scanning Project

File Form Naming Convention.

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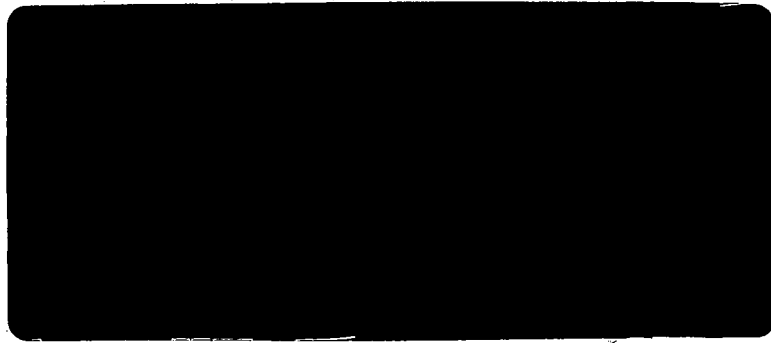
Note 1: Each category is separated by a period "."

Note 2: Each word within category is separated by an underscore "_"

Specific File Naming Convention Label:

report.HW.932035.1990-09-01.Preliminary-Environmental-Assessment.pdf

39
Alloy Briquetting



ENSAFE SM

Environmental and Safety Designs, Inc.

**PRELIMINARY ENVIRONMENTAL ASSESSMENT
OF A PORTION OF THE FORMER
UNION CARBIDE
FACILITY, NIAGARA FALLS, NEW YORK
VOLUME I**

**Prepared for
Alloy Briquetting Corporation
Niagara Falls, New York**

**Prepared by
Environmental & Safety Designs, Inc.
Memphis, TN**

Aug 1990

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EXECUTIVE SUMMARY

The following is a preliminary environmental assessment at Alloy Briquetting Corporation in Niagara Falls, New York. A site visit, site history review, and on site sampling protocol were performed. The assessment was initiated for Alloy which is considering purchase of the property.

The preliminary assessment concludes that there is a high probability that polyaromatic hydrocarbons, in the form of coal tar pitch, have been disposed on the property and are now being released into the environment.

Three locations were identified from which tar appears on the surface, including two locations inside buildings.

Analyses conducted in accordance with EPA's "Contract Laboratory Program (CLP," confirm the presence of coal tar pitch semivolatiles. The former site owner, Union Carbide Corporation (UCC) is reported to have used coal tar pitch on the property.

Substantive threats to human health and environment may exist as a result of these releases.

INTRODUCTION

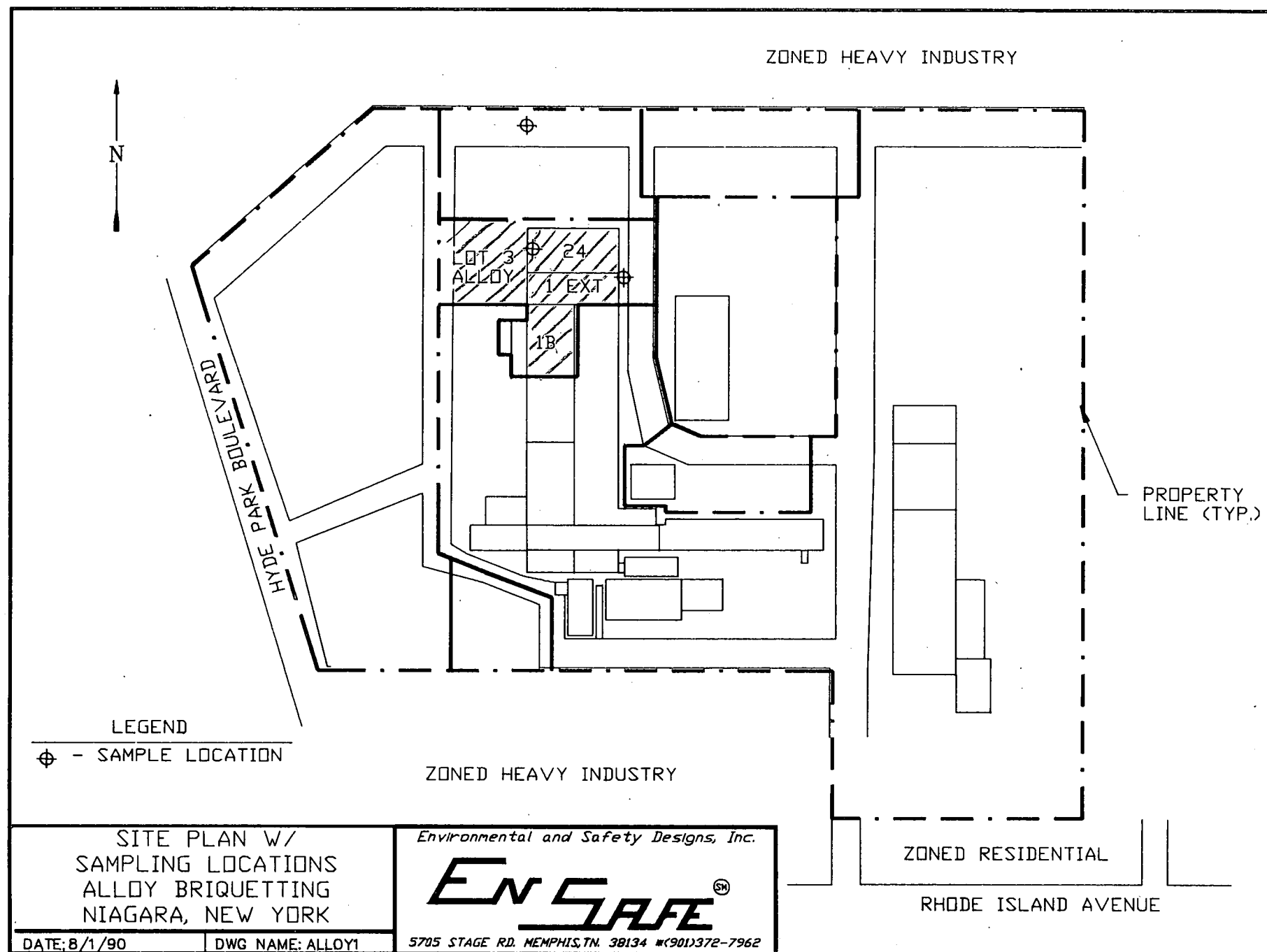
Environmental & Safety Designs, Inc. (EnSafe) has been retained to perform a preliminary environmental assessment of a portion of a plant in Niagara Falls, New York. The assessment was requested by Alloy Briquetting Corporation which is currently a tenant at the location and is considering purchase of a portion of the property.

SITE DESCRIPTION

The parcel assessed is part of an industrial development owned by Niagara Vest, Inc. It is an unusual development in the sense that a former manufacturing facility has been subdivided and offered for sale and/or lease. Figure 1 is a sketch of the entire property, located at 3501 Hyde Park Blvd., Niagara, New York. The environmental assessment described herein is principally limited to a portion of this facility currently occupied by Alloy Briquetting Corporation. This portion is shown on Figure 1 as Lots 24, 1 EXT, 1B, and 3 (hereinafter Alloy parcel). A legal description of the property provided by Alloy is attached as Appendix 1. The larger property was not addressed except as it is described in various documents provided to us for review.

PAST HISTORY

The parcel assessed was a portion of a manufacturing facility operated by Union Carbide Corporation (UCC), Carbon Products Division, and known as the Republic Site. According to a site plan submitted by UCC to EPA in 1980 with a Generator Notification form, the buildings on the Alloy parcel were constructed in 1926 (#1B) and 1943 (#1, #24). The principal plant building was apparently constructed in 1919.



UCC manufactured carbon products and used large quantities of coal tar pitch in its process. UCC also notified as a generator of hazardous waste in 1980, listing F001 (chlorinated solvents), U013 (asbestos), and U226 (1,1,1-trichloroethane). Attached to hazardous waste generation data in the UCC regulatory file was an additional list of wastes generated. This list included coal tar pitch, Code 88 waste (mixture of coal tar pitch, diethyl sulfate, and furfural), and coal filter residue. UCC apparently operated a less than 90 day hazardous waste accumulation unit on the property. However this unit was not near the Alloy facility.

Also on the property is a non-hazardous waste landfill which has been closed. Monitoring wells have been installed around this landfill but data was not available for this report.

VISUAL INSPECTION

Two representatives of EnSafe visited the site on June 28, 1990. The site visit was limited to those areas being considered for purchase or lease by Alloy and immediately adjacent property. During the site visit, it became evident that a black, tarry material was appearing at two spots on the floor at Alloy and also in the driveway north of Alloy

On the west side of Alloy, a wastewater pit was noted to also contain this tarry substance. Appendix 2 contains a material safety data sheet for coal tar pitch, provided by Alloy, which is believed to be representative of the UCC coal tar pitch.

As a result of these observations, it was determined that sampling would be appropriate. Samples of this tar were taken at two locations: Sample Alloy-SS1 was taken in the driveway north of Alloy. A shovel was used to remove overlying soil and gravel to a depth of 12 inches, after which samples of tarry material were taken with a stainless steel spoon. Sample Alloy-FLR was taken inside the Alloy facility at a crack in the concrete floor from which the material appeared to emanate. The sample was collected by scraping the tar with a stainless steel spoon. Finally a sample of water, Alloy-PIT, was taken from the wastewater sump. This sample was collected as a grab by lowering the sample bottle into the pit. In each case dedicated sampling devices were used to avoid cross-contamination. Samples were immediately placed in pre-cleaned glass containers with teflon lined lids, and placed in an insulated container holding "blue-ice" refrigerant. Samples were shipped by overnight express to Compuchem Laboratories, Research Triangle Park, NC using strict chain of custody and sample security procedures.

2 samples
(tar)

1 (water)

ANALYSIS AND QUALITY ASSURANCE

Analysis for semi-volatiles was requested because of the high probability of polyaromatic compounds in the tar. The analytical method was "CLP Semivolatiles" with associated Quality Assurance and Quality Control. Full CLP deliverables are attached to this report as Volume II to document quality control.

Of the three samples, Alloy-PIT and Alloy-SS1 met all holding time requirements. Alloy-FLR presented major matrix problems due to the high level of tar and as a result the final extract reported was not within holding times. As a result the values reported should be considered minimums as analytes may have been lost. Appendix 3 contains a summary of the data and a Quality Assurance narrative, in accordance with CLP deliverable requirements.

RESULTS OF ANALYSIS

The results of the sample analysis for semivolatiles are located in Appendix 3 and summarized in Table 1 below. In general, all samples showed very high levels of polyaromatic compounds typical of coal tar residues. It may be noted that

TABLE 1
SEMIVOLATILE ORGANICS ANALYSES - ALLOY BRIQUETTING CORP.
All units are micrograms per liter (ppb)

LIST OF COMPOUNDS	ALLOY-FLR	ALLOY-SS1	ALLOY-PIT
Phenol	740000	13000 J	380 U
bis(2-Chloroethyl) Ether	64000 U	40000 U	380 U
2-Chlorophenol	64000 U	40000 U	380 U
1,3-Dichlorobenzene	64000 U	40000 U	380 U
1,4-Dichlorobenzene	64000 U	40000 U	380 U
Benzyl Alcohol	64000 U	40000 U	380 U
1,2-Dichlorobenzene	64000 U	40000 U	380 U
2-Methylphenol	210000	40000 U	380 U
bis(2-Chloroisopropyl) Ether	64000 U	40000 U	380 U
4-Methylphenol	740000	5500 J	190 J
N-Nitroso-Di-n-Propylamine	64000 U	40000 U	380 U
Hexachloroethane	64000 U	40000 U	380 U
Nitrobenzene	64000 U	40000 U	380 U
Isophorone	64000 U	40000 U	380 U
2-Nitrophenol	64000 U	40000 U	380 U
2,4-Dimethylphenol	260000	40000 U	380 U
Benzoic Acid	310000 U	4700 J	1900 U
bis(2-Chloroethoxy) Methane	64000 U	40000 U	380 U
2,4-Dichlorophenol	64000 U	40000 U	380 U
1,2,4-Trichlorobenzene	64000 U	40000 U	380 U
Naphthalene	7000000 E	66000	200 J
4-Chloroaniline	64000 U	40000 U	380 U
Hexachlorobutadiene	64000 U	40000 U	380 U
4-Chloro-3-Methylphenol	64000 U	40000 U	380 U
2-Methylnaphthalene	3700000 E	43000	86 J
Hexachlorocyclopentadiene	64000 U	40000 U	380 U
2,4,6-Trichlorophenol	64000 U	40000 U	380 U
2,4,5-Trichlorophenol	310000 U	190000 U	1900 U
2-Chloronaphthalene	64000 U	40000 U	380 U
2-Nitroaniline	310000 U	190000 U	1900 U
Dimethyl Phthalate	64000 U	40000	380 U
Acenaphthylene	3300000 E	140000 U	380 U
2,6-Dinitrotoluene	64000 U	40000 U	380 U

NOTES: U = Indicates compound was analyzed but not detected.
J = Estimated value.
B = Analyte also found in laboratory blank.
E = Dilution required.

TABLE 1 (Continued)

SEMIVOLATILE ORGANICS ANALYSES - ALLOY BRIQUETTING CORP

All units are micrograms per liter (ppb)

LIST OF COMPOUNDS	ALLOY-FLR	ALLOY-SS1	ALLOY-PIT
3-Nitroaniline	310000 U	190000 U	1900 U
Acenaphthene	2200000 E	180000	1400
2,4-Dinitrophenol	310000 U	190000 U	1900 U
4-Nitrophenol	310000 U	190000 U	1900 U
Dibenzofuran	4300000 E	410000	350 J
2,4-Dinitrotoluene	64000 U	40000 U	380 U
Diethylphthalate	64000 U	40000 U	380 U
4-Chlorophenyl-phenylether	64000 U	40000 U	380 U
Fluorene	570000	260000	790
4-Nitroaniline	310000 U	190000 U	1900 U
4,6-Dinitro-2-Methylphenol	310000 U	190000 U	1900 U
N-Nitrosodiphenylamine (1)	64000 U	40000 U	380 U
4-Bromophenyl-phenylether	64000 U	40000 U	380 U
Hexachlorobenzene	64000 U	40000 U	380 U
Pentachlorophenol	310000 U	190000 U	1900 U
Phenanthrene	15000000 E	3900000 E	6900 E
Anthracene	3800000 E	800000 E	1300
Di-n-Butylphthalate	64000 U	40000 U	380 U
Fluoranthene	23000000 E	6700000 E	14000 E
Pyrene	17000000 E	5700000 E	15000 E
Butylbenzylphthalate	64000 U	40000 U	380 U
3,3'-Dichlorobenzidine	130000 U	80000 U	770 U
Benzo(a)Anthracene	11000000 E	2400000 E	8500 E
Chrysene	6400000 E	2700000 E	7800 E
bis(2-Ethylhexyl)Phthalate	64000 U	40000 U	290 J
Di-n-Octyl Phthalate	64000 U	40000 U	380 U
Benzo(b)Fluoranthene	15000000 EX	3300000 EX	16000 EX
Benzo(k)Fluoranthene	15000000 EX	3300000 EX	16000 EX
Benzo(a)Pyrene	9500000 E	1200000 E	8400 E
Indeno(1,2,3-cd)Pyrene	3700000 E	300000	2600
Dibenz(a,h)Anthracene	1000000	140000	800
Benzo(g,h,i)Perylene	3500000 E	310000	2900

NOTES: U = Indicates compound was analyzed but not detected.

