

SEP - 7 1981



**ATTACHMENT A**  
**SITE SAFETY PLAN AMENDMENTS**  
**For**  
**KUHLMAN ELECTRIC PLANT SITE**  
**KUHLMAN ELECTRIC CORPORATION**  
**CRYSTAL SPRINGS, MISSISSIPPI**

**SITE SAFETY PLAN AMENDMENT # 002**

**SITE NAME:** Kuhlman Electric Corporation Plant Site

**DATE:** Feb. 20, 2004

**TYPE OF AMENDMENT:** For Off Site Operations

**REASON FOR AMENDMENT:**

- Operations are now moving off Kuhlman Electric plant property. The extended work will be conducted around, the Kuhlman Electric site and into the surrounding neighborhoods. Maps are available for the work area, in the command center. The type of work to be conducted is excavation of contaminated soil and sampling.

PCB levels are known to be in the range of 0 ppm to 850 ppm. Air monitoring will be conducted at the parameter locations as needed. Weather conditions will be monitored by the Foreman on site as needed.

**ALTERNATE SAFEGUARD PROCEDURES:**

- (1) The scope of work is similar to the work performed on the Kuhlman Electric property; however there are additional concerns when working on highways, around railways and in neighborhoods.
- (2) All employees will have in addition to other USES training requirements; Canadian National Railway Track Safety training.
- (3) Some street closing maybe required, so an American Traffic Safety Services Association Registered Flagger will be required for some operations. These operations will be evaluated daily to determine flagging requirements and will be documented in daily tool box safety meetings.
- (4) Working with drilling equipment.

**A) GEOPROBE RIG**

Operation of the designated geoprobe rig can present a substantial hazard to workers. To mitigate the potential for these hazards, USES personnel and subcontractors will operate the geoprobe rig in accordance with the manufacturer's Operator's Manual. Geoprobe rig safety procedures are as follows:

- Before initiating drilling activities, secure and lock the derrick in accordance with the manufacturer's recommendations.
- The geoprobe rig operator should only operate the geoprobe rig from the position of the controls. If the operator must leave the area of the controls, the operator should shift the transmission into neutral. The operator should shut down the geoprobe rig engine before leaving the vicinity of the geoprobe rig.
- Throwing or dropping of tools associated with the geoprobe rig operations is prohibited. All tools should be carefully passed by hand between personnel.
- All air and water lines should be drained when not in use if freezing weather is expected.
- All unattended boreholes must be adequately covered or roped off with caution tape to prevent geoprobe rig personnel, visitors, and animals from stepping or falling into the borehole.
- Drilling operations should be terminated during an electrical storm, and the geoprobe crew should seek shelter.
- The automatic "kill" switch should be in working condition at all times during rig operation. The "kill" switch should be used if an emergency arises.
- Shut off the engine before attempting to clean or service the unit.
- All wire lines and fittings should be visually inspected prior to use and inspected at least once a week for abrasion, broken wires, reduction in wire diameter, corrosion, and kinking.

- All damaged wire lines should be replaced when inspection indicates excessive damage.
- Keep hand and fingers clear of all rotating equipment or pinch points.
  - Use a long handled shovel to remove drill cuttings from around rotating augers. Never use hand or feet to remove the drill cuttings.
  - Do not attempt to drive the geoprobe rig on slopes greater than 30 degrees.
  - Place hands, feet, and all other body parts within the "cab" of the geoprobe rig while moving.
  - Wear appropriate PPE while operating the geoprobe rig, such as hard hat, steel-toed boots, and safety glasses.
  - Do not stand directly in front of or directly behind the geoprobe rig when in motion.

#### B) HOLLOW STEM AUGER RIG

Operation of the designated hollow stem auger rig can present a substantial hazard to workers. To mitigate the potential for these hazards, USES personnel and subcontractors will operate the hollow stem auger rig in accordance with the manufacturer's Operator's Manual. Hollow stem auger rig safety procedures are as follows:

- Wear a hard hat, safety glasses or goggles, steel-toed boots, a shirt and full length pants when working with or near the drill rig.
- Do not wear loose or frayed clothing, long loose hair, or loose jewelry while working with rotating equipment. These items can get tangled around rotating hollow stem augers and cause serious injury or even death.
- Identify all underground utilities and buried structure locations before drilling.
- Do not drive the drill rig from borehole to borehole with the derrick in the raised position.
- Before the derrick is raised and drilling commences, the drill rig must first be leveled and stabilized with leveling jacks. The drill rig should be re-leveled if it settles after the initial set up. Lower the derrick only when leveling jacks are down and the drill rig is stabilized.
- Before initiating drilling activities, secure and lock the derrick (if required) in accordance with the manufacturer's recommendations.
- The drill rig operator should only operate the drill rig from the position of the controls. If the operator must leave the controls, the transmission controlling the rotary drive should be shifted into a neutral position. The operator should shut down the drill rig engine before leaving the vicinity of the drill rig.
- All unattended boreholes must be adequately covered or roped off with caution tape to prevent personnel, visitors, or animals from stepping or falling into the borehole.
- Terminate all drilling activities during an electrical storm and seek shelter.
- The automatic "kill" switch should be in working condition at all times during the drill rig operation. The "kill" switch is to be used by drill rig personnel should an emergency arise.
- When using hollow stem augers, never place hands or fingers under the bottom of an auger section when hoisting the auger section in the ground.
- Stay clear of rotating augers. Never reach behind or around rotating hollow stem auger.
- Use a long handled shovel to remove drill cuttings from around a rotating auger. Never use hands or feet.
- Augers should be cleaned only when the drill rig is in the neutral position, and the augers have stopped rotating.
- Do not attempt to drive on slopes of more than 30 degrees.
- Remove all loose impediments, tools, materials, cords and debris from the immediate work area to avoid trip, slip and fall hazards.


- Maintain adequate clearance of the drill rig and mast from overhead transmission lines. The minimum clearance is 25 feet unless special permission is granted by the utility company or the lines are blinded.
- Proper lifting techniques will be used.

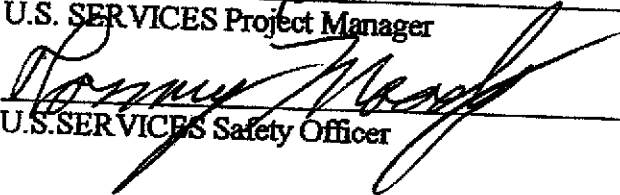
5) The Action Level for Contaminants.

- The area will be monitored with a Flame Ionization Detector (FID).
- The action level will be 1ppm over background.
- At a FID reading above 1ppm to 5ppm over background, the workers will wear cartridge respirators with organic vapor cartridges.
- At a FID reading above 5ppm over background, the workers will wear a Self Contain Breathing Apparatus (SCBA).

REQUIRED CHANGES IN PPE:

No required changes in PPE. USES will follow the PPE criteria that were stated in Site Safety Plan.

  
 U.S. SERVICES Project Manager \_\_\_\_\_ (Date) 3/2/05

  
 U.S. SERVICES Safety Officer \_\_\_\_\_ (Date) 3/2/05

**ATTACHMENT A**

**SITE SAFETY PLAN AMENDMENTS**

**For**

**KUHLMAN ELECTRIC PLANT SITE**

**KUHLMAN ELECTRIC CORPORATION  
CRYSTAL SPRINGS, MISSISSIPPI**

SITE SAFETY PLAN AMENDMENT # \_\_\_\_\_ :

SITE NAME: Kuhlman Electric Corporation Plant Site

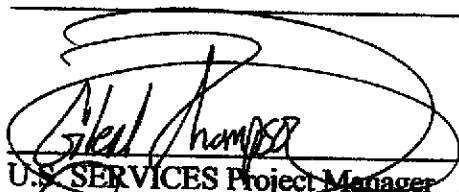
DATE: Feb. 20, 2004

TYPE OF AMENDMENT: For Off Site Operations

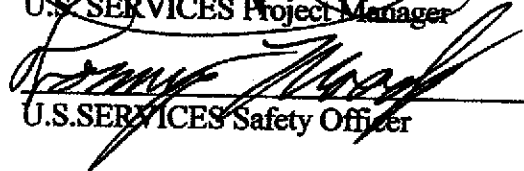
REASON FOR AMENDMENT: The previous work had been on Kuhlman Electric plant site. The extended work will be conducted around, but off-site of Kuhlman Electric site. Maps are available for the work area. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ALTERNATE SAFEGUARD PROCEDURES: (1) Will follow the scope of work that were planned for on site work. (2) All employees will have in addition to other USES training requirements; Canadian National Railway Track Safety training. (3) Some street closing maybe required, so American Traffic Safety Services Association Registered Flagger will be required for some employees. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

REQUIRED CHANGES IN PPE: No required changes in PPE. USES will follow the PPE criteria that were stated in Site Safety Plan. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



U.S. SERVICES Project Manager \_\_\_\_\_ (Date) \_\_\_\_\_



U.S. SERVICES Safety Officer \_\_\_\_\_ (Date) 3/1/04

**ATTACHMENT A**

**SITE SAFETY PLAN AMENDMENTS**

**For**

**KUHLMAN ELECTRIC PLANT SITE**

**KUHLMAN ELECTRIC CORPORATION  
CRYSTAL SPRINGS, MISSISSIPPI**

**SITE SAFETY PLAN AMENDMENT # 001**

**SITE NAME:** Kuhlman Electric Corporation Plant Site

**DATE:** Feb. 20, 2004

**TYPE OF AMENDMENT:** For Off Site Operations

**REASON FOR AMENDMENT:**

Operations are now moving off Kuhlman Electric plant property. The extended work will be conducted around, the Kuhlman Electric site and into the surrounding neighborhoods. Maps are available for the work area, in the command center. The type of work to be conducted is excavation of contaminated soil and sampling.

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**ALTERNATE SAFEGUARD PROCEDURES:**

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**REQUIRED CHANGES IN PPE:**

No required changes in PPE. USES will follow the PPE criteria that were stated in Site Safety Plan.