J = Estimated value.

B = Analyte also found in laboratory blank.

E = Dilution required.

the list of polyaromatic components of coal tar shown in the Material Safety Data Sheet in Appendix 3 is a close match with positive compounds in the test report. Further the test report shows very high values for phenol and substituted alkyl phenols. The presence of phenols, which are an oxidation product of coal and wood tars, is expected and as been documented at several CERCLA tar sites (Cliffs-Dow, Tar Lake, etc.).

The FLR sample appears to be pure tar and associated degradation products. The SS1 sample, shows high polyaromatic concentrations, but a lower total due to the dilution effect of soil. The PIT sample is positive for water soluble polyaromatic compounds.

SUMMARY

The past history of this site and the results of analytical tests on substances leaching from the property strongly suggest that coal tar pitch has been disposed on the property and is now being released to the environment.

APPENDIX 1

LEGAL DESCRIPTION OF PROPERTY

UNIT 2046 26

CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT - THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY

THIS INDENTURE, made the 22ND day of December, nineteen hundred and eight-six
BETWEEN UNION CARBIDE CORPORATION, a New York corporation having
offices at 39 Old Ridgebury Road, Danbury, Connecticut 06817
(hereinafter called "Grantor"),

party of the first part, and NIAGARA VEST INC., a New York corporation having
offices at 445 Third Street, Niagara Falls, New York 14301
(hereinafter called "Grantee").

U02717

party of the second part,

WITNESSETH, that the party of the first part, in consideration of TEN (\$10.00)

lawful money of the United States, and other good and valuable consideration paid
by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or
successors and assigns of the party of the second part forever,

ALL ^{those} certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate,
lying and being in the City of Niagara Falls and Town of Niagara,
County of Niagara and State of New York, as more, particularly
described in Exhibit A attached hereto, consisting of three (3)
parcels identified as Parcels 1A, 1B and 2 (hereinafter collectively
called the "Premises").

TOGETHER with all rights of Grantor in and to 15th Street,
a private street, extending from Parcel 1A and 1B to College Avenue,
subject to all existing rights, covenants and restrictions in favor
of Consolidated Rail Corporation and Niagara Mohawk Power Corporation
with respect to 15th Street.

EXCEPTING AND RESERVING however, out of the Premises unto
Grantor its successors and assigns, the following perpetual
easements:

- (1) The right to install, maintain, operate, repair,
replace, change the size of and remove one
underground electrical conduit within an area
20 feet wide under, across and through Parcel
1A, the centerline of which is more particularly
described as follows:

Commencing at a Point 30.00 feet South of the South Right-of-
way line of College Avenue (60.0 feet wide) (formerly Whirlpool
Street), 1357.69 feet East of the East Right-of-way line of 15th
Street (60.0 feet wide), said Point being in the South line of lands
of the Penn Central Railroad; Thence S-90°-00'-00"-E, 536.15 feet
to a Point; Thence S-60°-48'-36"-W, 63.56 feet to the Point or
Place of Beginning; Thence S-84°-13'-37"-W, 201.75 feet to a Point;
Thence S-63°-21'-19"-W, 144.60 feet to a Point, the above being a
description of the Centerline of a 20' wide easement;

- (ii) non-exclusive rights of ingress, egress and
regress between the remainder of Grantor's
property lying south of Parcel 1A and College
Avenue over 15th Street, a private street, as the
same may be extended southerly across the Premises
to said remaining property of Grantor; and

- (iii) non-exclusive rights of ingress, egress and regress
for pedestrians and vehicles and for above and below
ground utilities, including without limitation,
electric pole lines and transmission and distribution
facilities, gas pipelines, and water and sewer lines,
being 150 feet wide, and extending from Hyde Park

*for pedestrians and
vehicles

Release of Right of First Refusal To Purchase
See Liber 2182 of Deeds page 204.
Recorded 1/8/88.

Raymond A. Beiter

Boulevard to the remainder of Grantor property lying easterly of Parcel 2B, under, over, across and through the following parcel:

All that certain Piece or Parcel of Land, situate, lying and being in the Town of Niagara, County of Niagara and State of New York, being Part of Lot 24, Township 13, Range 9 of the Holland Land Company's Survey and being more particularly bounded and described as follows:

Beginning at a Point in the East Right-of-way line of the new layout of Hyde Park Boulevard, width varies, at its intersection with the South line of lands of the Niagara Mohawk Power Corp., said Point being the Northeast corner of Hyde Park Boulevard taking F.A.S.H. 58-21 Map 180, Parcel 190; Thence S 18°-30'-18" E along said boundary, 162.07 feet to a Point; Thence N 49°-14'-45" E and 150.00 feet South of and parallel to the lands of Niagara Mohawk Power Corp., 419.55 feet to a Point; Thence S 89°-49'-49" E and 150.00 feet South of and parallel to said boundary, 1187.21 feet to a Point; Thence N 00°-10'-09" E, 150.00 feet to a Point in the South line of said boundary; Thence N 89°-49'-49" W and along said boundary, 1243.18 feet to a Point; Thence S 49°-14'-45" W and along said boundary, 414.16 feet to the Point or Place of Beginning, containing 5.62 Acres, more or less.

FURTHER EXCEPTING AND RESERVING, out of the Premises unto Grantor, its successors and the following rights:

1. The right, but not the obligation, to re-enter upon the Premises and to perform any necessary remedial work in the event that any governmental authority gives notice to Grantor of any alleged violation of any statute, ordinance or regulation pertaining to the Premises; provided, however, that in exercising any such rights Grantor shall perform any such work expeditiously and so as not to unreasonably interfere with Grantee's use of the Premises.

2. The right of first refusal to purchase all or part of the Premises in the event that at any time within ten (10) years as measured from the date hereof Grantee elects to sell all or part of the Premises or receives a bona fide third-party offer to do so. In any such event, Grantee shall give to Grantor not less than thirty (30) days' prior written notice, specifying the details of such proposed transaction, and during such period Grantor shall have the right to elect to purchase that portion of the Premises to which Grantee's notice pertains. If Grantor exercises the right to purchase, Grantee shall convey to Grantor good and marketable fee simple title, free and clear of all mortgages, liens and similar encumbrances and any tenancies or parties in possession but subject to any matters set forth in this deed. Any failure by Grantor to exercise its rights to purchase hereunder shall not cause any forfeiture of Grantor's first refusal rights as to any subsequent sale transaction occurring within the aforesaid ten (10) year period.

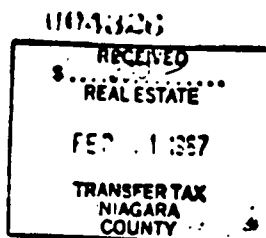


EXHIBIT A

Premises

Parcel 1A

All that certain Piece or Parcel of Land, situate, lying and being in the City of Niagara Falls, County of Niagara and State of New York, being Part of Lots 32 & 33 of The Mile Reservation and being more particularly bounded and described as follows:

Beginning at a Point in the East R.O.W. line of 15th Street (60' wide), 30.00 feet South of the South Right-of-way line of College Avenue (60' wide)(formerly Whirlpool Street); Thence S-00°-06'-55"-E, along the East Right-of-way line of 15th Street, 422.18 feet to a Point; Thence S-49°-02'-20"-E, 286.53 feet to a Point; Thence N-89°-57'-24"-E, 34.00 feet to a Point; Thence S-02°-52'-36"-E, 15.20 feet to a Point; Thence S-78°-27'-36"-E, 89.00 feet to a Point; Thence N-89°-57'-24"-E, 828.32 feet to a Point; Thence N-60°-48'-36"-E, 217.64 feet to a Point; Thence N-00°-00'-00"-E, 536.15 feet to a Point 30.00 feet South of the South Right-of-way line of College Avenue, said Point being in the South line of lands of the Penn Central Railroad; Thence N-90°-00'-00"-W along said boundary and 30.00 feet South of and parallel to the South line of College Avenue, 1357.69 feet to the Point or Place of Beginning, containing 19.11 Acres, more or less.

Parcel 1B

All that certain Piece or Parcel of Land, situate, lying and being in the City of Niagara Falls, County of Niagara and State of New York, being Part of Lot 33, The Mile Reservation, and being more particularly bounded and described as follows:

Beginning at a Point in the West Right-of-way line of 15th Street (60' wide), 203.39 feet South of the South Right-of-way line of College Avenue (60' wide) (formerly Whirlpool Street), said Point being in the North line of Lot 33; Thence S-00°-06'-55"-E along said West Right-of-way line of 15th Street, 675.17 feet to a Point; Thence S-89°-55'-35"-W, 445.96 feet to a Point, said Point being 128.25 feet East of the East Right-of-way line of Highland Avenue (75' wide), as measured at right angles; Thence N-19°-44'-35"-E, 128.25 feet East of and parallel to Highland Avenue, 545.68 feet to a Point; Thence N-89°-59'-25"-W and parallel to the North line of Lot 33, 136.24 feet to a Point in the East Right-of-way line of Highland Avenue; Thence N-19°-44'-35"-E along said Right-of-way line, 172.30 feet to a Point in the North line of Lot 33; Thence S-89°-59'-25"-E along said North line of Lot 33, 338.31 feet to the Point or Place of Beginning, containing 5.53 Acres, more or less.

Total area of Parcel 1A and Parcel 1B is 24.64 Acres, more or less.

Parcel 2

All that certain Piece or Parcel of Land, situate, lying and being in the Town of Niagara, County of Niagara and State of New York, being Part of Lots 23 and 24, Township 13, Range 9 of the Holland Land Company's Survey and being more particularly bounded and described as follows:

Beginning at a Point in the East Right-of-way line of the new layout of Hyde Park Boulevard (width varies) at its intersection with the South line of lands of the Niagara Mohawk Power Corp., said Point being the Northeast corner of Hyde Park Boulevard taking P.A.S.B. 58-21 Map 180-Parcel 180; Thence S 18°-30'-18" E along said boundary, 423.55 feet to a Point; Thence S 15°-40'-57" E continuing along said boundary, 228.0 feet to a Point; Thence S 17°-06'-06" E continuing along said boundary 94.42 feet to a Point, said Point being the South east corner of said taking and the North west corner of lands of the Carborundum Company; Thence S 89°-53'-59" E along the North line of lands of the Carborundum Company, 890.27 feet to a Point in the Northeast corner of lands of the Carborundum Company; Thence S 01°-38'-33" E along said boundary, 255.66 feet to a Point in the North west corner of Portland Street, 50 feet wide; Thence N 90°-00'-00" E, 431.70 feet to a Point; Thence N 00°-10'-09" E, 1235.68 feet to a Point in the South line of lands of the Niagara Mohawk Power Corp.; Thence W 89°-49'-49" W along said boundary, 1243.18 feet to a Point; Thence S 49°-14'-45" W along said boundary, 414.16 feet to the Point or Place of Beginning, containing 34.75 Acres, more or less.

Tax Lots:

City of Niagara Falls

<u>Tax Map</u>	<u>Block</u>	<u>Lots</u>
-93	8	1. 2. 3
-84, 93, 94,	15	1. 2. 3. 21.
98, 99		22. 23
-84, 85, 94,	15	1. 2. 3. 6.
95, 99		7
-99	15	10

Town of Niagara

Tax Map No.

130.20-1-1
130.84-1-1

EXHIBIT B

PERMITTED ENCUMBRANCES

1. Reservations, limitations, covenants and conditions as set forth or referenced in (i) the Deed dated April 27, 1910 from The Niagara Falls Hydraulic Power and Manufacturing Company, which was recorded in Deed Book 349, Page 397 of the Niagara County Clerk's Office; (ii) the Deed dated June 30, 1917 from Hydraulic Power Company of Niagara Falls, which was recorded in Deed Book 403, Page 20 of the Niagara County Clerk's Office; (iii) the Deed dated June 14, 1918 from Hydraulic Power Company of Niagara Falls, which was recorded in Deed Book 424, Page 39 of the Niagara County Clerk's Office; (iv) the Deed dated October 30, 1918 from Hydraulic Power Company of Niagara Falls, which was recorded in Deed Book 338, Page 436, of the Niagara County Clerk's Office; and (v) the Deed dated July 24, 1934, from Aluminum Company of America, The Carborundum Company and Acheson Graphite Corporation, which was recorded in Deed Book 403, Page 43 of the Niagara County Clerk's Office.
2. Right, title and interest of Niagara Mohawk Power Corporation in and to Fifteenth Street, a private street, and of Niagara Mohawk Power Corporation and Consolidated Rail Corporation (or any other party claiming rights through a predecessor railroad) in and to a strip of land

30 feet wide lying between the Premises and the southerly line of Colloge Avenue, and any restrictions with respect to the use of said lands.

3. License Agreement dated June 3, 1932 with Niagara Mohawk Power Corporation permitting it to erect a transmission line across the Republic Plant.
4. Rights of The Carborundum Company to use a sidetrack located upon the Republic plant's site as set forth in certain letter agreements dated October 26, 1943 and November 7, 1943, respectfully.
5. Any utility or roadway easements and encumbrances.
6. Zoning, land use and building statutes, ordinances, regulations and restrictions.
7. Any state of facts which an inspection or any accurate survey of the Premises would show.
8. Ad valorem taxes and assessments not yet due and payable.
9. Waterline Easement to Town of Niagara dated December 19, 1986 (affects Parcel 2 only).

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof,

TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises,

Premise
TO HAVE AND TO HOLD the ~~premises~~ ^{premises} granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

This conveyance is made and accepted subject to those matters as set forth in Exhibit B attached hereto.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the ~~premises~~ ^{Premise} have been incumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.
IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

In presence of: Signed, sealed and delivered in the presence of:

John J. Tibley

Wm. B. J. Foster

UNION CARBIDE CORPORATION

By V. E. Lawrence
Vice President

By Wm. B. J. Foster
Assistant Secretary



LIB 2046 PRE 34

STATE OF NEW YORK, COUNTY OF

On the day of 19 before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

Connecticut

STATE OF NEW YORK, COUNTY OF Fairfield.

On the 22nd day of December 1986 before me personally came VE. SONNENBERG to me known, who, being by me duly sworn, did depose and say that he resides at No. 45 Houghtstone Dr., Brookfield Center, CT 06803 that he is the Vice President

of Union Carbide Corporation, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that he signed his name thereto by like order.

Sara L. Hodge
Notary Public

SARA L. HODGE
NOTARY PUBLIC
My Commission expires March 31, 1991

Bargain and Sale Deed

WITH COVENANT AGAINST GRANTOR'S ACTS

TITLE NO

TO

SECTION

BLOCK

LOT

COUNTY OR TOWN

Recorded at Request of
CHICAGO TITLE INSURANCE COMPANY

Return by Mail to

STANDARD FORM OF NEW YORK DEED OF TITLE INSURANCE

Distributed by

CHICAGO TITLE
INSURANCE COMPANY

By

RESERVE THIS SPACE FOR USE OF RECORDING OFFICE

REC-11 FEB 11 1987

STATE OF NEW YORK
COUNTY OF NIAGARA

Recorded on the 11th day of February A.D. 1987
12:00 o'clock P.M. in Liber 2046 of Deeds

By Richard G. Borgen

Richard G. Borgen, Esq.
445 Third Street
Niagara Falls, New York 14301

APPENDIX 2

COAL TAR PITCH MSDS

ARISTECH CODE NO. C1042D

ORIGINAL ISSUE DATE: 11/6/85

REVISED: 10/88

Coal Tar Pitch
I. IDENTIFICATION

PRODUCT NAME: Coal Tar Pitch
 COMMON NAME(S): Binder Pitch, Electrode Pitch
 DOT HAZARD CLASS: ORM-E
 UN/NA NO. NA 9188
 DOT SHIPPING NAME: Hazardous Substance, Solid,
 n.o.s. (contains benzo(a)pyrene)

ARISTECH INFORMATION & EMERGENCY TELEPHONE NUMBERS
 (412) 433-7654 (8 a.m. - 5 p.m., Mon. - Fri.)
 (412) 433-5811 (Off Hour Emergencies)

FORMULA:

Complex mixture of aromatic hydrocarbons

MANUFACTURER:

Aristech Chemical Corporation
 600 Grant St.
 Pittsburgh, PA 15230-0250

II. INGREDIENTS AND RECOMMENDED OCCUPATIONAL EXPOSURE LIMITS

COMPONENT	% WT.	CAS NO.	EXPOSURE LIMITS		HAZARD DATA
			OSHA-PEL	ACGIH-TLV	
Coal Tar Pitch See page 3 for typical compositional analysis and SARA Section 313 information.	100	65996-93-2	0.2 mg/m ³ (CTPV, benzene soluble fraction)	0.2 mg/m ³ (CTPV, benzene soluble fraction)	DANGER! CANCER HAZARD! Harmful if inhaled or absorbed through the skin. PHOTO TOXIC COMBUSTIBLE

III. PHYSICAL DATA

BOILING POINT (°F.) Initial	Greater than 450	SPECIFIC GRAVITY (H ₂ O = 1)	Greater than 1.2
SOFTENING POINT (°F)	Approx. 110-130	PERCENT, VOLATILE BY VOLUME (%)	Negligible (at ambient temp.)
VAPOR PRESSURE (mm Hg.)	0.075 PSIA @ 440°F	pH	Not Applicable
VAPOR DENSITY (AIR = 1)	Greater Than 1	SOLUBILITY IN WATER	Negligible

APPEARANCE AND ODOR:

Black solid; no odor at ambient temperature; aromatic after melting

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (method used)	FLAMMABLE LIMITS	Lel	Uel
Greater than 200°F (Closed Cup)		Not Known	

EXTINGUISHING MEDIA

Steam, water fog, carbon dioxide, foam, dry chemical and sand

SPECIAL FIRE FIGHTING PROCEDURES Water fog or foam may cause frothing and eruptions. Self-contained respiratory equipment and full protective clothing should be worn when fumes and/or smoke are present.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fine pitch dust is as explosive as coal dust. Molten pitch at elevated temperature will burn.

V. REACTIVITY DATA

Stability	Unstable	X	CONDITIONS TO AVOID: None Known
	Stable		

INCOMPATIBILITY (materials to avoid)

None Known

HAZARDOUS DECOMPOSITION PRODUCTS

Toxic fumes may be emitted during uncontrolled burning.

Hazardous Polymerization	May Occur	X	CONDITIONS TO AVOID: None Known
	Will Not Occur		

VI. SPILL OR LEAK PROCEDURES

TRANSPORTATION EMERGENCIES
 Call CHEMTREC 800-424-9300

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED:

Release or spillage of solid can be treated as a coal spillage and recovery made avoiding skin and eye irritation. If hot liquid is spilled, contain with absorbent solids, such as sand, earth, etc. Allow to cool, scrape up and dispose. Avoid contact with hot liquid and fumes.

In case of release to the environment, report spills to 800-424-8802, The National Response Center.

WASTE DISPOSAL METHOD:

EPA Waste Identification No. None Applicable

Dispose of in accordance with local, state and federal regulations.

For hazardous waste regulations call 800-424-9346, the RCRA Hotline.

VII. HEALTH HAZARD DATA Coal Tar Pitches

EFFECTS OF OVEREXPOSURE:

INHALATION: Acute respiratory effects caused by over-exposure to coal tar pitch volatiles may include coughing, sneezing and swollen or irritated nasal mucosa and sinuses. Short-term exposures may also cause transient photosensitization. **SKIN CONTACT:** Exposure to coal tar pitch can cause skin irritation and phototoxic reactions characterized by skin burning, itching, swelling and redness following exposure to sunlight or ultraviolet light. Intimate skin contact without adequate personal hygiene can cause acne, folliculitis and more serious skin disorders. **EYE CONTACT:** Vapors or mists may cause eye irritation, burning, lacrimation and conjunctivitis. **CHRONIC TOXICITY:** See Section IX — Other Comments. **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with chronic respiratory disorders (i.e., asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any fume or airborne particulate matter exposure.

MAJOR EXPOSURE HAZARD

☒ INHALATION ☒ SKIN CONTACT ☐ EYE CONTACT ☐ INGESTION

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Immediately remove victim to uncontaminated area. If not breathing, administer artificial respiration and/or oxygen. Seek medical aid.

SKIN CONTACT: Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical aid. Molten pitch (350°F-450°F) is a severe burn hazard.

EYE CONTACT: Flush with large amounts of water for 15 minutes. Seek medical aid.

INGESTION: Immediately seek medical aid.

VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY: Respiratory protection approved by NIOSH/MSHA for protection against organic vapors and dust should be used to avoid inhalation of excessive air contaminants. Appropriate respirator selection depends on the type and magnitude of exposure.

SKIN: Chemical resistance data for barrier materials used should be determined based on the use of this product. Polyvinyl alcohol and Viton protective garments have been suggested for protection against materials of this chemical class (ACGIH Guidelines for the Selection of Chemical Protective Clothing, 1983). Full body covering clothing should be used to prevent skin contact.

EYE: Employees should be required to wear chemical safety glasses to prevent eye contact. A faceshield should be used when appropriate to prevent contact with splashed materials.

VENTILATION: Local exhaust ventilation should be used to control the emission of air contaminants. General dilution ventilation may assist with the reduction of air contaminant concentrations.

OTHER PROTECTIVE EQUIPMENT: Emergency eye wash stations and deluge safety showers should be available in the work area.

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

If fumes and dust are present, avoid sparks or open flame.

OTHER COMMENTS:

Avoid prolonged or repeated contact with skin. A complete soap and water shower should be taken at the end of each working day. A complete change of work clothes should be used each day if contaminated. **CHRONIC EFFECTS** — Based on a review of available toxicology and epidemiologic evidence, coal tar pitch and related products are carcinogenic. IARC 35:140 considers that sufficient evidence exists that coal tar pitches are carcinogenic in humans. Chemical analysis of coal tar pitch indicates the presence of a large number of known carcinogens as well as several agents known to enhance the effect of chemical carcinogens. Occupations in which there is contact with pitch, tar, tar products and related vapors have been associated with various types of cancer including skin carcinomas, lung, lip and kidney tumors (NIOSH Criteria Document for Exposure to Coal Tar Products (1977); ACGIH Documentation of the TLVs (1986), IARC 35 (1985)).

Page 3

ARISTECH MATERIAL SAFETY DATA SHEET

ARISTECH Code No. C1043C

Product: Coal Tar Pitch

TYPICAL COAL TAR PITCH ANALYSIS

Name	Weight Percent	CAS No.
Dibenzothiophene	0.1	132-85-0
Phenanthrene	1.8	85-01-8
Anthracene***	0.6	120-12-7
Benzoquinolines	0.2	280-94-8
Carbazole	0.3	86-74-8
Fluoranthene	2.8	206-44-0
Pyrene	2.2	129-00-0
Benzofluoranthenes	2.0	
1,2-Benzanthracene	2.4	56-55-3
Chrysene	2.5	218-01-9
Benzo(e)pyrene	0.6	192-97-2
Benzo(a)pyrene	0.7	50-32-8
Perylene	0.2	198-97-2
Indenopyrene	0.2	193-39-5
High boiling residue* and other non-hazardous constituents	Balance	—

*A highly condensed fraction of the tar which remains after all light components have been distilled off. This portion is not readily amenable to analysis.

**CAS Nos.: 205-82-3, 207-08-9, 205-99-2

***Although Anthracene is a SARA Section 313 toxic chemical it is contained in the product at less than 1.0%.

FOR INDUSTRIAL USE ONLY

COAL TAR PITCHES (POLYCYCLIC HYDROCARBON)

CANCER HAZARD. OVEREXPOSURE MAY CREATE CANCER RISK.

WARNING! HARMFUL IF INHALED. OVEREXPOSURE MAY CAUSE COUGHING, SNEEZING, AND/OR IRRITATION TO EYES AND NOSE. MAY CAUSE IRRITATION TO SKIN, ESPECIALLY WITH EXPOSURE TO SUNLIGHT.

AVOID CONTACT WITH EYES AND SKIN. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING. AVOID BREATHING VAPOR OR MIST.

SEE MATERIAL SAFETY DATA SHEET (MSDS) FOR MORE INFORMATION.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: IMMEDIATELY REMOVE VICTIM TO UNCONTAMINATED AREA. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION AND/OR OXYGEN. SEEK MEDICAL AID. SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER. EYE CONTACT: FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. SEEK MEDICAL AID. INGESTION: IMMEDIATELY SEEK MEDICAL AID.

SEE MATERIAL SAFETY DATA SHEET (MSDS) FOR MORE INFORMATION.



PO BOX 206 (MSDS) PITTSBURGH, PA 15200

INFORMATION AND EMERGENCY TELEPHONE NUMBERS

(412) 433-6840 (9 AM TO 5 PM, MONDAY - FRIDAY)

(412) 433-5811 (OFF-HOUR EMERGENCIES)

KEEP OUT OF REACH OF CHILDREN

APPENDIX 3

LABORATORY RESULTS

(DATA SUMMARY AND QUALITY ASSURANCE NARRATIVE)



COMPUCHEM
LABORATORIES, INC.

P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

02/AUG/90

EnSafe
Attn.Mr. Phillip G. Coop
P.O.Box 341315(Zip-38184-1315)
5705 Stage Rd./Suite 212
Memphis, TN 38134

ACCOUNT #: 178201

CC#	SAMPLE-ID	RECEIPT DATE
352335	ALLOY-SS1	6/30/90
352339	ALLOY-FLR	6/30/90
352340	ALLOY-PIT	6/30/90

TOTAL NUMBER OF SAMPLES = 3

I. SAMPLE DATA SUMMARY PACKAGE

The Sample Data Summary Package shall contain data for samples in one Sample Delivery Group of the Case , as follows :

1. Case Narrative
2. By fraction (VOA , SV , PEST) and by sample within each fraction - tabulated target compound results (Form I) and tentatively identified compounds (Form I , TIC) (VOA and SV only)
3. By fraction (VOA , SV , PEST) - surrogate spike analysis results (Form II) by matrix (Water and / or Soil) and for soil , by concentration (Low or Medium)
4. By fraction (VOA , SV , PEST) - matrix spike / matrix spike duplicate results (Form III)
5. By fraction (VOA , SV , PEST) - blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I , TIC) (VOA and SV only)
6. By fraction (VOA and SV only) - internal standard area data (Form VIII)

CASE#: 20688 SDG#: 01 SAS#: _____

1. Case Narrative



COMPUCHEM
LABORATORIES

CASE NARRATIVE--CASE# 20688
Contract# 2-88 (REVS) SDG# 01
CompuChem Laboratories, Inc.

Sample Numbers: ALLOY-FLR, ALLOY-PIT, ALLOYSS1

This portion of Case# 20688 consisted of 3 soil samples for semivolatile only analysis. The samples were received intact on 6-29-90 in properly sealed shipping containers with chain-of-custody documents. The pH values of the samples were within the range specified in EPA protocols. Moisture content of the samples ranged from 9% to 38%.

SEMIVOLATILES:

Samples ALLOY-FLR, ALLOY-FLRDL, ALLOY-FLRDLMS, and ALLOY-FLRDLMSD were extracted outside of holding time requirements. This sample presented problems during extraction because of its tar-like nature and required a medium level extraction and analysis. All other samples were extracted and analyzed within holding time requirements. Each sample contained many TCL compounds, some at very high levels. Tentatively identified compounds were found in all the samples. Samples ALLOY-FLR was initially analyzed as a medium level at a 2:1 dilution. Several compounds exceeded the multipoint range of the instrument. The sample was reanalyzed at a 200:1 dilution and both analyses were reported due to the loss of some compounds in the higher dilution. Sample ALLOY-PIT was initially analyzed as a low level without dilution. Several compounds exceeded the multipoint range of the instrument and the sample was reanalyzed at a 5:1 dilution. Both analyses were reported due to the loss of some data in the dilution. Sample ALLOY-SS1 would concentrate only to 10ml in the low level extraction procedure instead of the normal 0.9ml and then required a 10:1 dilution due to the viscosity of the extract. Several compounds still exceeded the multipoint range in this analysis (equivalent to 111:1) and the sample was reanalyzed at a 200:1 dilution (equivalent to 2220:1). Both analyses were reported due to the loss of some compounds in the higher dilution. Surrogate recoveries for ALLOY-SS1, ALLOY-SS1DL, ALLOY-FLRDL, and ALLOY-FLRDLMS/MSD were not available due to the required dilutions. Low level QC matrix spike/matrix spike duplicate results were acceptable. The recoveries of pyrene exceeded QC limits in the MS/MSD. Spike recovery data were not available for the medium level MS/MSD due to the required dilution level. The associated medium level blank spike data was reported and met all QC requirements.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Janet G. Livingston 8-2-90
Janet G. Livingston 8-2-90
Sr. Quality Assurance Specialist



DATA REPORTING QUALIFIERS

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed but not detected. The sample Quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U}) \times df}{D} \quad \text{Where } D = \frac{100 - \% \text{ Moisture}}{100}$$

and df = dilution factor

$$\text{At 24\% moisture, } D = \frac{100 - 24}{100} = 0.76$$

$$\frac{(330 \text{ U}) \times 10}{0.76} = 4300 \text{ U rounded to the appropriate number of significant figures}$$

For soil sample subjected to GCP clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/l, but a concentration is 3 ug/l is calculated, report it as 3J. The Sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/l and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.



DATA REPORTING QUALIFIERS - PAGE 2

- C - This flag applies to pesticides results where the identification has been confirmed by GC/MS. Single Component pesticides ≥ 10 ng/ul in the final extract shall be confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, The "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that TIC is a suspected aldol-condensation product.
- X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.



CHANGES TO THE EPA'S ORGANIC STATEMENT OF
WORK (SOW) FOR THE CONTRACT LABORATORY PROGRAM (CLP)

Effective with samples received at CompuChem Laboratories, Inc. on April 3, 1989, the new "SOW for Organics Analysis; Multi-Media, Multi-Concentration" will be in effect. The new SOW is dated 2/88 with revisions dated 9/88.