U.S. SERVICES Project Manager

*Patrick Thompson*

(Date)

U.S. SERVICES Safety Officer

(Date)

*3-23-04*



**APPENDIX 1**  
**MSDSs AND SELECTED DATA SHEETS**

Printed: 04/27/2000  
Last Revised: May 27, 1997

**SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

Catalog Number: F295  
Description: Arochlor 1268  
Other Name(s): Polychlorinated biphenyl-68% chlorine

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026  
EMERGENCY PHONE: 1-610-692-3026

**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

CAS No.: 11100-14-4  
Description: Arochlor 1268  
EINECS No.: Not Available  
Hazard Symbols: Not Available

**SECTION 3 - HAZARDS IDENTIFICATION**

Contact lenses should not be worn in the laboratory.  
All chemicals should be considered hazardous - Avoid direct physical contact!  
Suspected Carcinogen-may produce cancer. Can cause chloracne.  
Can cause gastro-intestinal disturbances. Can cause eye irritation.  
Vapors can cause severe eye inflammation and swelling of adjoining tissues.  
Can cause discoloration of nails/skin/etc. Exposure can cause liver damage.  
Can cause delayed adverse health effects.

This chemical is considered to be a CARCINOGEN by the state of California.  
This chemical is considered to cause DEVELOPMENTAL TOXICITY by the state of California.

**SECTION 4 - FIRST AID MEASURES**

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes. If no burns have occurred-use soap and water to cleanse skin.  
If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing. If patient has stopped breathing administer artificial respirations.  
If patient is in cardiac arrest administer CPR.  
Continue life supporting measures until medical assistance has arrived.  
Remove and wash contaminated clothing.  
If patient is exhibiting signs of shock - Keep warm and quiet.  
Contact Poison Control Center immediately if necessary.  
Do not administer liquids or induce vomiting to an unconscious or convulsing person.  
Induce vomiting if swallowed.  
If patient is vomiting-watch closely to make sure airway does not become obstructed by vomit.  
Get medical attention if necessary.

at No.: F295

age: 3

Specific Gravity: Not Available  
Solubility in Water: Insoluble (immiscible)  
Color: Not Available  
Evaporation Rate (Butyl acetate=1): Not Available

#### SECTION 10 - STABILITY AND REACTIVITY

Incompatible with strong oxidizing agents. Incompatible with active metals (e.g. Sodium).

#### SECTION 11 - TOXICOLOGY INFORMATION

TECS: TQ1366000

Acute Rat or Mouse LD50: 10900mg/kg

Sublethal Rat or Mouse LD50: N/A

Chronic Rat or Mouse LC50: Not Available

Mutagenicity

OSHA: No

IARC: No

NTP: No

ACGIH: No

NIOSH: No

Other: Yes

This chemical is considered to be a CARCINOGEN by the state of California.  
This chemical is considered to cause DEVELOPMENTAL TOXICITY by the state of California.

#### SECTION 12 - ECOLOGICAL INFORMATION

Biotoxicity: Not Available

Environmental Fate: Not Available

#### SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL: Burn in a chemicals incinerator equipped with an afterburner and scrubber.

#### SECTION 14 - TRANSPORTATION INFORMATION

UN Number: UN2315

Class: 9

Packing Group: II

Proper Shipping Name: Polychlorinated biphenyls

#### SECTION 15 - REGULATORY INFORMATION

European Labeling in Accordance with EC Directives

Hazard Symbols: Not Available

Risk Phrases

Not Available

**This Page Intentionally Left Blank 568889712 a-4**

Product Number:

171050

Product Name:

Hexachlorobenzene, 99%

Molecular Formula: C<sub>6</sub>Cl<sub>6</sub>

Molecular Weight: 284.78

CAS: 118-74-1

Assay: 99%

Comments: Melting Point (°C): 227 to 229

Boiling Point (°C): 323 to 326 / 760

ELINCS/EINECS Number: 204-273-9

Merck Index: 12,4714- Beilstein Index: 5,205

171050HEXACHLOROENZENE+99%>

Miscellaneous: This chemical is in the EPA inventory under TSCA. Label Precautions: Cancer suspect agent Mutagen Target organ: liver Irritant Photosensitizer Hazard: Toxic by Ingestion

Use: Organic Synthesis, fungicide for seeds, wood preservative.

Product Number: 171050

Product Name: Hexachlorobenzene, 99%

Valid 02/2000 - 04/2000 Aldrich Chemical Co., Inc. 1001 West St.  
 Paul Milwaukee, WI 53233 USA Tel: 414-273-3850

M A T E R I A

L S A F E T Y D A T A S H E E T

CHEMICAL IDENTIFICATION - - - - - SECTION 1. - - - - -  
 CATALOG #: 171050

NAME: HEXACHLOROENZENE, 99% SECTION 2. - - - - -  
 COMPOSITION/INFORMATION ON INGREDIENTS - - - - - CAS #: 118-74-1

MF: C6CL6 EC NO: 204-273-9 SYNONYMS AMATIN \* ANTICARIE \* BUNT-CURE  
 \* BUNT-NO-MORE \* CEKU C.B. \* CO-OP HEXA \* ESACLOROENZENE (ITALIAN) \*  
 GRANOX NM \* HCB \* HEXA C.B. \* HEXACHLORENZOL (GERMAN) \* HEXACHLOROENZENE  
 (ACGIE) \* JULIN'S CARBON CHLORIDE \* NO BUNT \* NO BUNT 40 \* NO BUNT 80 \* NO  
 BUNT LIQUID \* PENTACHLOROPHENYL CHLORIDE \* PERCHLOROENZENE \* PHENYL  
 PERCHLORYL \* RCRA WASTE NUMBER U127 \* SAATBEIZFUNGIZID (GERMAN) \* SANOCID  
 \* SANOCIDE \* SMUT-GO \* SNIENCIOTOX \* SECTION 3. - - - - - HAZARDS

IDENTIFICATION - - - - - LABEL PRECAUTIONARY STATEMENTS TOXIC  
 MAY CAUSE CANCER. HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF  
 SWALLOWED. MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.  
 CALIF. PROP. 65 REPRODUCTIVE HAZARD. PHOTSENSITIZER. TARGET ORGAN(S):  
 LIVER IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE  
 IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE). IN CASE OF CONTACT WITH EYES,  
 RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR  
 SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION. SECTION 4. -  
 - - - - - FIRST-AID MEASURES - - - - - IN CASE OF  
 CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR  
 AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. IF

INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
 RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. SECTION 5. - - - - -  
 - - FIRE FIGHTING MEASURES - - - - - EXTINGUISHING MEDIA  
 CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL  
 FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND  
 PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE  
 AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS. SECTION 6.  
 - - - - - ACCIDENTAL RELEASE MEASURES - - - - - EVACUATE  
 AREA. WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY  
 RUBBER GLOVES. WEAR DISPOSABLE COVERALLS AND DISCARD THEM AFTER USE.  
 SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. SECTION 7. - - - - -  
 - - - HANDLING AND STORAGE - - - - - REFER TO SECTION 8.  
 SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - - -  
 WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT  
 GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING. SAFETY SHOWER AND EYE  
 BATH. USE ONLY IN A CHEMICAL FUME HOOD. DO NOT BREATHE DUST. AVOID  
 ALL CONTACT. WASH THOROUGHLY AFTER HANDLING. DISCARD CONTAMINATED  
 CLOTHING AND SHOES. IRRITANT. PHOTSENSITIZER. KEEP TIGHTLY  
 CLOSED. STORE IN A COOL DRY PLACE. SECTION 9. - - - - - PHYSICAL AND  
 CHEMICAL PROPERTIES - - - - - APPEARANCE AND ODOR WHITE POWDER  
 PHYSICAL PROPERTIES BOILING POINT: 323 C TO 326 C MELTING  
 POINT: 227 C TO 229 C SECTION 10. - - - - - STABILITY AND  
 REACTIVITY - - - - - INCOMPATIBILITIES STRONG OXIDIZING AGENTS  
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS CARBON MONOXIDE, CARBON  
 DIOXIDE SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -  
 - ACUTE EFFECTS MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER  
 RESPIRATORY TRACT. HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH  
 SKIN. CAUSES EYE AND SKIN IRRITATION. CAUSES PHOTSENSITIVITY.  
 EXPOSURE TO LIGHT CAN RESULT IN ALLERGIC REACTIONS RESULTING IN  
 DERMATOLOGIC LESIONS, WHICH CAN VARY FROM SUNBURNLIKE RESPONSES TO  
 EDEMATOUS, VESICULATED LESIONS OR BULLAE. CHRONIC EFFECTS CARCINOGEN.  
 TARGET ORGAN(S): LIVER RTECS #: DA2975000 BENZENE, HEXACHLORO-  
 TOXICITY DATA UNR-MAN LD50:220 MG/KG 85DCAI  
 2,73,1970 ORL-RAT LD50:10 GM/KG FMCHA2 -, C163,1991  
 IHL-RAT LC50:3600 MG/M3 85GMAT -, 72,1982 ORL-MUS  
 LD50:4 GM/KG 85GMAT -, 72,1982 IHL-MUS LC50:4  
 GM/M3 85GMAT -, 72,1982 ORL-CAT LD50:1700 MG/KG  
 85GMAT -, 72,1982 IHL-CAT LC50:1600 MG/M3  
 85GMAT -, 72,1982 ORL-RBT LD50:2600 MG/KG 85GMAT  
 -, 72,1982 IHL-RBT LC50:1800 MG/M3 85GMAT -, 72,1982  
 ORL-GPG LD50:>3 GM/KG PEMNDP 9,469,1991 ORL-QAL  
 LD50:>6400 MG/KG MFLRA3 38,709,1973 ORL-MAM LD50:>5  
 GM/KG NTIS\*\* PB288-416 TARGET ORGAN DATA LIVER  
 (TUMORS) ENDOCRINE (THYROID TUMORS) MATERNAL EFFECTS (OVARIES,  
 FALLOPIAN TUBES) SPECIFIC DEVELOPMENTAL ABNORMALITIES (CRANIOFACIAL)  
 SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM) SPECIFIC  
 DEVELOPMENTAL ABNORMALITIES (UROGENITAL SYSTEM) EFFECTS ON NEWBORN (LIVE  
 BIRTH INDEX) EFFECTS ON NEWBORN (VIABILITY INDEX) EFFECTS ON NEWBORN  
 (WEANING OR LACTATION INDEX) EFFECTS ON NEWBORN (GROWTH STATISTICS)  
 EFFECTS ON NEWBORN (BIOCHEMICAL AND METABOLIC) TUMORIGENIC (CARCINOGENIC  
 BY RTECS CRITERIA) TUMORIGENIC (NEOPLASTIC BY RTECS CRITERIA)  
 BIOCHEMICAL EFFECTS (PORPHYRIN INCLUDING BILE PIGMENTS) ONLY SELECTED  
 REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED  
 HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION. SECTION 12. - -

----- ECOLOGICAL INFORMATION ----- DATA NOT YET  
 AVAILABLE. SECTION 13. ----- DISPOSAL CONSIDERATIONS -----  
 ----- DATA NOT AVAILABLE SECTION 14. ----- TRANSPORT  
 INFORMATION ----- CONTACT ALDRICH CHEMICAL COMPANY FOR  
 TRANSPORTATION INFORMATION. SECTION 15. ----- REGULATORY  
 INFORMATION ----- EUROPEAN INFORMATION EC INDEX NO:  
 602-065-00-6 TOXIC R 45 MAY CAUSE CANCER. R 48/25 TOXIC:  
 DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE IF SWALLOWED.  
 R 50/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE  
 EFFECTS IN THE AQUATIC ENVIRONMENT. S 53 AVOID EXPOSURE - OBTAIN  
 SPECIAL INSTRUCTIONS BEFORE USE. S 45 IN CASE OF ACCIDENT OR IF YOU  
 FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE  
 POSSIBLE). S 60 THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS  
 HAZARDOUS WASTE. S 61 AVOID RELEASE TO THE ENVIRONMENT. REFER TO  
 SPECIAL INSTRUCTIONS/ SAFETY DATA SHEETS. REVIEWS, STANDARDS, AND  
 REGULATIONS OEL-MAK ACGIH TLV-ANIMAL CARCINOGEN  
 DTLVS\* TLV/BEI,1997 ACGIH TLV-TWA 0.002 MG/M3 (SKIN) DTLVS\*  
 TLV/BEI,1997 IARC CANCER REVIEW:ANIMAL SUFFICIENT EVIDENCE IMEMDT  
 20,155,1979 IARC CANCER REVIEW:HUMAN INADEQUATE EVIDENCE IMSUDL  
 7,219,1987 IARC CANCER REVIEW:GROUP 2B IMSUDL 7,219,1987  
 OEL-RUSSIA:STEL 0.9 MG/M3;SKIN JAN 1993 OEL-POLAND: MAC(TWA) 0.5 MG/M3,  
 JAN1999 NOES 1983: HZD A1753; NIS 2; TNF 10; NOS 12; TNE 1038; TFE 26  
 EPA GENETOX PROGRAM 1988, POSITIVE: CARCINOGENICITY-MOUSE/RAT EPA GENETOX  
 PROGRAM 1988, NEGATIVE: RODENT DOMINANT LETHAL EPA TSCA SECTION 8(B)  
 CHEMICAL INVENTORY EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES  
 ON EPA IRIS DATABASE EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE,  
 SEPTEMBER 1999 NTP 8TH ANNUAL REPORT ON CARCINOGENS, 1998:REASONABLY  
 ANTICIPATED TO BE HUMAN CARCINOGEN NTP CARCINOGENESIS STUDIES;  
 SELECTED, SEPTEMBER 1999 U.S. INFORMATION THIS PRODUCT IS SUBJECT TO  
 SARA SECTION 313 REPORTING REQUIREMENTS. THIS PRODUCT IS OR CONTAINS  
 CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE DEVELOPMENTAL  
 TOXICITY. CALIFORNIA PROPOSITION 65: SECTION 16. ----- OTHER  
 INFORMATION----- THE ABOVE INFORMATION IS BELIEVED TO BE  
 CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS  
 A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE  
 RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE  
 REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND  
 CONDITIONS OF SALE. COPYRIGHT 1999 SIGMA-ALDRICH CO. LICENSE GRANTED  
 TO MAKE UNLIMITED PAPER COPIES FOR  
 INTERNAL USE ONLY

Product Number: 131326 Product Name: Pentachlorobenzene, 98%

131326PENTACHLOROENZENE+98%>

Molecular Formula: C<sub>5</sub>H<sub>1</sub>Cl<sub>5</sub>

Molecular Weight: 250.34

CAS: 608-93-5

Assay: 98%

Density: 1.609

Comments: Melting Point (°C): 84 to 87 Boiling Point (°C): 275 to 277 / 760

ELINCS/EINECS Number: 210-172-0

Bellstein Index: 5,205

Miscellaneous: This chemical is in the EPA inventory under TSCA. Label Precautions: Harmful solid  
Irritant Target organ: liver, kidneys Target organ: blood Target organ: thyroid

Product Number: 131326

Product Name: Pentachlorobenzene, 98%

Valid 02/2000 - 04/2000 Aldrich Chemical Co., Inc. 1001 West St.  
Paul Milwaukee, WI 53233 USA Tel: 414-273-3850 M A T E R I A  
L S A F E T Y D A T A S H E E T SECTION 1. - - - - -  
CHEMICAL IDENTIFICATION- - - - - CATALOG #: 131326  
NAME: PENTACHLOROENZENE, 98% SECTION 2. - - - - -  
COMPOSITION/INFORMATION ON INGREDIENTS - - - - - CAS #: 608-93-5  
MF: C<sub>5</sub>HCl<sub>5</sub> EC NO: 210-172-0 SYNONYMS PCB \* PENTACHLOROENZENE \*  
1,2,3,4,5-PENTACHLOROENZENE \* QCB \* RCRA WASTE NUMBER U183 \* SECTION 3. -  
- - - - - HAZARDS IDENTIFICATION - - - - - LABEL  
PRECAUTIONARY STATEMENTS HARMFUL HARMFUL BY INHALATION, IN CONTACT  
WITH SKIN AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND  
SKIN. TARGET ORGAN(S): BLOOD THYROID IN CASE OF CONTACT WITH  
EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.  
WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. SECTION 4. - - - - -  
FIRST-AID MEASURES- - - - - IN CASE OF CONTACT, IMMEDIATELY  
FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IN  
CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF  
WATER. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF SWALLOWED, WASH



OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.  
 DISCARD CONTAMINATED CLOTHING AND SHOES. SECTION 5. ----- FIRE  
 FIGHTING MEASURES ----- EXTINGUISHING MEDIA WATER SPRAY.  
 CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL  
 FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND  
 PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE  
 AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS. SECTION 6.  
 ----- ACCIDENTAL RELEASE MEASURES ----- WEAR  
 RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES.  
 SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING  
 DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS  
 COMPLETE. SECTION 7. ----- HANDLING AND STORAGE -----  
 ----- REFER TO SECTION 8. SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL  
 PROTECTION ----- WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR,  
 CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.  
 SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. DO NOT  
 BREATHE DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH  
 THOROUGHLY AFTER HANDLING. IRRITANT. HARMFUL SOLID. STORE IN A  
 COOL DRY PLACE. SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----  
 ----- APPEARANCE AND ODOR ----- OFF-WHITE POWDER WITH CHUNKS PHYSICAL  
 PROPERTIES BOILING POINT: 275 C TO 277 C MELTING POINT: 84  
 C TO 87 C SPECIFIC GRAVITY: 1.609 SECTION 10. -----  
 STABILITY AND REACTIVITY ----- INCOMPATIBILITIES STRONG  
 OXIDIZING AGENTS HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS TOXIC  
 FUMES OF: CARBON MONOXIDE, CARBON DIOXIDE HYDROGEN CHLORIDE GAS  
 SECTION 11. ----- TOXICOLOGICAL INFORMATION -----  
 ACUTE EFFECTS HARMFUL IF SWALLOWED. MAY BE HARMFUL IF INHALED. MAY  
 BE HARMFUL IF ABSORBED THROUGH THE SKIN. CAUSES EYE AND SKIN IRRITATION.  
 MATERIAL IS IRRITATING TO MUCCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.  
 TARGET ORGAN(S): LIVER, KIDNEYS BLOOD THYROID RTECS #:  
 DA6640000 BENZENE, PENTACHLORO- TOXICITY DATA ORL-RAT LD50:1080  
 MG/KG JEPTDQ 4(5-6),183,1980 SKN-RAT LD50:>2500  
 MG/KG JEPTDQ 4(5-6),183,1980 ORL-MUS LD50:1175  
 MG/KG JEPTDQ 4(5-6),183,1980 TARGET ORGAN DATA  
 BEHAVIORAL (GENERAL ANESTHETIC) BEHAVIORAL (TREMOR) PATERNAL EFFECTS  
 (SPERMATOGENESIS) SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL  
 SYSTEM) ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES  
 (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE  
 INFORMATION. SECTION 12. ----- ECOLOGICAL INFORMATION -----  
 ----- DATA NOT YET AVAILABLE. SECTION 13. ----- DISPOSAL  
 CONSIDERATIONS ----- DISSOLVE OR MIX THE MATERIAL WITH A  
 COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN  
 AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL  
 ENVIRONMENTAL REGULATIONS. SECTION 14. ----- TRANSPORT  
 INFORMATION ----- CONTACT ALDRICH CHEMICAL COMPANY FOR  
 TRANSPORTATION INFORMATION. SECTION 15. ----- REGULATORY  
 INFORMATION ----- EUROPEAN INFORMATION EC INDEX NO:  
 602-074-00-0 HARMFUL R 11 HIGHLY FLAMMABLE. R 22 HARMFUL  
 IF SWALLOWED. R 50/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-  
 TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT. S 41 IN CASE OF  
 FIRE AND/OR EXPLOSION DO NOT BREATHE FUMES. S 46 IF SWALLOWED, SEEK  
 MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL. S 60  
 THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE.  
 S 61 AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/

SAFETY DATA SHEETS. REVIEWS, STANDARDS, AND REGULATIONS OEL=MAK EPA  
TSCA SECTION 8(B) CHEMICAL INVENTORY EPA TSCA 8(A) PRELIMINARY ASSESSMENT  
INFORMATION, FINAL RULE FEREAC 47,26992,82 EPA TSCA SECTION 8(D)  
UNPUBLISHED HEALTH/SAFETY STUDIES ON EPA IRIS DATABASE EPA TSCA TEST  
SUBMISSION (TSCATS) DATA BASE, SEPTEMBER 1999 NIOSH ANALYTICAL METHOD,  
1994: POLYCHLOROBENZENES, 5517 NTP TOXICITY STUDIES, RPT# TOX-06,  
SEPTEMBER 1999 SECTION 16. - - - - - OTHER INFORMATION - - - - -

- - - - - THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT  
PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA,  
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Product Number: T54402