EPA introduces modifications to the CLP SOW for a variety of reasons. They are:

- as a result of technical caucuses attended by representatives from EPA regional laboratories and the CLP, new or modified analytical methods are required,
- as a result of analytical data being supplied to the Agency by the CLP laboratories, QC acceptance criteria are updated and made a requirement of the program,
- as a result of requirements by the end users of the data (the EPA regions and the Program Office), changes to the deliverable requirements of the CLP are necessary.

As a service to our clients utilizing the EPA CLP SOW for their analytical needs, the following information is provided to point out the substantive changes between the new SOW and the previous one (10/86 with revisions through 8/87).

"KEY" CHANGES TO THE ORGANIC SOW

- 1) Wide bore capillary columns (internal diameter greater than 0.32 mm) are allowed for pesticide/PCB analysis in addition to packed columns. Fused silica capillary columns remain an optional confirmation column.



- 2) The Sample Data Summary Package (SDSP) was introduced in the 10/86 SOW. The SDSP consists of copies of specific summary forms. In the 2/88 SOW, Form VIII, the Internal Standard Area Summary Form for volatile and semi-volatile analyses, has been added to the SDSP. Form VIII for volatiles and semi-volatiles is also to be included in the QC Summary Package.
- 3) A clarification for dealing with the three xylene isomers has been added. For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak exceeds 200 ug/l.
- 4) The volatile target analyte, 2-butanone, is to be quantified against the first internal standard, bromochloromethane. In the prior SOW, 2-butanone was quantified against the second internal standard, 1,4-difluorobenzene.
- 5) Turnaround time for the delivery of data has been lowered from 40 days to 35 days for routine analytical service (RAS) work associated with the Superfund program. The turnaround time is calculated from the Validated Time of Sample Receipt (VTSR) of the last sample in the Sample Delivery Group (SDG).

The above represents the major changes in the new organic SOW for EPA's CLP. There are, of course, other minor changes which have not been addressed in this announcement. Of note, the hardcopy deliverable forms have not changed and, in fact, retain the same revision dates as the prior SOW.

If there are any questions concerning the information presented, please feel free to contact your account administrator at 1-800-833-5097.

Robert E. Meierer
Vice President of Quality Assurance



DETECTION LIMIT CALCULATION CLARIFICATION

To protect our GC columns from unnecessary contamination, soil samples prepared according to Caucus Protocol methods are routinely diluted 5:1. Through a series of experiments we have determined that our Instrument Detection Limit for pesticides is 5X lower than the EPA Contract Required Quantitation Limit (CRQL). We, therefore, only adjust our detection limits if the dilution necessary to analyze the sample is greater than 5:1. If the sample is diluted by a factor of X the detection limit is adjusted by X/5 instead of X.

Doug McCormack

Doug McCormack
Manager, GC Laboratory

Robert E. Meierer

Robert E. Meierer
Vice - President, Quality Assurance



COMPUCHEM
LABORATORIES, INC.

QUALITY ASSURANCE NOTICE

With the advent of the new organics Statement of Work (SOW 2/88, Revision: 9/88) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in CompuChem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer
Director of Quality Assurance



COMPUCHEM
LABORATORIES, INC.

QUALITY ASSURANCE NOTICE

Specific guidelines are presented in the EPA CLP Organic Statement of Work for the positive qualitative identification of compounds through mass spectral interpretation. Applying these guidelines absolutely may not be possible when the nature of the sample is less than pure reference material. Where the mass spectral pattern of a compound to be identified demonstrates interferences or coelution from one or more additional compounds, either unknowns, internal standards, or surrogate standards, the "+" sign is added to the top of the dual spectra page.

Linda Fowler 4/10/89
Linda Fowler
Sr. Quality Assurance Specialist

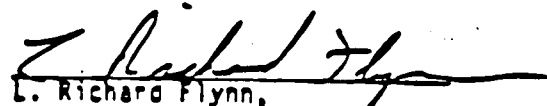
Robert E. Meierer 4/12/89
Robert E. Meierer
Vice President, Quality Assurance



COMPUCHEM
LABORATORIES, INC.

LABORATORY NOTICE

On June 15, 1985 CompuChem Laboratories began adding D3-2,4-Dinitrophenol to all standards and samples. The purpose of this addition is to enable the laboratory to have higher and more consistent analytical sensitivity for the native 2,4-Dinitrophenol. The peak corresponding to the deuterated analog is clearly labeled on each RIC as D3#1 and will not be searched and reported as a tentatively identified compound (TIC). This compound is not being used as an internal or surrogate standard.


L. Richard Flynn,
Development Chemist


Bob Meierer,
Director of Quality Assurance

2. By fraction (VOA, SV, PEST) and by sample within each fraction - tabulated target compound results (Form I) and tentatively identified compounds (Form I, TIC) (VOA and SV only)

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-FLR

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352339
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: GDJ52339A04
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/10/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2-----	Phenol	740000	
111-44-4-----	bis(2-Chloroethyl) Ether	64000	U
95-57-8-----	2-Chlorophenol	64000	U
541-73-1-----	1,3-Dichlorobenzene	64000	U
106-46-7-----	1,4-Dichlorobenzene	64000	U
100-51-6-----	Benzyl Alcohol	64000	U
95-50-1-----	1,2-Dichlorobenzene	64000	U
95-48-7-----	2-Methylphenol	210000	
39638-32-9-----	bis(2-Chloroisopropyl) Ether	64000	U
106-44-5-----	4-Methylphenol	740000	
621-64-7-----	N-Nitroso-Di-n-Propylamine	64000	U
67-72-1-----	Hexachloroethane	64000	U
98-95-3-----	Nitrobenzene	64000	U
78-59-1-----	Isophorone	64000	U
88-75-5-----	2-Nitrophenol	64000	U
105-67-9-----	2,4-Dimethylphenol	260000	
65-85-0-----	Benzoic Acid	310000	U
111-91-1-----	bis(2-Chloroethoxy) Methane	64000	U
120-83-2-----	2,4-Dichlorophenol	64000	U
120-82-1-----	1,2,4-Trichlorobenzene	64000	U
91-20-3-----	Naphthalene	7000000	E
106-47-8-----	4-Chloroaniline	64000	U
87-68-3-----	Hexachlorobutadiene	64000	U
59-50-7-----	4-Chloro-3-Methylphenol	64000	U
91-57-6-----	2-Methylnaphthalene	3700000	E
77-47-4-----	Hexachlorocyclopentadiene	64000	U
88-06-2-----	2,4,6-Trichlorophenol	64000	U
95-95-4-----	2,4,5-Trichlorophenol	310000	U
91-58-7-----	2-Chloronaphthalene	64000	U
88-74-4-----	2-Nitroaniline	310000	U
131-11-3-----	Dimethyl Phthalate	64000	U
208-96-8-----	Acenaphthylene	3300000	E
606-20-2-----	2,6-Dinitrotoluene	64000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-FLR

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352339
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: GDJ52339A04
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/10/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	310000	U
83-32-9-----	Acenaphthene	2200000	E
51-28-5-----	2,4-Dinitrophenol	310000	U
100-02-7-----	4-Nitrophenol	310000	U
132-64-9-----	Dibenzofuran	4300000	E
121-14-2-----	2,4-Dinitrotoluene	64000	U
84-66-2-----	Diethylphthalate	64000	U
7005-72-3-----	4-Chlorophenyl-phenylether	64000	U
86-73-7-----	Fluorene	570000	
100-01-6-----	4-Nitroaniline	310000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	310000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	64000	U
101-55-3-----	4-Bromophenyl-phenylether	64000	U
118-74-1-----	Hexachlorobenzene	64000	U
87-86-5-----	Pentachlorophenol	310000	U
85-01-8-----	Phenanthrene	15000000	E
120-12-7-----	Anthracene	3800000	E
84-74-2-----	Di-n-Butylphthalate	64000	U
206-44-0-----	Fluoranthene	23000000	E
129-00-0-----	Pyrene	17000000	E
85-68-7-----	Butylbenzylphthalate	64000	U
91-94-1-----	3,3'-Dichlorobenzidine	130000	U
56-55-3-----	Benzo(a)Anthracene	11000000	E
218-01-9-----	Chrysene	6400000	E
117-81-7-----	bis(2-Ethylhexyl)Phthalate	64000	U
117-84-0-----	Di-n-Octyl Phthalate	64000	U
205-99-2-----	Benzo(b)Fluoranthene	15000000	EX
207-08-9-----	Benzo(k)Fluoranthene	15000000	EX
50-32-8-----	Benzo(a)Pyrene	9500000	E
193-39-5-----	Indeno(1,2,3-cd)Pyrene	3700000	E
53-70-3-----	Dibenz(a,h)Anthracene	1000000	
191-24-2-----	Benzo(g,h,i)Perylene	3500000	E

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ALLOY-FLR

Lab Name: COMPUCHEM RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352339
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: GDJ52339A04
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/10/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 2.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1-METHYLNAPHTHALENE	9.85	2700000	J
2.	UNKNOWN PAH	10.32	1900000	J
3.	DIMETHYLNAPHTHALENE	10.64	1600000	J
4.	UNKNOWN	11.89	10000000	J
5.	UNKNOWN PNA	12.05	2100000	J
6.	UNKNOWN PNA	12.17	3200000	J
7. 132-65-0	DIBENZOTHIOPHENE	13.00	5400000	J
8.	UNKNOWN	13.47	4800000	J
9.	METHYLANTHRACENE	13.85	4500000	J
10.	UNKNOWN PAH	14.00	6500000	J
11.	PHENYLNAPHTHALENE	14.19	1900000	J
12.	UNKNOWN	14.80	9700000	J
13.	UNKNOWN	15.15	7100000	J
14. 3442-78-2	PYRENE, 2-METHYL-	15.40	2100000	J
15.	UNKNOWN	15.59	3200000	J
16.	UNKNOWN	15.70	4800000	J
17.	UNKNOWN PAH	15.94	1500000	J
18.	UNKNOWN PAH	16.67	2100000	J
19.	UNKNOWN PAH	16.75	1700000	J
20.	UNKNOWN	15.45	540000	J

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-FLRDL

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352339
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: G3D52339B04
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/10/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 200

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2-----	Phenol	6400000	U
111-44-4-----	bis(2-Chloroethyl) Ether	6400000	U
95-57-8-----	2-Chlorophenol	6400000	U
541-73-1-----	1,3-Dichlorobenzene	6400000	U
106-46-7-----	1,4-Dichlorobenzene	6400000	U
100-51-6-----	Benzyl Alcohol	6400000	U
95-50-1-----	1,2-Dichlorobenzene	6400000	U
95-48-7-----	2-Methylphenol	6400000	U
39638-32-9-----	bis(2-Chloroisopropyl) Ether	6400000	U
106-44-5-----	4-Methylphenol	6400000	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	6400000	U
67-72-1-----	Hexachloroethane	6400000	U
98-95-3-----	Nitrobenzene	6400000	U
78-59-1-----	Isophorone	6400000	U
88-75-5-----	2-Nitrophenol	6400000	U
105-67-9-----	2,4-Dimethylphenol	6400000	U
65-85-0-----	Benzoic Acid	31000000	U
111-91-1-----	bis(2-Chloroethoxy) Methane	6400000	U
120-83-2-----	2,4-Dichlorophenol	6400000	U
120-82-1-----	1,2,4-Trichlorobenzene	6400000	U
91-20-3-----	Naphthalene	35000000	D
106-47-8-----	4-Chloroaniline	6400000	U
87-68-3-----	Hexachlorobutadiene	6400000	U
59-50-7-----	4-Chloro-3-Methylphenol	6400000	U
91-57-6-----	2-Methylnaphthalene	4400000	DJ
77-47-4-----	Hexachlorocyclopentadiene	6400000	U
88-06-2-----	2,4,6-Trichlorophenol	6400000	U
95-95-4-----	2,4,5-Trichlorophenol	31000000	U
91-58-7-----	2-Chloronaphthalene	6400000	U
88-74-4-----	2-Nitroaniline	31000000	U
131-11-3-----	Dimethyl Phthalate	6400000	U
208-96-8-----	Acenaphthylene	6300000	DJ
606-20-2-----	2,6-Dinitrotoluene	6400000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM, RTP

Contract: (2-88)-REVS

ALLOY-FLRDL

Lab Code: COMPU

Case No.: 20688

SAS No.: _____

SDG No.: 01

Matrix: (soil/water) SOIL

Lab Sample ID: 352339

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: G3D52339B04

Level: (low/med) MED

Date Received: 06/29/90

% Moisture: not dec. 38 dec. _____

Date Extracted: 07/10/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: 6.8

Dilution Factor: 200

CAS NO.

COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Q

99-09-2-----	3-Nitroaniline	31000000	U
83-32-9-----	Acenaphthene	6400000	U
51-28-5-----	2,4-Dinitrophenol	31000000	U
100-02-7-----	4-Nitrophenol	31000000	U
132-64-9-----	Dibenzofuran	11000000	D
121-14-2-----	2,4-Dinitrotoluene	6400000	U
84-66-2-----	Diethylphthalate	6400000	U
7005-72-3-----	4-Chlorophenyl-phenylether	6400000	U
86-73-7-----	Fluorene	20000000	D
100-01-6-----	4-Nitroaniline	31000000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	31000000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	6400000	U
101-55-3-----	4-Bromophenyl-phenylether	6400000	U
118-74-1-----	Hexachlorobenzene	6400000	U
87-86-5-----	Pentachlorophenol	31000000	U
85-01-8-----	Phenanthrene	74000000	D
120-12-7-----	Anthracene	16000000	D
84-74-2-----	Di-n-Butylphthalate	6400000	U
206-44-0-----	Fluoranthene	69000000	D
129-00-0-----	Pyrene	6400000	U
85-68-7-----	Butylbenzylphthalate	6400000	U
91-94-1-----	3,3'-Dichlorobenzidine	13000000	U
56-55-3-----	Benzo(a)Anthracene	16000000	D
218-01-9-----	Chrysene	14000000	D
117-81-7-----	bis(2-Ethylhexyl)Phthalate	6400000	U
117-84-0-----	Di-n-Octyl Phthalate	6400000	U
205-99-2-----	Benzo(b)Fluoranthene	26000000	DX
207-08-9-----	Benzo(k)Fluoranthene	26000000	DX
50-32-8-----	Benzo(a)Pyrene	14000000	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	3500000	DJ
53-70-3-----	Dibenz(a,h)Anthracene	930000	DJ
191-24-2-----	Benzo(g,h,i)Perylene	3500000	DJ

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ALLOY-FLRDL

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352339
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: G3D52339B04
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/10/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 200

Number TICs found: 10 CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1-METHYLNAPHTHALENE	9.87	2600000	J
2. 132-65-0	DIBENZOTHIOPHENE	12.97	3200000	J
3.	UNKNOWN PNA	13.39	6500000	J
4.	METHYLANTHRACENE	13.79	5200000	J
5.	UNKNOWN	13.92	9700000	J
6.	UNKNOWN PNA	14.82	1300000	J
7.	BENZOFLUORENE	15.45	3200000	J
8.	BENZOFLUORENE	15.55	3900000	J
9.	BENZOPYRENE	20.12	2600000	J
10.	BENZOFLUORANTHENE	20.74	6500000	J