Product Name: 1,2,3-Trichlorobenzene, 99%

Molecular Formula: C<sub>6</sub>H<sub>3</sub>Cl<sub>3</sub>

Molecular Weight: 181.45

CAS: 87-61-6

Assay: 99%

Comments: Melting Point (°C): 53 to 55 Boiling Point (°C): 218 to 219 / 760

Flash Point (°F): 260

ELINCS/EINECS Number: 201-757-1

Merck Index: 12,9759

Bellstein Index: 5,203

1Aldrich^T544021,2,3-TRICHLORO BENZENE+99%>

Literature References: Aldrich FT-IR Library (Vapor Phase): 3,923A Aldrich NMR Library (60 MHz): 2(1),800C

Miscellaneous: This chemical is in the EPA inventory under TSCA. Hazard: Toxic by ingestion and inhalation. Use: organic intermediate Label Precautions: Harmful solid Irritant

Product Number: T54402

Product Name: 1,2,3-Trichlorobenzene, 99%

Valid 02/2000 - 04/2000 Aldrich Chemical Co., Inc. 1001 West St. Paul  
 Milwaukee, WI 53233 USA Tel: 414-273-3850 MATERIALS  
 A F E T Y D A T A S H E E T SECTION 1. - - - - -  
 CHEMICAL IDENTIFICATION- - - - - CATALOG #: T54402  
 NAME: 1,2,3-TRICHLORO BENZENE, 99% SECTION 2. - - - - -  
 COMPOSITION/INFORMATION ON INGREDIENTS - - - - - CAS #: 87-61-6  
 MF: C6H3CL3 EC NO: 201-757-1 SYNONYMS VIC-TRICHLORO BENZENE \* 1,2,3-  
 TRICHLORO BENZENE \* 1,2,6- TRICHLORO BENZENE \* SECTION 3. - - - - -  
 - HAZARDS IDENTIFICATION - - - - - LABEL PRECAUTIONARY STATEMENTS  
 HARMFUL HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. IN CASE OF CONTACT WITH  
 EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.  
 WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. SECTION 4. - - - - -  
 FIRST-AID MEASURES- - - - - IN CASE OF CONTACT, IMMEDIATELY  
 FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IN  
 CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF  
 WATER. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
 RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF SWALLOWED, WASH

OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER  
OR APPROPRIATE FOAM. SPECIAL FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED  
BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN  
AND EYES. UNUSUAL FIRE AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER  
FIRE CONDITIONS. SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -

- - - - - WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY  
RUBBER GLOVES. SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.  
AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL  
PICKUP IS COMPLETE. SECTION 7. - - - - - HANDLING AND STORAGE- - - - -

- - - - - REFER TO SECTION 8. SECTION 8. - - - - - EXPOSURE  
CONTROLS/PERSONAL PROTECTION- - - - - WEAR APPROPRIATE NIOSH/MSHA-  
APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER  
PROTECTIVE CLOTHING. SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST  
REQUIRED. DO NOT BREATHE DUST. AVOID CONTACT WITH EYES, SKIN AND  
CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. WASH THOROUGHLY AFTER  
HANDLING. IRRITANT. HARMFUL SOLID OR LIQUID (PHYSICAL STATE IS  
TEMPERATURE DEPENDENT). KEEP CONTAINER CLOSED. STORE IN A COOL DRY  
PLACE. SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR WHITE CRYSTALLINE SOLID PHYSICAL PROPERTIES  
BOILING POINT: 218 C TO 219 C MELTING POINT: 53 C TO 55 C  
FLASHPOINT 260F 126.66C  
EXPLOSION LIMITS IN AIR: UPPER 6.6%  
LOWER 1059 F 569C VAPOR PRESSURE: 2.5% AUTOIGNITION TEMPERATURE:  
0.07MM 25 C VAPOR

DENSITY: 6.25 SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -

- - - - - INCOMPATIBILITIES STRONG OXIDIZING AGENTS HAZARDOUS  
COMBUSTION OR DECOMPOSITION PRODUCTS TOXIC FUMES OF: CARBON MONOXIDE,  
CARBON DIOXIDE HYDROGEN CHLORIDE GAS SECTION 11. - - - - -

TOXICOLOGICAL INFORMATION - - - - - ACUTE EFFECTS HARMFUL IF  
SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN. CAUSES EYE AND SKIN  
IRRITATION. MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER  
RESPIRATORY TRACT. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL,  
AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: DC2095000 BENZENE, 1,2,3-TRICHLORO- TOXICITY DATA ORL-RAT  
LD50:1830 MG/KG DCTODJ 11,11,1988 IPR-MUS LD50:1390  
MG/KG MUTAEX 2,111,1987 ONLY SELECTED REGISTRY OF  
TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE  
ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION. SECTION 12. - - - - -

- - - - - ECOLOGICAL INFORMATION - - - - - DATA NOT YET AVAILABLE.

SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - -  
DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A  
CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE  
ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. - - - - -

- - - - - TRANSPORT INFORMATION - - - - - CONTACT ALDRICH CHEMICAL  
COMPANY FOR TRANSPORTATION INFORMATION. SECTION 15. - - - - -

REGULATORY INFORMATION - - - - - EUROPEAN INFORMATION HARMFUL  
R 20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
R 36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. S 26  
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND  
SEEK MEDICAL ADVICE. S 37/39 WEAR SUITABLE GLOVES AND EYE/FACE  
PROTECTION. REVIEWS, STANDARDS, AND REGULATIONS OEL=MAK OEL-AUSTRIA:  
MAK 5 PPM (40 MG/M3), JAN1999 NOBS 1983: HZD X9450; NIS 1; TNF 38; NOS 2;

TNE 691      EPA TSCA SECTION 8(B) CHEMICAL INVENTORY      EPA TSCA SECTION 8(D)  
UNPUBLISHED HEALTH/SAFETY STUDIES      EPA TSCA TEST SUBMISSION (TSCATS) DATA  
BASE, SEPTEMBER 1999 SECTION 16. - - - - - OTHER INFORMATION- - - -

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Product Number: 132047

Product Name: 1,2,4-Trichlorobenzene, 99+%

Molecular Formula: C<sub>6</sub>H<sub>3</sub>Cl<sub>3</sub>

Molecular Weight: 181.45

CAS: 120-82-1

Assay: 99+%

Density: 1.454

Comments: Melting Point (°C): 16 Boiling Point (°C): 214 / 760 Refractive Index: 1.5710 Flash Point (°F): >230

ELINCS/EINECS Number: 204-428-0 Merck Index: 12,9760 Beilstein Index: 5,204

132047 1,2,4-TRICHLOROBENZENE+99+%>

Miscellaneous: This chemical is in the EPA inventory under TSCA. Hazard: Toxic by ingestion and inhalation. Use: Solvent in chemical manufacturing, dyes and intermediates, dielectric fluid, synthetic transformer oils, lubricants, heat transfer medium, insecticides. Label Precautions: Toxic Irritant Target organ: liver, kidneys

Product Number: 132047

Product Name: 1,2,4-Trichlorobenzene, 99+%

Valid 02/2000 - 04/2000 Aldrich Chemical Co., Inc. 1001 West St.  
Paul Milwaukee, WI 53233 USA Tel: 414-273-3850 M A T E R I A  
L S A F E T Y D A T A S H E E T SECTION 1. - - - - -  
CHEMICAL IDENTIFICATION - - - - - CATALOG #: 132047  
NAME: 1,2,4-TRICHLOROBENZENE, 99+% SECTION 2. - - - - -  
COMPOSITION/INFORMATION ON INGREDIENTS - - - - - CAS #: 120-82-1  
MF: C6H3CL3 EC NO: 204-428-0 SYNONYMS HOSTETEX L-PEC \* UNSYM-

TRICHLOROBEENZENE \* 1,2,4-TRICHLOROBEENZENE \* 1, 2,5-TRICHLOROBEENZENE \*  
 1,3,4-TRICHLOROBEENZENE \* 1,2,4- TRICHLOROBEENZENE (ACGIH) \* 1,2,4-  
 TRICHLOROBEENZOL \* TRICHLOROBEENZEN (POLISH) \* SECTION 3. - - - - -  
 - HAZARDS IDENTIFICATION - - - - - LABEL PRECAUTIONARY STATEMENTS  
 TOXIC (USA) HARMFUL (EU) HARMFUL BY INHALATION, IN CONTACT WITH SKIN  
 AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.  
 TARGET ORGAN(S): LIVER, KIDNEYS IN CASE OF CONTACT WITH EYES, RINSE  
 IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR  
 SUITABLE PROTECTIVE CLOTHING. SECTION 4. - - - - - FIRST-AID  
 MEASURES- - - - - IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES  
 OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE  
 REMOVING CONTAMINATED CLOTHING AND SHOES. IF SWALLOWED, WASH OUT MOUTH  
 WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. IF INHALED,  
 REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF  
 BREATHING IS DIFFICULT, GIVE OXYGEN. SECTION 5. - - - - - FIRE  
 FIGHTING MEASURES - - - - - EXTINGUISHING MEDIA WATER SPRAY.  
 CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL  
 FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND  
 PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE  
 AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS. SECTION 6:  
 - - - - - ACCIDENTAL RELEASE MEASURES- - - - - EVACUATE  
 AREA. WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY  
 RUBBER GLOVES. ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED  
 CONTAINERS FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER  
 MATERIAL PICKUP IS COMPLETE. SECTION 7. - - - - - HANDLING AND  
 STORAGE- - - - - REFER TO SECTION 8. SECTION 8. - - - - -  
 EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - - WEAR APPROPRIATE  
 NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES,  
 OTHER PROTECTIVE CLOTHING. SAFETY SHOWER AND EYE BATH. USE ONLY IN A  
 CHEMICAL FUME HOOD. DO NOT BREATHE VAPOR. DO NOT GET IN EYES, ON SKIN,  
 ON CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. WASH THOROUGHLY  
 AFTER HANDLING. WASH CONTAMINATED CLOTHING BEFORE REUSE. TOXIC.  
 IRRITANT. HARMFUL LIQUID AND FUMES. KEEP TIGHTLY CLOSED. STORE IN  
 A COOL DRY PLACE. SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES -  
 - - - - - PHYSICAL PROPERTIES BOILING POINT: 214 C MELTING  
 POINT: 16 C FLASHPOINT >230  
 109C EXPLOSION LIMITS IN AIR: UPPER  
 6.6% 150 C LOWER 2.5%  
 AUTOIGNITION TEMPERATURE: 1060 F 570C VAPOR PRESSURE:  
 IMM 40 C SPECIFIC GRAVITY: 1.454 VAPOR DENSITY: >6 SECTION 10.  
 - - - - - STABILITY AND REACTIVITY - - - - -  
 INCOMPATIBILITIES STRONG OXIDIZING AGENTS HAZARDOUS COMBUSTION OR  
 DECOMPOSITION PRODUCTS CARBON MONOXIDE, CARBON DIOXIDE HYDROGEN  
 CHLORIDE GAS SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -  
 - - - - - ACUTE EFFECTS NAUSEA, DIZZINESS AND HEADACHE GASTROINTESTINAL  
 DISTURBANCES DAMAGE TO THE LIVER DAMAGE TO THE KIDNEYS CAUSES SKIN  
 IRRITATION. HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.  
 VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER  
 RESPIRATORY TRACT. CHRONIC EFFECTS TARGET ORGAN(S): DAMAGE TO THE  
 LIVER DAMAGE TO THE KIDNEYS RTECS #: DC2100000 BENZENE, 1,2,4-  
 TRICHLORO- IRRITATION DATA SKN-RBT 1950 MG/13W-I MOD  
 AEHLAU 30,165,1975 TOXICITY DATA ORL-RAT LD50:756 MG/KG  
 AOHYA3 12,209,1969 SKN-RAT LD50:6139 MG/KG  
 AOHYA3 12,209,1969 ORL-MUS LD50:300 MG/KG NAIZAM

29,569,1978 IPR-MUS LD50:1223 MG/KG MUTAEX  
 2,111,1987 TARGET ORGAN DATA BEHAVIORAL (ALTERED SLEEP TIME)  
 BEHAVIORAL (SOMNOLENCE) BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE  
 THRESHOLD) BEHAVIORAL (ATAXIA) MATERNAL EFFECTS (UTERUS, CERVIX,  
 VAGINA) EFFECTS ON EMBRYO OR FETUS (CYTOLOGICAL CHANGES) EFFECTS ON  
 EMBRYO OR FETUS (FETOTOXICITY) EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)  
 ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)  
 DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE  
 INFORMATION. SECTION 12. ----- ECOLOGICAL INFORMATION -----  
 ----- DATA NOT YET AVAILABLE. SECTION 13. ----- DISPOSAL  
 CONSIDERATIONS ----- DISSOLVE OR MIX THE MATERIAL WITH A  
 COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN  
 AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL  
 ENVIRONMENTAL REGULATIONS. SECTION 14. ----- TRANSPORT  
 INFORMATION ----- CONTACT ALDRICH CHEMICAL COMPANY FOR  
 TRANSPORTATION INFORMATION. SECTION 15. ----- REGULATORY  
 INFORMATION ----- EUROPEAN INFORMATION HARMFUL R  
 20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
 R 36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. S 26  
 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND  
 SEEK MEDICAL ADVICE. S 36 WEAR SUITABLE PROTECTIVE CLOTHING.  
 REVIEWS, STANDARDS, AND REGULATIONS OEL-MAK ACGIH TLV-CL 37 MG/M3 (5  
 PPM) DTLVS\* TLV/BEI,1997 OEL-AUSTRALIA:TWA 5 PPM (40  
 MG/M3) JAN 1993 OEL-AUSTRIA: MAK 5 PPM (40 MG/M3), JAN1999 OEL-  
 BELGIUM:STEL 5 PPM (37 MG/M3) JAN 1993 OEL-DENMARK: TWA 5 PPM (40 MG/M3),  
 JAN1999 OEL-FINLAND:TWA 5 PPM (40 MG/M3);STEL 10 PPM (74 MG/M3);SKIN JAN  
 1993 OEL-GERMANY:TWA 5 PPM (40 MG/M3) JAN 1993 OEL-THE NETHERLANDS:TWA  
 5 PPM (40 MG/M3) JAN 1993 OEL-SWITZERLAND:TWA 5 PPM (40 MG/M3) JAN 1993  
 OEL-UNITED KINGDOM:TWA 5 PPM (40 MG/M3);STEL 5 PPM (40 MG/M3) JAN 1993  
 OEL-POLAND: MAC(TWA) 10 MG/M3, MAC(C) 40 MG/M3, JAN1999 OEL IN BULGARIA,  
 COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE,  
 VIETNAM CHECK ACGIH TLV NIOSH REL TO 1,2,4-TRICHLOROBENZENE-AIR:CL 5 PPM  
 NIOSH\* DHHS #92-100,1992 NOHS 1974: HZD 83334; NIS 4; TNF 74; NOS 8; TNE  
 1687 NOHS 1983: HZD 83334; NIS 6; TNF 78; NOS 14; TNE 4033; TFE 1463  
 EPA TSCA SECTION 8(B) CHEMICAL INVENTORY EPA TSCA 8(A) PRELIMINARY  
 ASSESSMENT INFORMATION, FINAL RULE FEREAC 47,26992,82 EPA TSCA  
 SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES ON EPA IRIS DATABASE  
 EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, SEPTEMBER 1999 NIOSH  
 ANALYTICAL METHOD, 1994: POLYCHLOROBENZENES, 5517 U.S. INFORMATION THIS  
 PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS. SECTION 16. - -  
 ----- OTHER INFORMATION----- THE ABOVE  
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afety Phrases  
Not Available

**SECTION 16 - OTHER INFORMATION**

The above information is believed to be correct on the date it is published and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

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ge: 2

#### SECTION 5 - FIRE AND EXPLOSION DATA

Flash Point: 200< C

Extinguishing Media:

Carbon dioxide, dry chemical powder or spray.

Upper Explosion Limit: Not Available

Lower Explosion Limit: Not Available

Autoignition Temperature: Not Available

NFPA Hazard Rating: Not Available

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

In case of spills or leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area.

Collect spill and place in an appropriate container. Hold for disposal.

Wash contaminated surfaces to remove any residues.

Remove contaminated clothing and wash before reuse.

#### SECTION 7 - HANDLING AND STORAGE

Handling:

This chemical should be handled only in a hood. Eye shields should be worn.

Use appropriate OSHA/MSHA approved safety equipment.

Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.

Wash thoroughly after handling.

Storage:

Store in a cool dry place. Store only with compatible chemicals.

Keep tightly closed.

#### SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL (TWA): Not Available

ACGIH TLV (TWA): Not Available

ACGIH TLV (STEL): Not Available

Personal Protective Equipment

Eyes: Wear Safety Glasses.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements

must be followed whenever workplace conditions warrant a respirator's use.

#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Color:

White

Phase:

Crystalline solid

Melting Point:

Not Available

Boiling Point:

>200 C

Specific Gravity:

Not Available

Vapor Pressure:

<0.1 mm@38 C

Product Number:

T54607

Product Name:

1,3,5-Trichlorobenzene, 99%

Molecular Formula: C<sub>6</sub>H<sub>3</sub>Cl<sub>3</sub>

Molecular Weight: 181.45

CAS: 108-70-3

Assay: 99%

Comments: Melting Point (°C): 63 to 65 Boiling Point (°C): 208 / 760 Flash Point (°F): 260

ELINCS/EINECS Number: 203-608-6 Merck Index: 12,9761

Bellstein Index: 5,204

1Aldrich^T546071,3,5-TRICHLOROENZENE+99%>

Miscellaneous: This chemical is in the EPA inventory under TSCA. Label Precautions: Harmful solid Irritant

Product Number:

T54607

Product Name:

1,3,5-Trichlorobenzene, 99%

Valid 02/2000 - 04/2000 Aldrich Chemical Co., Inc. 1001 West St.  
 Paul Milwaukee, WI 53233 USA Tel: 414-273-3850 M A T E R I A  
 L S A F E T Y D A T A S H E E T SECTION 1. - - - - -  
 CHEMICAL IDENTIFICATION - - - - - CATALOG #: T54607  
 NAME: 1,3,5-TRICHLOROENZENE, 99% SECTION 2. - - - - -  
 COMPOSITION/INFORMATION ON INGREDIENTS - - - - - CAS #: 108-70-3  
 MF: C6H3CL3 EC NO: 203-608-6 SYNONYMS S-TRICHLOROENZENE \* SYM-  
 TRICHLOROENZENE \* 1,3,5-TRICHLOROENZENE \* SECTION 3. - - - - -

HAZARDS IDENTIFICATION - - - - - LABEL PRECAUTIONARY STATEMENTS  
HARMFUL HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. TARGET ORGAN(S):  
LIVER, KIDNEYS THYROID IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY  
WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE GLOVES AND  
EYE/FACE PROTECTION. SECTION 4. - - - - - FIRST-AID MEASURES- - - - -  
- - - - - IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS  
CONSCIOUS. CALL A PHYSICIAN. IF INHALED, REMOVE TO FRESH AIR. IF NOT  
BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE  
OXYGEN. IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS  
AMOUNTS OF WATER. IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS  
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SECTION 5. - - - - -  
FIRE FIGHTING MEASURES - - - - - EXTINGUISHING MEDIA WATER  
SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL  
FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND  
PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE  
AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS. SECTION 6.  
- - - - - ACCIDENTAL RELEASE MEASURES- - - - - WEAR  
RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES.  
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING  
DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS  
COMPLETE. SECTION 7. - - - - - HANDLING AND STORAGE- - - - -  
- - - - - REFER TO SECTION 8. SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL  
PROTECTION- - - - - WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR,  
CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.  
SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. DO NOT  
BREATHE DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH  
THOROUGHLY AFTER HANDLING. IRRITANT. HARMFUL SOLID. KEEP CONTAINER  
CLOSED. STORE IN A COOL DRY PLACE. SECTION 9. - - - - - PHYSICAL AND  
CHEMICAL PROPERTIES - - - - - PHYSICAL PROPERTIES BOILING POINT:  
208 C MELTING POINT: 62 C FLASHPOINT 224.6 F  
107 C SECTION 10. - - - - - STABILITY AND  
REACTIVITY - - - - - INCOMPATIBILITIES STRONG OXIDIZING AGENTS  
ACIDS HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS CARBON MONOXIDE,  
CARBON DIOXIDE HYDROGEN CHLORIDE GAS SECTION 11. - - - - -  
TOXICOLOGICAL INFORMATION - - - - - ACUTE EFFECTS MATERIAL IS  
IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. HARMFUL IF  
SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN. CAUSES EYE AND SKIN  
IRRITATION. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND  
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. CHRONIC  
EFFECTS TARGET ORGAN(S): LIVER KIDNEYS THYROID RTECS #:  
DC2100100 BENZENE, 1,3,5-TRICHLORO- IRRITATION DATA SKN-RBT 500  
MG/24H MLD NTIS\*\* OTS0537049 EYE-RBT 100 MG MLD  
MG/KG NTIS\*\* OTS0537049 TOXICITY DATA ORL-RAT LD50:800  
48RKAL -,389,1981 ORL-MUS LD50:3350 MG/KG  
NTIS\*\* UCRL-13701 IPR-MUS LD50:2260 MG/KG  
MUTAEX 2,111,1987 ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL  
SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR  
COMPLETE INFORMATION. SECTION 12. - - - - - ECOLOGICAL INFORMATION -  
- - - - - DATA NOT YET AVAILABLE. SECTION 13. - - - - -  
DISPOSAL CONSIDERATIONS - - - - - DISSOLVE OR MIX THE MATERIAL  
WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED  
WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL  
ENVIRONMENTAL REGULATIONS. SECTION 14. - - - - - TRANSPORT