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-PIT

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 352340

Sample wt/vol: 30.3 (g/mL) G Lab File ID: GH052340B08

Level: (low/med) LOW Date Received: 06/29/90

% Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2-----	Phenol	380	U
111-44-4-----	bis(2-Chloroethyl) Ether	380	U
95-57-8-----	2-Chlorophenol	380	U
541-73-1-----	1,3-Dichlorobenzene	380	U
106-46-7-----	1,4-Dichlorobenzene	380	U
100-51-6-----	Benzyl Alcohol	380	U
95-50-1-----	1,2-Dichlorobenzene	380	U
95-48-7-----	2-Methylphenol	380	U
39638-32-9-----	bis(2-Chloroisopropyl) Ether	380	U
106-44-5-----	4-Methylphenol	190	J
621-64-7-----	N-Nitroso-Di-n-Propylamine	380	U
67-72-1-----	Hexachloroethane	380	U
98-95-3-----	Nitrobenzene	380	U
78-59-1-----	Isophorone	380	U
88-75-5-----	2-Nitrophenol	380	U
105-67-9-----	2,4-Dimethylphenol	380	U
65-85-0-----	Benzoic Acid	1900	U
111-91-1-----	bis(2-Chloroethoxy)Methane	380	U
120-83-2-----	2,4-Dichlorophenol	380	U
120-82-1-----	1,2,4-Trichlorobenzene	380	U
91-20-3-----	Naphthalene	200	J
106-47-8-----	4-Chloroaniline	380	U
87-68-3-----	Hexachlorobutadiene	380	U
59-50-7-----	4-Chloro-3-Methylphenol	380	U
91-57-6-----	2-Methylnaphthalene	86	J
77-47-4-----	Hexachlorocyclopentadiene	380	U
88-06-2-----	2,4,6-Trichlorophenol	380	U
95-95-4-----	2,4,5-Trichlorophenol	1900	U
91-58-7-----	2-Chloronaphthalene	380	U
88-74-4-----	2-Nitroaniline	1900	U
131-11-3-----	Dimethyl Phthalate	380	U
208-96-8-----	Acenaphthylene	380	U
606-20-2-----	2,6-Dinitrotoluene	380	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS ALLOY-PIT

Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 352340

Sample wt/vol: 30.3 (g/mL) G Lab File ID: GH052340B08

Level: (low/med) LOW Date Received: 06/29/90

% Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	1900	U
83-32-9-----	Acenaphthene	1400	
51-28-5-----	2,4-Dinitrophenol	1900	U
100-02-7-----	4-Nitrophenol	1900	U
132-64-9-----	Dibenzofuran	350	J
121-14-2-----	2,4-Dinitrotoluene	380	U
84-66-2-----	Diethylphthalate	380	U
7005-72-3-----	4-Chlorophenyl-phenylether	380	U
86-73-7-----	Fluorene	790	
100-01-6-----	4-Nitroaniline	1900	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1900	U
86-30-6-----	N-Nitrosodiphenylamine (1)	380	U
101-55-3-----	4-Bromophenyl-phenylether	380	U
118-74-1-----	Hexachlorobenzene	380	U
87-86-5-----	Pentachlorophenol	1900	U
85-01-8-----	Phenanthrene	6900	E
120-12-7-----	Anthracene	1300	
84-74-2-----	Di-n-Butylphthalate	380	U
206-44-0-----	Fluoranthene	14000	E
129-00-0-----	Pyrene	15000	E
85-68-7-----	Butylbenzylphthalate	380	U
91-94-1-----	3,3'-Dichlorobenzidine	770	U
56-55-3-----	Benzo(a)Anthracene	8500	E
218-01-9-----	Chrysene	7800	E
117-81-7-----	bis(2-Ethylhexyl) Phthalate	290	J
117-84-0-----	Di-n-Octyl Phthalate	380	U
205-99-2-----	Benzo(b) Fluoranthene	16000	EX
207-08-9-----	Benzo(k) Fluoranthene	16000	EX
50-32-8-----	Benzo(a) Pyrene	8400	E
193-39-5-----	Indeno(1,2,3-cd) Pyrene	2600	
53-70-3-----	Dibenz(a,h) Anthracene	800	
191-24-2-----	Benzo(g,h,i) Perylene	2900	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.:

ALLOY-PIT

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352340
 Sample wt/vol: 30.3 (g/mL) G Lab File ID: GH052340B08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90
 GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

Number TICs found: 21

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	BENZOFUORENE	16.17	3300	J
2.	BENZOFUORENE	16.27	3600	J
3.	UNKNOWN	16.37	1400	J
4.	SOLVENT CONTAMINANT	16.52	2600	BJ
5.	UNKNOWN	16.92	3000	J
6.	BENZONAPHTHOTHIOPHENE	17.09	7000	J
7.	UNKNOWN PAH	17.17	5000	J
8.	UNKNOWN PAH	17.65	2200	J
9.	UNKNOWN	17.75	1700	J
10.	UNKNOWN	17.82	3100	J
11.	UNKNOWN PAH	18.14	2500	J
12.	UNKNOWN	18.19	1000	J
13.	UNKNOWN	18.32	3500	J
14.	UNKNOWN	18.44	2600	J
15.	UNKNOWN	18.50	2600	J
16.	BENZOFUORANTHENE	19.79	2000	J
17.	UNKNOWN	20.12	2100	J
18.	BENZOFUORANTHENE	20.25	6200	J
19.	BENZOFUORANTHENE	20.60	1700	J
20.	UNKNOWN	22.19	6200	J
21.	UNKNOWN	22.67	3600	J

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-PITDL

Lab Name: COMPUCHEM.RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352340
 Sample wt/vol: 30.3 (g/mL) G Lab File ID: GD052340A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2	Phenol	1900	U
111-44-4	bis(2-Chloroethyl) Ether	1900	U
95-57-8	2-Chlorophenol	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
100-51-6	Benzyl Alcohol	1900	U
95-50-1	1,2-Dichlorobenzene	1900	U
95-48-7	2-Methylphenol	1900	U
39638-32-9	bis(2-Chloroisopropyl) Ether	1900	U
106-44-5	4-Methylphenol	1900	U
621-64-7	N-Nitroso-Di-n-Propylamine	1900	U
67-72-1	Hexachloroethane	1900	U
98-95-3	Nitrobenzene	1900	U
78-59-1	Isophorone	1900	U
88-75-5	2-Nitrophenol	1900	U
105-67-9	2,4-Dimethylphenol	1900	U
65-85-0	Benzoic Acid	9200	U
111-91-1	bis(2-Chloroethoxy) Methane	1900	U
120-83-2	2,4-Dichlorophenol	1900	U
120-82-1	1,2,4-Trichlorobenzene	1900	U
91-20-3	Naphthalene	1900	U
106-47-8	4-Chloroaniline	1900	U
87-68-3	Hexachlorobutadiene	1900	U
59-50-7	4-Chloro-3-Methylphenol	1900	U
91-57-6	2-Methylnaphthalene	1900	U
77-47-4	Hexachlorocyclopentadiene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	9200	U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	9200	U
131-11-3	Dimethyl Phthalate	1900	U
208-96-8	Acenaphthylene	1900	U
606-20-2	2,6-Dinitrotoluene	1900	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-PITDL

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352340
 Sample wt/vol: 30.3 (g/mL) G Lab File ID: GD052340A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 5.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	9200	U
83-32-9-----	Acenaphthene	1100	DJ
51-28-5-----	2,4-Dinitrophenol	9200	U
100-02-7-----	4-Nitrophenol	9200	U
132-64-9-----	Dibenzofuran	240	DJ
121-14-2-----	2,4-Dinitrotoluene	1900	U
84-66-2-----	Diethylphthalate	1900	U
7005-72-3-----	4-Chlorophenyl-phenylether	1900	U
86-73-7-----	Fluorene	590	DJ
100-01-6-----	4-Nitroaniline	9200	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	9200	U
86-30-6-----	N-Nitrosodiphenylamine (1)	1900	U
101-55-3-----	4-Bromophenyl-phenylether	1900	U
118-74-1-----	Hexachlorobenzene	1900	U
87-86-5-----	Pentachlorophenol	9200	U
85-01-8-----	Phenanthrene	6600	D
120-12-7-----	Anthracene	1600	DJ
84-74-2-----	Di-n-Butylphthalate	1900	U
206-44-0-----	Fluoranthene	14000	D
129-00-0-----	Pyrene	11000	D
85-68-7-----	Butylbenzylphthalate	1900	U
91-94-1-----	3,3'-Dichlorobenzidine	3800	U
56-55-3-----	Benzo(a)Anthracene	8800	D
218-01-9-----	Chrysene	6900	D
117-81-7-----	bis(2-Ethylhexyl) Phthalate	230	DJ
117-84-0-----	Di-n-Octyl Phthalate	1900	U
205-99-2-----	Benzo(b)Fluoranthene	14000	DX
207-08-9-----	Benzo(k)Fluoranthene	14000	DX
50-32-8-----	Benzo(a)Pyrene	7600	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	3200	D
53-70-3-----	Dibenz(a,h)Anthracene	1000	DJ
191-24-2-----	Benzo(g,h,i)Perylene	3600	D

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ALLOY-PITDL

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352340
 Sample wt/vol: 30.3 (g/mL) G Lab File ID: GD052340A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 5.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN OXYGENATED HYDROCARB	13.85	2100	J
2.	CYCLOPENTAPHENANTHRENE	14.50	960	J
3.	TETRAMETHYLBUTYLPHENOXYETHAN	15.50	770	J
4.	BENZOFLUORENE	16.17	1300	J
5.	BENZOFLUORENE	16.25	1500	J
6.	BENZONAPHTHOTHIOPHENE	17.07	2900	J
7.	UNKNOWN PAH	17.15	2300	J
8.	UNKNOWN PAH	17.62	1700	J
9.	UNKNOWN	17.74	770	J
10.	UNKNOWN	17.80	1300	J
11.	UNKNOWN PAH	18.10	1300	J
12.	UNKNOWN	18.30	1700	J
13.	UNKNOWN	18.40	1700	J
14.	UNKNOWN	18.47	1300	J
15.	BENZOFLUORANTHENE	19.74	1200	J
16.	UNKNOWN	20.09	960	J
17.	BENZFLUORANTHENE	20.20	4600	J
18.	UNKNOWN	22.17	2700	J
19.	UNKNOWN	22.67	1900	J
20.	UNKNOWN	23.30	1300	J

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-SS1

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352335
 Sample wt/vol: 30.2 (g/mL) G Lab File ID: GD052335B08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 9 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 110

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2-----	Phenol	13000	J
111-44-4-----	bis(2-Chloroethyl) Ether	40000	U
95-57-8-----	2-Chlorophenol	40000	U
541-73-1-----	1,3-Dichlorobenzene	40000	U
106-46-7-----	1,4-Dichlorobenzene	40000	U
100-51-6-----	Benzyl Alcohol	40000	U
95-50-1-----	1,2-Dichlorobenzene	40000	U
95-48-7-----	2-Methylphenol	40000	U
39638-32-9-----	bis(2-Chloroisopropyl) Ether	40000	U
106-44-5-----	4-Methylphenol	5500	J
621-64-7-----	N-Nitroso-Di-n-Propylamine	40000	U
67-72-1-----	Hexachloroethane	40000	U
98-95-3-----	Nitrobenzene	40000	U
78-59-1-----	Isophorone	40000	U
88-75-5-----	2-Nitrophenol	40000	U
105-67-9-----	2,4-Dimethylphenol	40000	U
65-85-0-----	Benzoic Acid	4700	J
111-91-1-----	bis(2-Chloroethoxy) Methane	40000	U
120-83-2-----	2,4-Dichlorophenol	40000	U
120-82-1-----	1,2,4-Trichlorobenzene	40000	U
91-20-3-----	Naphthalene	66000	
106-47-8-----	4-Chloroaniline	40000	U
87-68-3-----	Hexachlorobutadiene	40000	U
59-50-7-----	4-Chloro-3-Methylphenol	40000	U
91-57-6-----	2-Methylnaphthalene	43000	
77-47-4-----	Hexachlorocyclopentadiene	40000	U
88-06-2-----	2,4,6-Trichlorophenol	40000	U
95-95-4-----	2,4,5-Trichlorophenol	190000	U
91-58-7-----	2-Chloronaphthalene	40000	U
88-74-4-----	2-Nitroaniline	190000	U
131-11-3-----	Dimethyl Phthalate	40000	U
208-96-8-----	Acenaphthylene	140000	
606-20-2-----	2,6-Dinitrotoluene	40000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-SS1

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352335
 Sample wt/vol: 30.2 (g/mL) G Lab File ID: GD052335B08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 9 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 110

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	190000	U
83-32-9-----	Acenaphthene	180000	
51-28-5-----	2,4-Dinitrophenol	190000	U
100-02-7-----	4-Nitrophenol	190000	U
132-64-9-----	Dibenzofuran	410000	
121-14-2-----	2,4-Dinitrotoluene	40000	U
84-66-2-----	Diethylphthalate	40000	U
7005-72-3-----	4-Chlorophenyl-phenylether	40000	U
86-73-7-----	Fluorene	260000	
100-01-6-----	4-Nitroaniline	190000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	190000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	40000	U
101-55-3-----	4-Bromophenyl-phenylether	40000	U
118-74-1-----	Hexachlorobenzene	40000	U
87-86-5-----	Pentachlorophenol	190000	U
85-01-8-----	Phenanthrene	3900000	E
120-12-7-----	Anthracene	800000	E
84-74-2-----	Di-n-Butylphthalate	40000	U
206-44-0-----	Fluoranthene	6700000	E
129-00-0-----	Pyrene	5700000	E
85-68-7-----	Butylbenzylphthalate	40000	U
91-94-1-----	3,3'-Dichlorobenzidine	80000	U
56-55-3-----	Benzo(a)Anthracene	2400000	E
218-01-9-----	Chrysene	2700000	E
117-81-7-----	bis(2-Ethylhexyl) Phthalate	40000	U
117-84-0-----	Di-n-Octyl Phthalate	40000	U
205-99-2-----	Benzo(b) Fluoranthene	3300000	EX
207-08-9-----	Benzo(k) Fluoranthene	3300000	EX
50-32-8-----	Benzo(a) Pyrene	1200000	E
193-39-5-----	Indeno(1,2,3-cd) Pyrene	300000	
53-70-3-----	Dibenz(a,h) Anthracene	140000	
191-24-2-----	Benzo(g,h,i) Perylene	310000	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ALLOY-SS1

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352335
 Sample wt/vol: 30.2 (g/mL) G Lab File ID: GD052335B08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 9 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 110

Number TICs found: 20 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 486-25-9	9H-FLUOREN-9-ONE	13.39	250000	J
2. 132-65-0	DIBENZOTHIOPHENE	13.52	300000	J
3.	UNKNOWN	13.99	610000	J
4.	METHYLPHENANTHRENE	14.42	610000	J
5.	UNKNOWN	14.49	230000	J
6.	UNKNOWN	14.55	350000	J
7. 81-84-5	1,8-NAPHTHALIC ANHYDRIDE	15.27	340000	J
8.	UNKNOWN	15.67	810000	J
9.	UNKNOWN	15.79	2000000	J
10.	UNKNOWN	15.92	230000	J
11.	UNKNOWN	16.05	400000	J
12.	UNKNOWN	16.24	610000	J
13.	METHYLPYRENE & UNKNOWN	16.39	250000	J
14.	METHYLPYRENE & UNKNOWN	16.52	440000	J
15.	UNKNOWN	16.95	180000	J
16.	UNKNOWN	17.14	1100000	J
17.	UNKNOWN	17.77	220000	J
18.	UNKNOWN	17.89	290000	J
19.	UNKNOWN	18.17	310000	J
20.	BENZOFLUORANTHENE	20.35	610000	J

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-SS1DL

Lab Name: COMPUCHEM.RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352335
 Sample wt/vol: 30.2 (g/mL) G Lab File ID: GDJ52335A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 9 dec. Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 2200

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2-----	Phenol	810000	U
111-44-4-----	bis(2-Chloroethyl) Ether	810000	U
95-57-8-----	2-Chlorophenol	810000	U
541-73-1-----	1,3-Dichlorobenzene	810000	U
106-46-7-----	1,4-Dichlorobenzene	810000	U
100-51-6-----	Benzyl Alcohol	810000	U
95-50-1-----	1,2-Dichlorobenzene	810000	U
95-48-7-----	2-Methylphenol	810000	U
39638-32-9-----	bis(2-Chloroisopropyl) Ether	810000	U
106-44-5-----	4-Methylphenol	810000	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	810000	U
67-72-1-----	Hexachloroethane	810000	U
98-95-3-----	Nitrobenzene	810000	U
78-59-1-----	Isophorone	810000	U
88-75-5-----	2-Nitrophenol	810000	U
105-67-9-----	2,4-Dimethylphenol	810000	U
65-85-0-----	Benzoic Acid	3900000	U
111-91-1-----	bis(2-Chloroethoxy) Methane	810000	U
120-83-2-----	2,4-Dichlorophenol	810000	U
120-82-1-----	1,2,4-Trichlorobenzene	810000	U
91-20-3-----	Naphthalene	810000	U
106-47-8-----	4-Chloroaniline	810000	U
87-68-3-----	Hexachlorobutadiene	810000	U
59-50-7-----	4-Chloro-3-Methylphenol	810000	U
91-57-6-----	2-Methylnaphthalene	810000	U
77-47-4-----	Hexachlorocyclopentadiene	810000	U
88-06-2-----	2,4,6-Trichlorophenol	810000	U
95-95-4-----	2,4,5-Trichlorophenol	3900000	U
91-58-7-----	2-Chloronaphthalene	810000	U
88-74-4-----	2-Nitroaniline	3900000	U
131-11-3-----	Dimethyl Phthalate	810000	U
208-96-8-----	Acenaphthylene	130000	DJ
606-20-2-----	2,6-Dinitrotoluene	810000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-SS1DL

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352335
 Sample wt/vol: 30.2 (g/mL) G Lab File ID: GDJ52335A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 9 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 2200

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	3900000	U
83-32-9-----	Acenaphthene	170000	DJ
51-28-5-----	2,4-Dinitrophenol	3900000	U
100-02-7-----	4-Nitrophenol	3900000	U
132-64-9-----	Dibenzofuran	430000	DJ
121-14-2-----	2,4-Dinitrotoluene	810000	U
84-66-2-----	Diethylphthalate	810000	U
7005-72-3-----	4-Chlorophenyl-phenylether	810000	U
86-73-7-----	Fluorene	280000	DJ
100-01-6-----	4-Nitroaniline	3900000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	3900000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	810000	U
101-55-3-----	4-Bromophenyl-phenylether	810000	U
118-74-1-----	Hexachlorobenzene	810000	U
87-86-5-----	Pentachlorophenol	3900000	U
85-01-8-----	Phenanthrene	7700000	D
120-12-7-----	Anthracene	1700000	D
84-74-2-----	Di-n-Butylphthalate	810000	U
206-44-0-----	Fluoranthene	12000000	D
129-00-0-----	Pyrene	9000000	D
85-68-7-----	Butylbenzylphthalate	810000	U
91-94-1-----	3,3'-Dichlorobenzidine	1600000	U
56-55-3-----	Benzo(a)Anthracene	4000000	D
218-01-9-----	Chrysene	5600000	D
117-81-7-----	bis(2-Ethylhexyl)Phthalate	810000	U
117-84-0-----	Di-n-Octyl Phthalate	810000	U
205-99-2-----	Benzo(b)Fluoranthene	5000000	DX
207-08-9-----	Benzo(k)Fluoranthene	5000000	DX
50-32-8-----	Benzo(a)Pyrene	1800000	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	630000	DJ
53-70-3-----	Dibenz(a,h)Anthracene	280000	DJ
191-24-2-----	Benzo(g,h,i)Perylene	710000	DJ

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ALLOY-SS1DL

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352335
 Sample wt/vol: 30.2 (g/mL) G Lab File ID: GDJ52335A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 9 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 2200

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 486-25-9	9H-FLUOREN-9-ONE	13.34	650000	J
2.	UNKNOWN	13.95	1400000	J
3.	METHYLANTHRACENE	14.39	1600000	J
4.	UNKNOWN	14.52	980000	J
5. 612-94-2	NAPHTHALENE, 2-PHENYL-	14.75	730000	J
6.	UNKNOWN	15.27	490000	J
7. 243-42-5	BENZO[B]NAPHTHO[2,3-D]FURAN	15.89	570000	J
8.	UNKNOWN	16.02	1100000	J
9.	UNKNOWN	16.17	2000000	J
10. 238-84-6	11H-BENZO[A]FLUORENE	16.27	490000	J
11.	METHYLPYRENE	16.34	980000	J
12.	METHYLPYRENE	16.47	1400000	J
13.	UNKNOWN	16.59	330000	J
14.	UNKNOWN	16.92	650000	J
15.	UNKNOWN	17.09	2000000	J
16.	UNKNOWN	17.17	1500000	J
17.	UNKNOWN	17.70	730000	J
18.	UNKNOWN	17.82	810000	J
19.	METHYLCHRYSENE	18.12	730000	J
20.	BENZOFLUORANTHENE	20.20	1800000	J

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-PITDLMS

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352336
 Sample wt/vol: 30.7 (g/mL) G Lab File ID: GD052336A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2	Phenol	1900	U
111-44-4	bis(2-Chloroethyl) Ether	1900	U
95-57-8	2-Chlorophenol	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
100-51-6	Benzyl Alcohol	1900	U
95-50-1	1,2-Dichlorobenzene	1900	U
95-48-7	2-Methylphenol	1900	U
39638-32-9	bis(2-Chloroisopropyl) Ether	1900	U
106-44-5	4-Methylphenol	1900	U
621-64-7	N-Nitroso-Di-n-Propylamine	1900	U
67-72-1	Hexachloroethane	1900	U
98-95-3	Nitrobenzene	1900	U
78-59-1	Isophorone	1900	U
88-75-5	2-Nitrophenol	1900	U
105-67-9	2,4-Dimethylphenol	1900	U
65-85-0	Benzoic Acid	9100	U
111-91-1	bis(2-Chloroethoxy) Methane	1900	U
120-83-2	2,4-Dichlorophenol	1900	U
120-82-1	1,2,4-Trichlorobenzene	1900	U
91-20-3	Naphthalene	190	DJ
106-47-8	4-Chloroaniline	1900	U
87-68-3	Hexachlorobutadiene	1900	U
59-50-7	4-Chloro-3-Methylphenol	1900	U
91-57-6	2-Methylnaphthalene	1900	U
77-47-4	Hexachlorocyclopentadiene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	9100	U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	9100	U
131-11-3	Dimethyl Phthalate	1900	U
208-96-8	Acenaphthylene	1900	U
606-20-2	2,6-Dinitrotoluene	1900	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-PITDLMS

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352336
 Sample wt/vol: 30.7 (g/mL) G Lab File ID: GD052336A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 5.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	9100	U
83-32-9-----	Acenaphthene	1900	U
51-28-5-----	2,4-Dinitrophenol	9100	U
100-02-7-----	4-Nitrophenol	9100	U
132-64-9-----	Dibenzofuran	330	DJ
121-14-2-----	2,4-Dinitrotoluene	1900	U
84-66-2-----	Diethylphthalate	1900	U
7005-72-3-----	4-Chlorophenyl-phenylether	1900	U
86-73-7-----	Fluorene	780	DJ
100-01-6-----	4-Nitroaniline	9100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	9100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	1900	U
101-55-3-----	4-Bromophenyl-phenylether	1900	U
118-74-1-----	Hexachlorobenzene	1900	U
87-86-5-----	Pentachlorophenol	9100	U
85-01-8-----	Phenanthrene	8500	D
120-12-7-----	Anthracene	2200	D
84-74-2-----	Di-n-Butylphthalate	1900	U
206-44-0-----	Fluoranthene	16000	D
129-00-0-----	Pyrene	1900	U
85-68-7-----	Butylbenzylphthalate	1900	U
91-94-1-----	3,3'-Dichlorobenzidine	3800	U
56-55-3-----	Benzo(a)Anthracene	11000	D
218-01-9-----	Chrysene	9800	D
117-81-7-----	bis(2-Ethylhexyl) Phthalate	340	DJ
117-84-0-----	Di-n-Octyl Phthalate	1900	U
205-99-2-----	Benzo(b)Fluoranthene	17000	DX
207-08-9-----	Benzo(k)Fluoranthene	17000	DX
50-32-8-----	Benzo(a)Pyrene	9500	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	3800	D
53-70-3-----	Dibenz(a,h)Anthracene	1400	DJ
191-24-2-----	Benzo(g,h,i)Perylene	4200	D

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

EPA SAMPLE NO.

ALLOY-PITDLMSD

Contract: (2-88)-REVS

SDG No.: 01

Lab Sample ID: 352337

Lab File ID: GD052337A08

Date Received: 06/29/90

Date Extracted: 07/06/90

Date Analyzed: 07/11/90

Dilution Factor: 5.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

0

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-PITDLMSD

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 352337
 Sample wt/vol: 30.6 (g/mL) G Lab File ID: GD052337A08
 Level: (low/med) LOW Date Received: 06/29/90
 % Moisture: not dec. 14 dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90
 GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	9100	U
83-32-9-----	Acenaphthene	1900	U
51-28-5-----	2,4-Dinitrophenol	9100	U
100-02-7-----	4-Nitrophenol	9100	U
132-64-9-----	Dibenzofuran	320	DJ
121-14-2-----	2,4-Dinitrotoluene	1900	U
84-66-2-----	Diethylphthalate	1900	U
7005-72-3-----	4-Chlorophenyl-phenylether	1900	U
86-73-7-----	Fluorene	770	DJ
100-01-6-----	4-Nitroaniline	9100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	9100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	1900	U
101-55-3-----	4-Bromophenyl-phenylether	1900	U
118-74-1-----	Hexachlorobenzene	1900	U
87-86-5-----	Pentachlorophenol	9100	U
85-01-8-----	Phenanthrene	8200	D
120-12-7-----	Anthracene	2300	D
84-74-2-----	Di-n-Butylphthalate	1900	U
206-44-0-----	Fluoranthene	17000	D
129-00-0-----	Pyrene	1900	U
85-68-7-----	Butylbenzylphthalate	1900	U
91-94-1-----	3,3'-Dichlorobenzidine	3800	U
56-55-3-----	Benzo(a)Anthracene	9800	D
218-01-9-----	Chrysene	10000	D
117-81-7-----	bis(2-Ethylhexyl) Phthalate	310	DJ
117-84-0-----	Di-n-Octyl Phthalate	1900	U
205-99-2-----	Benzo(b) Fluoranthene	18000	DX
207-08-9-----	Benzo(k) Fluoranthene	18000	DX
50-32-8-----	Benzo(a) Pyrene	10000	D
193-39-5-----	Indeno(1,2,3-cd) Pyrene	4300	D
53-70-3-----	Dibenz(a,h)Anthracene	1600	DJ
191-24-2-----	Benzo(g,h,i) Perylene	4800	D

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-FLRDLMS

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 353831
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRJ53831B21
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/13/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 200

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2-----	Phenol	6400000	U
111-44-4-----	bis(2-Chloroethyl) Ether	6400000	U
95-57-8-----	2-Chlorophenol	6400000	U
541-73-1-----	1,3-Dichlorobenzene	6400000	U
106-46-7-----	1,4-Dichlorobenzene	6400000	U
100-51-6-----	Benzyl Alcohol	6400000	U
95-50-1-----	1,2-Dichlorobenzene	6400000	U
95-48-7-----	2-Methylphenol	6400000	U
39638-32-9-----	bis(2-Chloroisopropyl) Ether	6400000	U
106-44-5-----	4-Methylphenol	880000	DJ
621-64-7-----	N-Nitroso-Di-n-Propylamine	6400000	U
67-72-1-----	Hexachloroethane	6400000	U
98-95-3-----	Nitrobenzene	6400000	U
78-59-1-----	Isophorone	6400000	U
88-75-5-----	2-Nitrophenol	6400000	U
105-67-9-----	2,4-Dimethylphenol	6400000	U
65-85-0-----	Benzoic Acid	31000000	U
111-91-1-----	bis(2-Chloroethoxy) Methane	6400000	U
120-83-2-----	2,4-Dichlorophenol	6400000	U
120-82-1-----	1,2,4-Trichlorobenzene	6400000	U
91-20-3-----	Naphthalene	47000000	D
106-47-8-----	4-Chloroaniline	6400000	U
87-68-3-----	Hexachlorobutadiene	6400000	U
59-50-7-----	4-Chloro-3-Methylphenol	6400000	U
91-57-6-----	2-Methylnaphthalene	5800000	DJ
77-47-4-----	Hexachlorocyclopentadiene	6400000	U
88-06-2-----	2,4,6-Trichlorophenol	6400000	U
95-95-4-----	2,4,5-Trichlorophenol	31000000	U
91-58-7-----	2-Chloronaphthalene	6400000	U
88-74-4-----	2-Nitroaniline	31000000	U
131-11-3-----	Dimethyl Phthalate	6400000	U
208-96-8-----	Acenaphthylene	5100000	DJ
606-20-2-----	2,6-Dinitrotoluene	6400000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-FLRDLMS

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 353831
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRJ53831B21
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/13/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 200

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	31000000	U
83-32-9-----	Acenaphthene	6400000	U
51-28-5-----	2,4-Dinitrophenol	31000000	U
100-02-7-----	4-Nitrophenol	31000000	U
132-64-9-----	Dibenzofuran	9900000	D
121-14-2-----	2,4-Dinitrotoluene	6400000	U
84-66-2-----	Diethylphthalate	6400000	U
7005-72-3-----	4-Chlorophenyl-phenylether	6400000	U
86-73-7-----	Fluorene	16000000	D
100-01-6-----	4-Nitroaniline	31000000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	31000000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	6400000	U
101-55-3-----	4-Bromophenyl-phenylether	6400000	U
118-74-1-----	Hexachlorobenzene	6400000	U
87-86-5-----	Pentachlorophenol	31000000	U
85-01-8-----	Phenanthrene	70000000	D
120-12-7-----	Anthracene	12000000	D
84-74-2-----	Di-n-Butylphthalate	6400000	U
206-44-0-----	Fluoranthene	44000000	D
129-00-0-----	Pyrene	6400000	U
85-68-7-----	Butylbenzylphthalate	6400000	U
91-94-1-----	3,3'-Dichlorobenzidine	13000000	U
56-55-3-----	Benzo(a)Anthracene	11000000	D
218-01-9-----	Chrysene	9000000	D
117-81-7-----	bis(2-Ethylhexyl)Phthalate	6400000	U
117-84-0-----	Di-n-Octyl Phthalate	6400000	U
205-99-2-----	Benzo(b)Fluoranthene	8500000	D
207-08-9-----	Benzo(k)Fluoranthene	6500000	D
50-32-8-----	Benzo(a)Pyrene	7700000	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	3100000	DJ
53-70-3-----	Dibenz(a,h)Anthracene	750000	DJ
191-24-2-----	Benzo(g,h,i)Perylene	3200000	DJ