INFORMATION - - - - - CONTACT ALDRICH CHEMICAL COMPANY FOR  
TRANSPORTATION INFORMATION. SECTION 15. - - - - - REGULATORY  
INFORMATION - - - - - EUROPEAN INFORMATION HARMFUL R  
20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
R 36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. S 26  
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND  
SEEK MEDICAL ADVICE. S 37/39 WEAR SUITABLE GLOVES AND EYE/FACE  
PROTECTION. REVIEWS, STANDARDS, AND REGULATIONS OEL-MAK OEL-AUSTRIA:  
MAK 5 PPM (40 MG/ME), JAN1999 NOHS 1974: HZD M2497; NIS 3; TNF 60; NOS 8;  
TNE 1673 EPA GENETOX PROGRAM 1988, NEGATIVE: TRP REVERSION EPA GENETOX  
PROGRAM 1988, INCONCLUSIVE: B SUBTILIS REC ASSAY; E COLI POLA WITHOUT S9  
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY EPA TSCA 8(A) PRELIMINARY  
ASSESSMENT INFORMATION, FINAL RULE FEREAC 47,26992,82 EPA TSCA  
SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES EPA TSCA TEST SUBMISSION  
(TSCATS) DATA BASE, SEPTEMBER 1999 SECTION 16. - - - - - OTHER  
INFORMATION- - - - - THE ABOVE INFORMATION IS BELIEVED TO BE  
CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS  
A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE  
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IBM -- IBM, CLEANER, ISOPROPYL ALCOHOL 91 - ISOPROPYL ALCOHOL, TECHNICAL  
MATERIAL SAFETY DATA SHEET  
NSN: 6810007534993  
Manufacturer's CAGE: 89264  
Part No. Indicator: A  
Part Number/Trade Name: IBM, CLEANER, ISOPROPYL ALCOHOL 91

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General Information

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Item Name: ISOPROPYL ALCOHOL, TECHNICAL  
Company's Name: IBM CORP.  
Company's Street: SOUTH RD  
Company's P. O. Box: 950  
Company's City: POUGHKEEPSIE  
Company's State: NY  
Company's Country: US  
Company's Zip Code: 12602  
Company's Emerg Ph #: 800-IBM-4333  
Company's Info Ph #: 800-IBM-4333  
Record No. For Safety Entry: 015  
Tot Safety Entries This Stk#: 015  
Status: SE  
Date MSDS Prepared: 07FEB91  
Safety Data Review Date: 14NOV92  
Supply Item Manager: CX  
MSDS Serial Number: BPHMV  
Hazard Characteristic Code: F3  
Unit Of Issue: CN  
Unit Of Issue Container Qty: 8 OZ.  
Type Of Container: UNKNOWN  
Net Unit Weight: 0.4 LBS

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Ingredients/Identity Information

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Proprietary: NO  
Ingredient: ISOPROPYL ALCOHOL (SARA III)  
Ingredient Sequence Number: 01  
Percent: 91.0  
NIOSH (RTECS) Number: NT8050000  
CAS Number: 67-63-0  
OSHA PEL: 400 PPM/500 STEL  
ACGIH TLV: 400 PPM/500STEL;9192

Proprietary: NO  
Ingredient: WATER  
Ingredient Sequence Number: 02  
Percent: 9.0.  
NIOSH (RTECS) Number: ZC0110000  
CAS Number: 7732-18-5  
ACGIH TLV: UNKNOWN

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Physical/Chemical Characteristics

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Appearance And Odor: WATER WHITE, CLEAR, SLIGHTLY SWEET ALCOHOL ODOR.  
Boiling Point: 177F, 80C  
Melting Point: -123F, -86C  
Vapor Pressure (MM Hg/70 F): 33 MM HG  
Specific Gravity: 0.786  
Solubility In Water: 100%

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Fire and Explosion Hazard Data

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Flash Point: 68.0F, 20.0C  
Lower Explosive Limit: 2.5  
Upper Explosive Limit: 5.2

Extinguishing Media: CO2, DRY CHEMICAL, FOAM.  
Special Fire Fighting Proc: CAN REACT VIGOROUSLY WITH OXIDANTS. USE  
SELF-CONTAINED BREATHING APPARATUS.  
Unusual Fire And Expl Hazrds: FLASHBACK ALONG VAPOR TRAIL MAY OCCUR. VAPOR  
MAY EXPLODE IF IGNITED IN ENCLOSED AREA. COOL CANS W/H2O.

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Reactivity Data

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Stability: YES  
Cond To Avoid (Stability): HEAT, SPARKS, AND OPEN FLAMES.  
Materials To Avoid: STRONG OXIDIZERS.  
Hazardous Decomp Products: NONE  
Hazardous Poly Occur: NO  
Conditions To Avoid (Poly): NOT APPLICABLE

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Health Hazard Data

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LD50-LC50 Mixture: UNKNOWN  
Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: YES  
Route Of Entry - Ingestion: YES  
Health Haz Acute And Chronic: INHALATION- MAY CAUSE CNS DEPRESSION AND/OR  
NARCOTIC EFFECTS. DEEP COMA HAS RESULTED FROM SPONGING WITH ISOPROPYL  
ALCOHOL. EYES- MAY CAUSE IRRITATION. SKIN- MAY CAUSE IRRITATION AND  
DERMATITIS, CNS DEPRESSION AND/OR NARCOTIC EFFECTS. INGESTION- MAY CASUE  
CNS DEPRESSION AND/OR NARCOTIC EFFECTS.  
Carcinogenicity - NTP: NO  
Carcinogenicity - IARC: NO  
Carcinogenicity - OSHA: NO  
Explanation Carcinogenicity: NOT APPLICABLE  
Signs/Symptoms Of Overexp: ACUTE: INHALATION- NAUSEA, VOMITING, ABDOMINAL  
PAIN, CONFUSION AND DROWSINESS. CHRONIC: CHRONIC DRUNKENNESS DURING VAPOR  
EXPOSURE.  
Med Cond Aggravated By Exp: MAY IRRITATE PEOPLE WITH SKIN PROBLEMS,  
ASTHMA, AND LUNG DISEASES.  
Emergency/First Aid Proc: INGESTION- IF PATIENT IS CONSCIOUS AND ALERT  
INDUCE VOMITING ON THE ADVICE OF PHYSICIAN. IF NOT ALERT - SEEK IMMEDIATE  
MEDICAL ATTENTION. INHALATION- REMOVE FROM EXPOSURE. IF BREATHING IS  
DIFFICULT OR ABSENT, GIVE CARDIOPULMONARY SUPPORT IF NECESSARY. SKIN- FLUSH  
WITH WATER. EYES- FLUSH COPIOUSLY WITH WATER FOR 15 MIN.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: DILUTE WITH WATER, ADD ABSORBENT. AVOID  
CONTACT WITH LIQUID & VAPOR.  
Neutralizing Agent: NONE  
Waste Disposal Method: SPRAY INTO THE FURNACE UNDER APPROVED OPERATING  
PROCEDURES. INCINERATION WILL BECOME EASIER BY MIXING WITH A MORE FLAMMABLE  
SOLVENT.  
Precautions-Handling/Storing: DO NOT STORE NEAR STRONG OXIDANTS. KEEP AWAY  
FROM HEAT & OPEN FLAMES.  
Other Precautions: NONE

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Control Measures

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Respiratory Protection: FACE SHIELD, COVERALLS & A MULTIPURPOSE GAS MASK  
Ventilation: LOCAL EXHAUST IS RECOMMENDED TO REDUCE CONCENTRATION < 400.  
Protective Gloves: RUBBER  
Eye Protection: SAFETY GOGGLES  
Other Protective Equipment: FACE SHIELD, COVERALLS, A MULTIPURPOSE GAS  
MASK.  
Work Hygienic Practices: WASH HANDS AFTER HANDLING THIS MATERIAL.  
Suppl. Safety & Health Data: NONE

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Transportation Data

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Trans Data Review Date: 92319  
DOT PSN Code: HWY  
DOT Proper Shipping Name: ISOPROPANOL OR ISOPROPYL ALCOHOL  
DOT Class: 3  
DOT ID Number: UN1219  
DOT Pack Group: II  
DOT Label: FLAMMABLE LIQUID  
IMO PSN Code: FWX  
IMO Proper Shipping Name: DIMETHYL CARBINOL  
IMO Regulations Page Number: SEE 3244  
IMO UN Number: 1219  
IMO UN Class: 3.2  
IMO Subsidiary Risk Label: -  
IATA PSN Code: ONH  
IATA UN ID Number: 1219  
IATA Proper Shipping Name: ISOPROPANOL  
IATA UN Class: 3  
IATA Label: FLAMMABLE LIQUID  
AFI PSN Code: ONH  
AFI Prop. Shipping Name: ISOPROPANOL  
AFI Class: 3  
AFI ID Number: UN1219  
AFI Pack Group: II  
AFI Basic Pac Ref: 7-7  
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Disposal Data  
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Label Data  
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Label Required: YES  
Technical Review Date: 14NOV92  
Label Status: F  
Common Name: IBM, CLEANER, ISOPROPYL ALCOHOL 91  
Signal Word: DANGER!  
Acute Health Hazard-Moderate: X  
Contact Hazard-Slight: X  
Fire Hazard-Severe: X  
Reactivity Hazard-None: X  
Special Hazard Precautions: MAY BE POISONOUS IF INHALED OR ABSORBED  
THROUGH SKIN. VAPORS MAY CAUSE DIZZINESS OR SUFFOCATION. CONTACT MAY  
IRRITATE OR BURN SKIN AND EYES. FIRE MAY PRODUCE IRRITATING OR POISONOUS  
GASES. RUNOFF FROM FIRE CONTROL OR DILUTION WATER MAY CAUSE POLLUTION.  
Protect Eye: Y  
Protect Skin: Y  
Protect Respiratory: Y  
Label Name: IBM CORP.  
Label Street: SOUTH RD  
Label P.O. Box: 950  
Label City: POUGHKEEPSIE  
Label State: NY  
Label Zip Code: 12602  
Label Country: US  
Label Emergency Number: 800-IBM-4333