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-FLRDLMSD

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 353832
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRJ53832B21
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/13/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 200

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

108-95-2-----Phenol	6400000	U
111-44-4-----bis(2-Chloroethyl) Ether	6400000	U
95-57-8-----2-Chlorophenol	6400000	U
541-73-1-----1,3-Dichlorobenzene	6400000	U
106-46-7-----1,4-Dichlorobenzene	6400000	U
100-51-6-----Benzyl Alcohol	6400000	U
95-50-1-----1,2-Dichlorobenzene	6400000	U
95-48-7-----2-Methylphenol	6400000	U
39638-32-9-----bis(2-Chloroisopropyl) Ether	6400000	U
106-44-5-----4-Methylphenol	740000	DJ
621-64-7-----N-Nitroso-Di-n-Propylamine	6400000	U
67-72-1-----Hexachloroethane	6400000	U
98-95-3-----Nitrobenzene	6400000	U
78-59-1-----Isophorone	6400000	U
88-75-5-----2-Nitrophenol	6400000	U
105-67-9-----2,4-Dimethylphenol	6400000	U
65-85-0-----Benzoic Acid	31000000	U
111-91-1-----bis(2-Chloroethoxy) Methane	6400000	U
120-83-2-----2,4-Dichlorophenol	6400000	U
120-82-1-----1,2,4-Trichlorobenzene	6400000	U
91-20-3-----Naphthalene	58000000	D
106-47-8-----4-Chloroaniline	6400000	U
87-68-3-----Hexachlorobutadiene	6400000	U
59-50-7-----4-Chloro-3-Methylphenol	6400000	U
91-57-6-----2-Methylnaphthalene	6800000	D
77-47-4-----Hexachlorocyclopentadiene	6400000	U
88-06-2-----2,4,6-Trichlorophenol	6400000	U
95-95-4-----2,4,5-Trichlorophenol	31000000	U
91-58-7-----2-Chloronaphthalene	6400000	U
88-74-4-----2-Nitroaniline	31000000	U
131-11-3-----Dimethyl Phthalate	6400000	U
208-96-8-----Acenaphthylene	11000000	D
606-20-2-----2,6-Dinitrotoluene	6400000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ALLOY-FLRDLMSD

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: 353832
 Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRJ53832B21
 Level: (low/med) MED Date Received: 06/29/90
 % Moisture: not dec. 38 dec. _____ Date Extracted: 07/13/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 200

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	31000000	U
83-32-9-----	Acenaphthene	6400000	U
51-28-5-----	2,4-Dinitrophenol	31000000	U
100-02-7-----	4-Nitrophenol	31000000	U
132-64-9-----	Dibenzofuran	13000000	D
121-14-2-----	2,4-Dinitrotoluene	6400000	U
84-66-2-----	Diethylphthalate	6400000	U
7005-72-3-----	4-Chlorophenyl-phenylether	6400000	U
86-73-7-----	Fluorene	22000000	D
100-01-6-----	4-Nitroaniline	31000000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	31000000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	6400000	U
101-55-3-----	4-Bromophenyl-phenylether	6400000	U
118-74-1-----	Hexachlorobenzene	6400000	U
87-86-5-----	Pentachlorophenol	31000000	U
85-01-8-----	Phenanthrene	110000000	DE
120-12-7-----	Anthracene	21000000	D
84-74-2-----	Di-n-Butylphthalate	6400000	U
206-44-0-----	Fluoranthene	87000000	D
129-00-0-----	Pyrene	6400000	U
85-68-7-----	Butylbenzylphthalate	6400000	U
91-94-1-----	3,3'-Dichlorobenzidine	13000000	U
56-55-3-----	Benzo(a)Anthracene	25000000	D
218-01-9-----	Chrysene	19000000	D
117-81-7-----	bis(2-Ethylhexyl)Phthalate	6400000	U
117-84-0-----	Di-n-Octyl Phthalate	6400000	U
205-99-2-----	Benzo(b)Fluoranthene	39000000	DX
207-08-9-----	Benzo(k)Fluoranthene	39000000	DX
50-32-8-----	Benzo(a)Pyrene	21000000	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10000000	D
53-70-3-----	Dibenz(a,h)Anthracene	2600000	DJ
191-24-2-----	Benzo(g,h,i)Perylene	11000000	D

(1) - Cannot be separated from Diphenylamine

3. By fraction (VOA , SV , PEST) - surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil , by concentration (Low or Medium)

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	ALLOY-PIT	67	86	100	92	86	84	0	0
02	ALLOY-PITDL	44	72	78	62	58	64	0	0
03	ALLOY-SS1	0 D	0 D	0 D	0 D	0 D	0 D	0	0
04	ALLOY-SS1DL	0 D	0 D	0 D	0 D	0 D	0 D	0	0
05	ALLOY-PITDLMS	47	68	70	66	60	60	0	0
06	ALLOY-PITDLMSD	49	67	74	67	60	63	0	0
07	SBLK53	83	99	113	99	98	74	0	0

901
3/2/90

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (23-120)
 S2 (FBP) = 2-Fluorobiphenyl (30-115)
 S3 (TPH) = Terphenyl (18-137)
 S4 (PHL) = Phenol-d5 (24-113)
 S5 (2FP) = 2-Fluorophenol (25-121)
 S6 (TBP) = 2,4,6-Tribromophenol (19-122)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Level: (low/med) MED

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	ALLOY-FLR	71	73	120	61	61	49	0	0
02	ALLOY-FLRDL	0 D	0 D	0 D	0 D	0 D	0 D	0	0
03	ALLOY-FLRDLS	0 D	0 D	0 D	0 D	0 D	0 D	0	0
04	ALLOY-FLRDLS ^d	0 D	0 D	0 D	0 D	0 D	0 D	0	0
05	SBLK83	72	104	113	71	76	81	0	0
06	SBLK20	70	83	91	72	86	58	0	0

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (23-120)
 S2 (FBP) = 2-Fluorobiphenyl (30-115)
 S3 (TPH) = Terphenyl (18-137)
 S4 (PHL) = Phenol-d5 (24-113)
 S5 (2FP) = 2-Fluorophenol (25-121)
 S6 (TBP) = 2,4,6-Tribromophenol (19-122)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogates diluted out

4. By fraction (VOA , SV , PEST) - matrix spike duplicate results
(Form III)

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix Spike - EPA Sample No.: ALLOY-PITDL Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	7580	0	5610	74	26- 90
2-Chlorophenol	7580	0	5290	70	25-102
1,4-Dichlorobenzene	3790	0	2480	65	28 104
N-Nitroso-di-n-prop. (1)	3790	0	2770	73	41 126
1,2,4-Trichlorobenzene	3790	0	2730	72	38 107
4-Chloro-3-methylphenol	7580	0	5140	68	26 103
Acenaphthene	3790	1090	4700	95	31-137
4-Nitrophenol	7580	0	3920	52	11-114
2,4-Dinitrotoluene	3790	0	2410	64	28- 89
Pentachlorophenol	7580	0	3750	49	17-109
Pyrene	3790	11500	17000	145 *	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Phenol	7580	5670	75	-1	35	26- 90
2-Chlorophenol	7580	5420	72	-3	50	25-102
1,4-Dichlorobenzene	3790	2540	67	-3	27	28 104
N-Nitroso-di-n-prop. (1)	3790	2650	70	4	38	41 126
1,2,4-Trichlorobenzene	3790	2620	69	4	23	38 107
4-Chloro-3-methylphenol	7580	5100	67	1	33	26 103
Acenaphthene	3790	4470	89	7	19	31-137
4-Nitrophenol	7580	3890	51	2	50	11-114
2,4-Dinitrotoluene	3790	2430	64	0	47	28- 89
Pentachlorophenol	7580	3960	52	-6	47	17-109
Pyrene	3790	17200	150 *	-3	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 0 out of 11 outside limits
 Spike Recovery: 2 out of 22 outside limits

COMMENTS: CLP , 2068, 81, ALLOY-PIT, LOW, SOIL, 352340, BNA, EPA,
 CAP, HG900711A08, DH900711A08, , , ,

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM, RTP

Contract: (2-88)-REVS

Lab Code: COMPU

Case No.: 20688

SAS No.: _____

SDG No.: 01

Matrix Spike - EPA Sample No.: ALLOY-FLRDL

Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	323000	0	1000000	310 *	26- 90
2-Chlorophenol	323000	0	0	0 *	25-102
1,4-Dichlorobenzene	161000	0	0	0 *	28 104
N-Nitroso-di-n-prop. (1)	161000	0	0	0 *	41 126
1,2,4-Trichlorobenzene	161000	0	0	0 *	38 107
4-Chloro-3-methylphenol	323000	0	0	0 *	26 103
Acenaphthene	161000	0	1950000	1211 *	31-137
4-Nitrophenol	323000	0	0	0 *	11-114
2,4-Dinitrotoluene	161000	0	0	0 *	28- 89
Pentachlorophenol	323000	0	0	0 *	17-109
Pyrene	161000	34300000	28000000	-999 *	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	323000	910000	282 *	9	35	26- 90
2-Chlorophenol	323000	0	0 *	0	50	25-102
1,4-Dichlorobenzene	161000	0	0 *	0	27	28 104
N-Nitroso-di-n-prop. (1)	161000	0	0 *	0	38	41 126
1,2,4-Trichlorobenzene	161000	0	0 *	0	23	38 107
4-Chloro-3-methylphenol	323000	0	0 *	0	33	26 103
Acenaphthene	161000	2920000	1814 *	-40 *	19	31-137
4-Nitrophenol	323000	0	0 *	0	50	11-114
2,4-Dinitrotoluene	161000	0	0 *	0	47	28- 89
Pentachlorophenol	323000	0	0 *	0	47	17-109
Pyrene	161000	52500000	9999 *	-244 *	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 2 out of 11 outside limits

Spike Recovery: 22 out of 22 outside limits

COMMENTS: CLP , 2068, 81, ALLOY-FLR, LOW, SOIL, 352339, BNA, EPA,
CAP, HI900712A04, DH900712A04, , , ,

*Spike recovery data not available due to dilution. See Blank
Spike data. 3/2/90*

FORM III SV-2

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5. By fraction (VOA , SV , PEST) - blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only)

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Lab File ID: GH053153B08 Lab Sample ID: SBLK53
 Date Extracted: 07/06/90 Extraction: (SepF/Cont/Sonc) SONC
 Date Analyzed: 07/10/90 Time Analyzed: 1627
 Matrix: (soil/water) SOIL Level: (low/med) LOW
 Instrument ID: 08

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	ALLOY-PIT	352340	GH052340B08	07/10/90
02	ALLOY-PITDL	352340	GD052340A08	07/11/90
03	ALLOY-SS1	352335	GD052335B08	07/10/90
04	ALLOY-SS1DL	352335	GDJ52335A08	07/11/90
05	ALLOY-PITMS	352336	GD052336A08	07/11/90
06	ALLOY-PITMSD	352337	GD052337A08	07/11/90

COMMENTS: CLP , , , , LOW, , 353153, BNA, BLANK,
 CAP, HG900710A08, DH900710A08, , , ,

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: <u>COMPUCHEM, RTP</u>		Contract: <u>(2-88)-REVS</u>		SBLK53
Lab Code: <u>COMPU</u>	Case No.: <u>20688</u>	SAS No.: _____	SDG No.: <u>01</u>	
Matrix: (soil/water) <u>SOIL</u>		Lab Sample ID: <u>SBLK53</u>		
Sample wt/vol: <u>30.4</u>	(g/mL) <u>G</u>	Lab File ID: <u>GH053153B08</u>		
Level: (low/med) <u>LOW</u>		Date Received: _____		
% Moisture: not dec. _____	dec. _____	Date Extracted: <u>07/06/90</u>		
Extraction: (SepF/Cont/Sonc) <u>SONC</u>		Date Analyzed: <u>07/10/90</u>		
GPC Cleanup: (Y/N) <u>N</u>	pH: _____	Dilution Factor: <u>1.0</u>		

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl) Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl Alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
39638-32-9	bis(2-Chloroisopropyl) Ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy) Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK53

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: SBLK53
 Sample wt/vol: 30.4 (g/mL) G Lab File ID: GH053153B08
 Level: (low/med) LOW Date Received: _____
 % Moisture: not dec. _____ dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90
 GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	1600	U
83-32-9-----	Acenaphthene	330	U
51-28-5-----	2,4-Dinitrophenol	1600	U
100-02-7-----	4-Nitrophenol	1600	U
132-64-9-----	Dibenzofuran	330	U
121-14-2-----	2,4-Dinitrotoluene	330	U
84-66-2-----	Diethylphthalate	330	U
7005-72-3-----	4-Chlorophenyl-phenylether	330	U
86-73-7-----	Fluorene	330	U
100-01-6-----	4-Nitroaniline	1600	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6-----	N-Nitrosodiphenylamine (1)	330	U
101-55-3-----	4-Bromophenyl-phenylether	330	U
118-74-1-----	Hexachlorobenzene	330	U
87-86-5-----	Pentachlorophenol	1600	U
85-01-8-----	Phenanthrene	330	U
120-12-7-----	Anthracene	330	U
84-74-2-----	Di-n-Butylphthalate	330	U
206-44-0-----	Fluoranthene	330	U
129-00-0-----	Pyrene	330	U
85-68-7-----	Butylbenzylphthalate	330	U
91-94-1-----	3,3'-Dichlorobenzidine	660	U
56-55-3-----	Benzo(a)Anthracene	330	U
218-01-9-----	Chrysene	330	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0-----	Di-n-Octyl Phthalate	330	U
205-99-2-----	Benzo(b)Fluoranthene	330	U
207-08-9-----	Benzo(k)Fluoranthene	330	U
50-32-8-----	Benzo(a)Pyrene	330	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3-----	Dibenz(a,h)Anthracene	330	U
191-24-2-----	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK53

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Matrix: (soil/water) SOIL Lab Sample ID: SBLK53
 Sample wt/vol: 30.4 (g/mL) G Lab File ID: GH053153B08
 Level: (low/med) LOW Date Received: _____
 % Moisture: not dec. _____ dec. _____ Date Extracted: 07/06/90
 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90
 GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 3074-71-3	HEPTANE, 2,3-DIMETHYL-	5.38	370	J
2. 921-47-1	HEXANE, 2,3,4-TRIMETHYL-	5.48	230	J
3. 79-34-5	ETHANE, 1,1,2,2-TETRACHLORO-	6.18	130	J
4. 20019-64-1	2(5H)-FURANONE, 5,5-DIMETHYL	6.38	170	J
5.	FLUOROPHENOL	7.48	170	J
6.	TRIBROMOPHENOL	13.12	300	J
7. 4337-65-9	HEXANEDIOIC ACID, MONO(2-ETH	16.55	100	J