ALCONOX -- ALCONOX - DETERGENT, GENERAL PURPOSE  
MATERIAL SAFETY DATA SHEET  
NSN: 7930011986050  
Manufacturer's CAGE: 17534  
Part No. Indicator: A  
Part Number/Trade Name: ALCONOX

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General Information

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Item Name: DETERGENT, GENERAL PURPOSE  
Company's Name: ALCONOX INC.  
Company's Street: 215 PARK AVE SOUTH  
Company's City: NEW YORK  
Company's State: NY  
Company's Country: US  
Company's Zip Code: 10003-1603  
Company's Emerg Ph #: 212-473-1300  
Record No. For Safety Entry: 001  
Tot Safety Entries This Stk#: 001  
Status: SEU  
Date MSDS Prepared: 01FEB91  
Safety Data Review Date: 04DEC91  
Supply Item Manager: CX  
MSDS Serial Number: BLLFP  
Hazard Characteristic Code: N1  
Unit Of Issue: BX  
Unit Of Issue Container Qty: 4.00 LBS  
Type Of Container: BOX  
Net Unit Weight: 4.00 LBS

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Ingredients/Identity Information

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Proprietary: NO  
Ingredient: THE MANUFACTURER STATES THAT NO HAZARDOUS INGREDIENTS ARE  
PRESENT IN THIS PRODUCT.  
Ingredient Sequence Number: 01  
Percent: N/A  
NIOSH (RTECS) Number: 9999999ZZ  
OSHA PEL: NOT APPLICABLE  
ACGIH TLV: NOT APPLICABLE  
Other Recommended Limit: NONE SPECIFIED

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Physical/Chemical Characteristics

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Appearance And Odor: WHITE POWDER INTERSPERSED WITH CREAM COLORED FLAKES,  
ODORLESS.  
Boiling Point: N/A  
Melting Point: N/A  
Vapor Pressure (MM Hg/70 F): N/A  
Vapor Density (Air=1): N/A  
Specific Gravity: N/A  
Evaporation Rate And Ref: N/A  
Solubility In Water: APPRECIABLE (>10%)  
Percent Volatiles By Volume: N/A  
pH: N/A

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Fire and Explosion Hazard Data

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Flash Point: NONE  
Lower Explosive Limit: N/A  
Upper Explosive Limit: N/A  
Extinguishing Media: WATER, CARBON DIOXIDE, FOAM, SAND/EARTH.  
Special Fire Fighting Proc: FOR FIRES INVOLVING THIS MATERIAL DO NOT ENTER  
WITHOUT PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS.  
Unusual Fire And Expl Hazrds: NONE

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Reactivity Data

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Stability: YES  
Cond To Avoid (Stability): NONE  
Materials To Avoid: STRONG ACIDS.  
Hazardous Decomp Products: MAY RELEASE CARBON DIOXIDE GAS ON BURNING.  
Hazardous Poly Occur: NO  
Conditions To Avoid (Poly): NOT APPLICABLE

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Health Hazard Data

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LD50-LC50 Mixture: UNKNOWN  
Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: NO  
Route Of Entry - Ingestion: YES  
Health Haz Acute And Chronic: INHALATION OF POWDER MAY PROVE LOCALLY IRRITATING TO MUCOUS MEMBRANES. INGESTION MAY CAUSE DISCOMFORT.  
Carcinogenicity - NTP: NO  
Carcinogenicity - IARC: NO  
Carcinogenicity - OSHA: NO  
Explanation Carcinogenicity: NOT APPLICABLE  
Signs/Symptoms Of Overexp: INGESTION MAY CAUSE DIARRHEA.  
Med Cond Aggravated By Exp: RESPIRATORY CONDITIONS.  
Emergency/First Aid Proc: EYES: FLUSH WITH PLENTY OF WATER FOR 15 MIN.  
SKIN: FLUSH WITH PLENTY OF WATER. INGESTION: DRINK LARGE QUANTITIES OF WATER. GET MEDICAL ATTENTION FOR DISCOMFORT.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: MATERIAL FOAMS PROFUSELY. SHOVEL AND RECOVER AS MUCH AS POSSIBLE. RINSE REMAINDER TO SEWER. MATERIAL IS COMPLETELY BIODEGRADABLE.  
Neutralizing Agent: NONE  
Waste Disposal Method: SMALL QUANTITIES MAY BE DISPOSED OF IN SEWER. LARGE QUANTITIES SHOULD BE DISPOSED OF ACCORDING TO LOCAL REQUIREMENTS FOR NON-HAZARDOUS DETERGENTS.  
Precautions-Handling/Storing: STORE IN A DRY AREA TO PREVENT CAKING.  
Other Precautions: NO SPECIAL REQUIREMENTS OTHER THAN THE GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES EMPLOYED WITH ANY INDUSTRIAL CHEMICAL.

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Control Measures

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Respiratory Protection: DUST MASK.  
Ventilation: NORMAL LOCAL EXHAUST.  
Protective Gloves: USEFUL BUT NOT REQUIRED.  
Eye Protection: USEFUL BUT NOT REQUIRED.  
Other Protective Equipment: NONE REQUIRED.  
Work Hygienic Practices: NO SPECIAL PRACTICES REQUIRED.  
Suppl. Safety & Health Data: NONE

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Transportation Data

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Trans Data Review Date: 91338  
DOT PSN Code: ZZZ  
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
IMO PSN Code: ZZZ  
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION  
IATA PSN Code: ZZZ  
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
AFI PSN Code: ZZZ  
AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
Additional Trans Data: NONE

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Disposal Data

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Label Data

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Label Required: YES  
Technical Review Date: 04DEC91  
Label Date: 04DEC91  
Label Status: F  
Common Name: ALCONOX  
Chronic Hazard: NO  
Signal Word: CAUTION!  
Acute Health Hazard-Slight: X  
Contact Hazard-Slight: X  
Fire Hazard-None: X  
Reactivity Hazard-None: X  
Special Hazard Precautions: INHALATION OF POWDER MAY PROVE LOCALLY  
IRRITATING TO MUCOUS MEMBRANES. INGESTION MAY CAUSE DISCOMFORT. STORE IN A  
DRY AREA TO PREVENT CAKING. FIRST AID: EYES: FLUSH WITH PLENTY OF WATER FOR  
15 MIN. SKIN: FLUSH WITH PLENTY OF WATER. INGESTION: DRINK LARGE QUANTITIES  
OF WATER. GET MEDICAL ATTENTION FOR DISCOMFORT.  
Protect Eye: Y  
Protect Respiratory: Y  
Label Name: ALCONOX INC.  
Label Street: 215 PARK AVE SOUTH  
Label City: NEW YORK  
Label State: NY  
Label Zip Code: 10003-1603  
Label Country: US  
Label Emergency Number: 212-473-1300

SCIENTIFIC GAS PRODUCTS SCOTT SPECIALITY GASE -- HYDROGEN - HYDROGEN  
MATERIAL SAFETY DATA SHEET  
NSN: 6830009652492  
Manufacturer's CAGE: 54262  
Part No. Indicator: A  
Part Number/Trade Name: HYDROGEN

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General Information

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Item Name: HYDROGEN  
Company's Name: SCIENTIFIC GAS PRODUCTS INC/SCOTT SPECIALITY GASES  
Company's Street: 2330 HAMILTON BLVD  
Company's City: SOUTH PLAINFIELD  
Company's State: NJ  
Company's Country: US  
Company's Zip Code: 07080  
Company's Emerg Ph #: 908-754-7700  
Company's Info Ph #: 908-754-7700  
Record No. For Safety Entry: 001  
Tot Safety Entries This Stk#: 002  
Status: SE  
Date MSDS Prepared: 16OCT96  
Safety Data Review Date: 06MAR97  
Supply Item Manager: CX  
MSDS Preparer's Name: UNKNOWN  
MSDS Serial Number: CDGHC  
Specification Number: BB-H-886C  
Spec Type, Grade, Class: GRADE A  
Hazard Characteristic Code: G2  
Unit Of Issue: CY  
Unit Of Issue Container Qty: 175 CU FT  
Type Of Container: CYLINDER  
Net Unit Weight: 0.92 LB  
NRC/State License Number: NOT RELEVANT

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Ingredients/Identity Information

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Proprietary: NO  
Ingredient: HYDROGEN  
Ingredient Sequence Number: 01  
Percent: >99  
NIOSH (RTECS) Number: MW8900000  
CAS Number: 1333-74-0  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED  
Other Recommended Limit: NONE RECOMMENDED

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Physical/Chemical Characteristics

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Appearance And Odor: COLORLESS, ODORLESS GAS  
Boiling Point: -422F, -252C  
Melting Point: -435F, -259C  
Vapor Pressure (MM Hg/70 F): GAS  
Vapor Density (Air=1): 0.07  
Specific Gravity: GAS  
Decomposition Temperature: UNKNOWN  
Evaporation Rate And Ref: GAS  
Solubility In Water: 1.82% @ 20C/68F  
Percent Volatiles By Volume: 100  
Viscosity: NOT RELEVANT  
Radioactivity: NOT RELEVANT  
Corrosion Rate (IPY): UNKNOWN  
Autoignition Temperature: 752F

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Fire and Explosion Hazard Data

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Flash Point: FLAMMABLE GAS  
Lower Explosive Limit: 4%  
Upper Explosive Limit: 75%  
Extinguishing Media: HALOGENATED GAS, CARBON DIOXIDE, DRY CHEMICAL. WATER SPRAY MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL.  
Special Fire Fighting Proc: ONLY SAFE WAY TO EXTINGUISH FIRE IS TO STOP FLOW OF GAS. IF FLOW CANNOT BE STOPPED, LET FIRE BURN ITSELF OUT WHILE COOLING CONTAINERS WITH WATER. STAY UPWIND.  
Unusual Fire And Expl Hazrds: EXTREMELY FLAMMABLE AND EXPLOSIVE. HYDROGEN BURNS WITH AN ALMOST INVISIBLE FLAME. HYDROGEN IS VERY LIGHT AND RISES VERY RAPIDLY IN AIR. INCREASE VENTILATION.

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#### Reactivity Data

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Stability: YES  
Cond To Avoid (Stability): STORAGE IN POORLY VENTILATED AREA OR HEAT SOURCE  
Materials To Avoid: OXIDIZING AGENTS, SOME METALS, ALKALINE MATERIALS, HALOGENS  
Hazardous Decomp Products: NONE  
Hazardous Poly Occur: NO  
Conditions To Avoid (Poly): NOT RELEVANT

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#### Health Hazard Data

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LD50-LC50 Mixture: LD50 (ORAL RAT) IS NOT RELEVANT.  
Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: NO  
Route Of Entry - Ingestion: NO  
Health Haz Acute And Chronic: TARGET ORGANS:LUNGS AND CNS. ACUTE- HYDROGEN IS DEFINED AS A SIMPLE ASPHYXIANT. INHALATION OF HIGH CONCENTRATIONS OF HYDROGEN MAY CAUSE DIZZINESS, HEADACHE, DEEPER BREATHING DUE TO AIR HUNGER, POSSIBLE NAUSEA AND EVENTUAL UNCONSCIOUSNESS. EYES/SKIN/ORAL:NOT LIKELY TO OCCUR. CHRONIC- NONE.  
Carcinogenicity - NTP: NO  
Carcinogenicity - IARC: NO  
Carcinogenicity - OSHA: NO  
Explanation Carcinogenicity: NONE  
Signs/Symptoms Of Overexp: HYDROGEN IS INACTIVE BIOLOGICALLY AND ESSENTIALLY NONTOXIC. IF THE EXCLUSION OF AN ADEQUATE SUPPLY OF OXYGEN TO THE LUNGS OCCUR: HEADACHE, DIZZINESS, DROWSINESS, NAUSEA, VOMITING, EXCITATION, EXCESS SALIVATION, UNCONSCIOUSNESS  
Med Cond Aggravated By Exp: NONE  
Emergency/First Aid Proc: PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO HYDROGEN. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SCBA. CONSCIOUS PERSONS SHOULD BE REMOVED TO AN UNCONTAMINATED AREA AND INHALE FRESH AIR. QUICK REMOVAL FROM CONTAMINATED AREA IS MOST IMPORTANT. UNCONSCIOUS PERSONS SHOULD BE MOVED TO AN UNCONTAMINATED AREA, GIVEN MOUTH-TO-MOUTH RESUSCITATION & SUPPLEMENTAL OXYGEN.

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#### Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: WEAR PROTECTIVE EQUIPMENTS. VENTILATE AREA. REMOVE ALL SOURCES OF IGNITION. STOP LEAK AND REMOVE LEAKING CONTAINERS TO A SAFE OUTDOOR AREA OR TO EXHAUST HOOD IF YOU CAN DO WITHOUT RISK. ALLOW GAS TO DISSIPATE.  
Neutralizing Agent: NOT RELEVANT  
Waste Disposal Method: ALLOW GAS TO DISCHARGE AT MODERATE RATE, IF ALLOWED. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE TO SUPPLIER.  
Precautions-Handling/Storing: STORE CYLINDERS SECURED, IN UPRIGHT POSITION. STORE AWAY FROM FLAMES, OXYGEN & OTHER OXIDIZERS. DO NOT STORE ABOVE 130F. PROTECT CYLINDERS FROM DAMAGE  
Other Precautions: EXTREMELY FLAMMABLE. STORE AND USE WITH ADEQUATE

VENTILATION. CLOSE VALVE WHEN NOT IN USE. NEVER WORK ON A PRESSURIZED SYSTEM. GAS CAN CAUSE RAPID SUFFOCATION. KEEP OUT OF REACH OF CHILDREN. POST NO SMOKING OR OPEN FLAMES SIGNS.

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Control Measures

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Respiratory Protection: IF AIRBORNE CONCENTRATIONS ARE HIGH, A NIOSH-APPROVED POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR OR SELF-CONTAINED BREATHING APPARATUS MUST BE WORN.  
Ventilation: MECHANICAL (GENERAL AND/OR LOCAL EXHAUST, EXPLOSION-PROOF) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV.  
Protective Gloves: PLASTIC OR RUBBER RECOMMENDED  
Eye Protection: SAFETY GLASSES OR GOGGLES RECOMMENDED  
Other Protective Equipment: SAFETY SHOWER AND EYE WASH FOUNTAIN SHOULD BE LOCATED NEARBY. WEAR APPROPRIATE PROTECTIVE CLOTHING FOR RISK OF EXPOSURE.  
Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

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Transportation Data

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Trans Data Review Date: 97065  
DOT PSN Code: HLR  
DOT Proper Shipping Name: HYDROGEN, COMPRESSED  
DOT Class: 2.1  
DOT ID Number: UN1049  
DOT Label: FLAMMABLE GAS  
DOT/DoD Exemption Number: NOT RELEVANT  
IMO PSN Code: IGH  
IMO Proper Shipping Name: HYDROGEN, COMPRESSED  
IMO Regulations Page Number: 2148  
IMO UN Number: 1049  
IMO UN Class: 2(2.1)  
IMO Subsidiary Risk Label: -  
IATA PSN Code: NSD  
IATA UN ID Number: 1049  
IATA Proper Shipping Name: HYDROGEN, COMPRESSED  
IATA UN Class: 2.1  
IATA Label: FLAMMABLE GAS  
AFI PSN Code: NSD  
AFI Symbols: 0  
AFI Prop. Shipping Name: HYDROGEN, COMPRESSED  
AFI Class: 2.1  
AFI ID Number: UN1049  
AFI Basic Pac Ref: A6.3,A6.7  
Additional Trans Data: PROPER SHIPPING NAME AND UN ID NUMBER PER MSDS.

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Disposal Data

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Label Data

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Label Required: YES  
Technical Review Date: 06MAR97  
MFR Label Number: UNKNOWN  
Label Status: F  
Common Name: HYDROGEN  
Chronic Hazard: NO  
Signal Word: DANGER!  
Acute Health Hazard-Severe: X  
Contact Hazard-None: X  
Fire Hazard-Severe: X  
Reactivity Hazard-None: X  
Special Hazard Precautions: TARGET ORGANS:LUNGS & CNS. ACUTE- ASPHYXIANT. INHALATION OF HIGH CONCENTRATIONS OF HYDROGEN MAY CAUSE CNS EFFECTS, POSSIBLE NAUSEA & EVENTUAL UNCONSCIOUSNESS. EYES/SKIN/ORAL:NOT LIKELY TO

OCCUR. CHRONIC- NONE. STORE AWAY FROM FLAMES & INCOMPATIBLES. STOP LEAK & REMOVE LEAKING CONTAINERS TO A SAFE OUTDOOR AREA/EXHAUST HOOD. ALLOW GAS TO DISSIPATE. FIRST AID- RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SCBA. CONSCIOUS PERSONS SHOULD BE REMOVED TO AN UNCONTAMINATED AREA. QUICK REMOVAL FROM CONTAMINATED AREA IS MOST IMPORTANT. UNCONSCIOUS PERSONS SHOULD BE MOVED TO AN UNCONTAMINATED AREA, GIVEN MOUTH-TO-MOUTH RESUSCITATION & SUPPLEMENTAL OXYGEN.

Label Name: SCIENTIFIC GAS PRODUCTS INC/SCOTT SPECIALITY GASES

Label Street: 2330 HAMILTON BLVD

Label City: SOUTH PLAINFIELD

Label State: NJ

Label Zip Code: 07080

Label Country: US

Label Emergency Number: 908-754-7700

Year Procured: 1997

CONOCO -- GASOLINE, SUPERUNLEADED - GASOLINE, AUTOMOTIVE  
MATERIAL SAFETY DATA SHEET  
NSN: 9130010550816  
Manufacturer's CAGE: 5R396  
Part No. Indicator: A  
Part Number/Trade Name: GASOLINE, SUPERUNLEADED

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General Information

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Item Name: GASOLINE, AUTOMOTIVE  
Company's Name: CONOCO INC  
Company's P. O. Box: 2197  
Company's City: HOUSTON  
Company's State: TX  
Company's Country: US  
Company's Zip Code: 77252  
Company's Emerg Ph #: 800-441-3637/800-424-9300 (CHEMTREC)  
Company's Info Ph #: 713-293-5550  
Record No. For Safety Entry: 031  
Tot Safety Entries This Stk#: 044  
Status: SE  
Date MSDS Prepared: 16NOV92  
Safety Data Review Date: 03AUG93  
Supply Item Manager: KY  
MSDS Serial Number: BRGZJ  
Specification Number: ASTM D439  
Spec Type, Grade, Class: SPECIAL GRADE  
Hazard Characteristic Code: F2  
Unit Of Issue: GL  
Unit Of Issue Container Qty: 55 GALLONS  
Type Of Container: DRUM, 18 GAGE  
Net Unit Weight: 334.3 LBS

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Ingredients/Identity Information

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Proprietary: NO  
Ingredient: GASOLINE (INGREDIENTS BELOW ARE INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 01  
Percent: 100  
NIOSH (RTECS) Number: LX3300000  
OSHA PEL: 300 PPM/500 STEL  
ACGIH TLV: 300 PPM/500 STEL; 9293  
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO  
Ingredient: BENZENE (SARA III) (INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 02  
Percent: 0.1-4.9  
NIOSH (RTECS) Number: CY1400000  
CAS Number: 71-43-2  
OSHA PEL: 1PPM/5STEL; 1910.1028  
ACGIH TLV: 10 PPM; A2; 9293  
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO  
Ingredient: ETHYL BENZENE (SARA III) (INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 03  
Percent: 2  
NIOSH (RTECS) Number: DA0700000  
CAS Number: 100-41-4  
OSHA PEL: 100