FORM I SV-TIC

1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Lab File ID: GJ053749C04 Lab Sample ID: SBLK83
 Date Extracted: 07/10/90 Extraction: (SepF/Cont/Sonc) SONC
 Date Analyzed: 07/12/90 Time Analyzed: 0317
 Matrix: (soil/water) SOIL Level: (low/med) MED
 Instrument ID: 04

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	ALLOY-FLR	352339	GDJ52339A04	07/12/90
02	ALLOY-FLRDL	352339	G3D52339B04	07/12/90

COMMENTS: CLP , , , , LOW, , 353749, BNA, BLANK,
 CAP, HG900712C04, DF900711B04, , , ,

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK83

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: SBLK83

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ053749C04

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2-----	Phenol	20000	U
111-44-4-----	bis(2-Chloroethyl) Ether	20000	U
95-57-8-----	2-Chlorophenol	20000	U
541-73-1-----	1,3-Dichlorobenzene	20000	U
106-46-7-----	1,4-Dichlorobenzene	20000	U
100-51-6-----	Benzyl Alcohol	20000	U
95-50-1-----	1,2-Dichlorobenzene	20000	U
95-48-7-----	2-Methylphenol	20000	U
39638-32-9-----	bis(2-Chloroisopropyl) Ether	20000	U
106-44-5-----	4-Methylphenol	20000	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1-----	Hexachloroethane	20000	U
98-95-3-----	Nitrobenzene	20000	U
78-59-1-----	Isophorone	20000	U
88-75-5-----	2-Nitrophenol	20000	U
105-67-9-----	2,4-Dimethylphenol	20000	U
65-85-0-----	Benzoic Acid	96000	U
111-91-1-----	bis(2-Chloroethoxy) Methane	20000	U
120-83-2-----	2,4-Dichlorophenol	20000	U
120-82-1-----	1,2,4-Trichlorobenzene	20000	U
91-20-3-----	Naphthalene	20000	U
106-47-8-----	4-Chloroaniline	20000	U
87-68-3-----	Hexachlorobutadiene	20000	U
59-50-7-----	4-Chloro-3-Methylphenol	20000	U
91-57-6-----	2-Methylnaphthalene	20000	U
77-47-4-----	Hexachlorocyclopentadiene	20000	U
88-06-2-----	2,4,6-Trichlorophenol	20000	U
95-95-4-----	2,4,5-Trichlorophenol	96000	U
91-58-7-----	2-Chloronaphthalene	20000	U
88-74-4-----	2-Nitroaniline	96000	U
131-11-3-----	Dimethyl Phthalate	20000	U
208-96-8-----	Acenaphthylene	20000	U
606-20-2-----	2,6-Dinitrotoluene	20000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK83

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: SBLK83

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ053749C04

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

99-09-2-----	3-Nitroaniline	96000	U
83-32-9-----	Acenaphthene	20000	U
51-28-5-----	2,4-Dinitrophenol	96000	U
100-02-7-----	4-Nitrophenol	96000	U
132-64-9-----	Dibenzofuran	20000	U
121-14-2-----	2,4-Dinitrotoluene	20000	U
84-66-2-----	Diethylphthalate	20000	U
7005-72-3-----	4-Chlorophenyl-phenylether	20000	U
86-73-7-----	Fluorene	20000	U
100-01-6-----	4-Nitroaniline	96000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	20000	U
101-55-3-----	4-Bromophenyl-phenylether	20000	U
118-74-1-----	Hexachlorobenzene	20000	U
87-86-5-----	Pentachlorophenol	96000	U
85-01-8-----	Phenanthrene	20000	U
120-12-7-----	Anthracene	20000	U
84-74-2-----	Di-n-Butylphthalate	20000	U
206-44-0-----	Fluoranthene	20000	U
129-00-0-----	Pyrene	20000	U
85-68-7-----	Butylbenzylphthalate	20000	U
91-94-1-----	3,3'-Dichlorobenzidine	40000	U
56-55-3-----	Benzo(a)Anthracene	20000	U
218-01-9-----	Chrysene	20000	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0-----	Di-n-Octyl Phthalate	20000	U
205-99-2-----	Benzo(b)Fluoranthene	20000	U
207-08-9-----	Benzo(k)Fluoranthene	20000	U
50-32-8-----	Benzo(a)Pyrene	20000	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3-----	Dibenz(a,h)Anthracene	20000	U
191-24-2-----	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK83

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
Matrix: (soil/water) SOIL Lab Sample ID: SBLK83
Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ053749C04
Level: (low/med) MED Date Received: _____
% Moisture: not dec. _____ dec. _____ Date Extracted: 07/10/90
Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/12/90
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I SV-TIC

1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Lab File ID: GH055697B21 Lab Sample ID: SBLK20
 Date Extracted: 07/13/90 Extraction: (SepF/Cont/Sonc) SONC
 Date Analyzed: 07/17/90 Time Analyzed: 2206
 Matrix: (soil/water) SOIL Level: (low/med) MED
 Instrument ID: 21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	ALLOY-FLRDLMS	353831	GRJ53831B21	07/26/90
02	ALLOY-FLRDLMS	353832	GRJ53832B21	07/26/90

COMMENTS: CLP , , , , LOW, , 355697, BNA, BLANK,
 CAP, HG900717B21, DH900717B21, , , ,

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK20

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: SBLK20

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH055697B21

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/13/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/17/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl) Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
39638-32-9	bis(2-Chloroisopropyl) Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	96000	U
111-91-1	bis(2-Chloroethoxy) Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	96000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	96000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

FORM I SV-1

1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK20

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: SBLK20

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH055697B21

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/13/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/17/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
99-09-2-----	3-Nitroaniline	96000	U
83-32-9-----	Acenaphthene	20000	U
51-28-5-----	2,4-Dinitrophenol	96000	U
100-02-7-----	4-Nitrophenol	96000	U
132-64-9-----	Dibenzofuran	20000	U
121-14-2-----	2,4-Dinitrotoluene	20000	U
84-66-2-----	Diethylphthalate	20000	U
7005-72-3-----	4-Chlorophenyl-phenylether	20000	U
86-73-7-----	Fluorene	20000	U
100-01-6-----	4-Nitroaniline	96000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	20000	U
101-55-3-----	4-Bromophenyl-phenylether	20000	U
118-74-1-----	Hexachlorobenzene	20000	U
87-86-5-----	Pentachlorophenol	96000	U
85-01-8-----	Phenanthrene	20000	U
120-12-7-----	Anthracene	20000	U
84-74-2-----	Di-n-Butylphthalate	20000	U
206-44-0-----	Fluoranthene	20000	U
129-00-0-----	Pyrene	20000	U
85-68-7-----	Butylbenzylphthalate	20000	U
91-94-1-----	3,3'-Dichlorobenzidine	40000	U
56-55-3-----	Benzo(a)Anthracene	20000	U
218-01-9-----	Chrysene	20000	U
117-81-7-----	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0-----	Di-n-Octyl Phthalate	20000	U
205-99-2-----	Benzo(b)Fluoranthene	20000	U
207-08-9-----	Benzo(k)Fluoranthene	20000	U
50-32-8-----	Benzo(a)Pyrene	20000	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3-----	Dibenz(a,h)Anthracene	20000	U
191-24-2-----	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK20

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL

Lab Sample ID: SBLK20

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: GH055697B21

Level: (low/med) MED

Date Received: _____

% Moisture: not dec. _____ dec. _____

Date Extracted: 07/13/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 07/17/90

GPC Cleanup: (Y/N) N pH: _____

Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

FORM I SV-TIC

1/87 Rev.

6. By fraction (VOA , SV only) - internal standard area data (Form VIII)

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Lab File ID (Standard): HG900712C04 Date Analyzed: 07/12/90
 Instrument ID: 04 Time Analyzed: 0038

	IS1 (DCB) AREA #	RT	IS2 (NPT) AREA #	RT	IS3 (ANT) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	253000	7.10	868000	8.70	449000	10.99
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	506000		1736000		898000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	126500		434000		224500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-FLR	317000	7.17	801000	8.82	559000	11.12
02 SBLK83	249000	7.15	853000	8.75	392000	11.09

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTPContract: (2-88)-REVSLab Code: COMPUCase No.: 20688

SAS No.: _____

SDG No.: 01Lab File ID (Standard): HG900712C04Date Analyzed: 07/12/90Instrument ID: 04Time Analyzed: 0038

	IS4 (PHN) AREA #	RT	IS5 (CRY) AREA #	RT	IS6 (PRY) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	672000	12.95	474000	16.87	388000	21.02
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	1344000		948000		776000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	336000		237000		194000	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-FLR	384000	13.17	281000	17.24	210000	21.50
02 SBLK83	510000	13.09	402000	17.02	343000	21.25

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100%

of internal standard area.

LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Lab File ID (Standard): HI900712A04 Date Analyzed: 07/12/90
 Instrument ID: 04 Time Analyzed: 1554

	IS1 (DCB) AREA #	RT	IS2 (NPT) AREA #	RT	IS3 (ANT) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	206000	7.20	644000	8.82	297000	11.14
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	412000		1288000		594000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	103000		322000		148500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-FLRDL	129000	7.20	520000	8.82	246000	11.14

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM,RTPContract: (2-88)-REVSLab Code: COMPU Case No.: 20688SAS No.: _____ SDG No.: 01Lab File ID (Standard): HI900712A04Date Analyzed: 07/12/90Instrument ID: 04Time Analyzed: 1554

	IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	412000	13.09	234000	16.92	173000	21.02
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	824000		468000		346000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	206000		117000		86500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-FLRDL	424000	13.10	357000	16.99	184000	21.15

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTPContract: (2-88)-REVSLab Code: COMPU Case No.: 20688SAS No.: _____ SDG No.: 01Lab File ID (Standard): HG900710A08Date Analyzed: 07/10/90Instrument ID: 08Time Analyzed: 1335

	IS1 (DCB) AREA #	RT	IS2 (NPT) AREA #	RT	IS3 (ANT) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	184000	7.25	601000	8.99	246000	11.50
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	368000		1202000		492000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	92000		300500		123000	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-PIT	97400	7.25	365000	8.99	168000	11.47
02 ALLOY-SS1	116000	7.27	440000	9.02	197000	11.50
03 SBLK53	100000	7.25	369000	9.00	161000	11.50

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%

of internal standard area.

LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTPContract: (2-88)-REVSLab Code: COMPU Case No.: 20688SAS No.: _____ SDG No.: 01Lab File ID (Standard): HG900710A08Date Analyzed: 07/10/90Instrument ID: 08Time Analyzed: 1335

	IS4 (PHN) AREA #	RT	IS5 (CRY) AREA #	RT	IS6 (PRY) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	300000	13.64	230000	17.47	211000	20.55
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	600000		460000		422000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	150000		115000		105500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-PIT	229000	13.62	136000	17.47	131000	20.52
02 ALLOY-SS1	202000	13.67	139000	17.55	158000	20.59
03 SBLK53	211000	13.64	144000	17.44	126000	20.47

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100%

of internal standard area.

LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTP Contract: (2-88)-REVS
 Lab Code: COMPU Case No.: 20688 SAS No.: _____ SDG No.: 01
 Lab File ID (Standard): HG900711A08 Date Analyzed: 07/11/90
 Instrument ID: 08 Time Analyzed: 0949

	IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	211000	7.20	695000	8.95	307000	11.45
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	422000		1390000		614000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	105500		347500		153500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-PITDL	201000	7.25	699000	9.00	303000	11.50
02 ALLOY-SS1DL	266000	7.25	932000	9.00	398000	11.50
03 ALLOY-PITMS	220000	7.22	736000	8.97	318000	11.45
04 ALLOY-PITMSD	210000	7.27	736000	9.00	318000	11.50

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTPContract: (2-88)-REVSLab Code: COMPUCase No.: 20688

SAS No.: _____

SDG No.: 01Lab File ID (Standard): HG900711A08Date Analyzed: 07/11/90Instrument ID: 08Time Analyzed: 0949

	IS4 (PHN) AREA #	RT	IS5 (CRY) AREA #	RT	IS6 (PRY) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	340000	13.60	208000	17.44	186000	20.45
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	680000		416000		372000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	170000		104000		93000	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-PITDL	414000	13.64	262000	17.44	271000	20.49
02 ALLOY-SS1DL	514000	13.64	321000	17.45	297000	20.50
03 ALLOY-PITMS	392000	13.60	233000	17.44	251000	20.45
04 ALLOY-PITMSD	418000	13.64	258000	17.45	270000	20.50

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100%

of internal standard area.

LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTPContract: (2-88)-REVSLab Code: COMPU Case No.: 20688SAS No.: _____ SDG No.: 01Lab File ID (Standard): HG900717B21Date Analyzed: 07/17/90Instrument ID: 21Time Analyzed: 2122

	IS1 (DCB) AREA #	RT	IS2 (NPT) AREA #	RT	IS3 (ANT) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	131000	6.50	464000	8.18	243000	10.64
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	262000		928000		486000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	65500		232000		121500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK20	146000	6.50	455000	8.18	239000	10.64

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%

of internal standard area.

LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM RTPContract: (2-88)-REVSLab Code: COMPU Case No.: 20688SAS No.: _____ SDG No.: 01Lab File ID (Standard): HG900717B21Date Analyzed: 07/17/90Instrument ID: 21Time Analyzed: 2122

	IS4 (PHN) AREA #	RT	IS5 (CRY) AREA #	RT	IS6 (PRY) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	389000	12.72	340000	16.44	327000	19.09
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	778000		680000		654000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	194500		170000		163500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK20	319000	12.72	232000	16.44	213000	19.09

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100%

of internal standard area.

LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM RTPContract: (2-88)-REVSLab Code: COMPU Case No.: 20688SAS No.: _____ SDG No.: 01Lab File ID (Standard): HG900726A21Date Analyzed: 07/26/90Instrument ID: 21Time Analyzed: 1510

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT	AREA #	RT	AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	112000	6.92	377000	8.57	173000	10.94
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	224000		754000		346000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	56000		188500		86500	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-FLRDLMS	122000	6.90	355000	8.55	181000	10.92
02 ALLOY-FLRDLMS*	115000	6.92	337000	8.57	184000	10.94

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM, RTPContract: (2-88)-REVSLab Code: COMPU Case No.: 20688SAS No.: _____ SDG No.: 01Lab File ID (Standard): HG900726A21Date Analyzed: 07/26/90Instrument ID: 21Time Analyzed: 1510

	IS4 (PHN) AREA #	RT	IS5 (CRY) AREA #	RT	IS6 (PRY) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	238000	12.94	203000	16.70	172000	20.37
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	476000		406000		344000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	119000		101500		86000	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 ALLOY-FLRDLMs	297000	12.92	281000	16.69	284000	20.37
02 ALLOY-FLRDLMs	278000	12.94	276000	16.72	276000	20.40

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100%

of internal standard area.

LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk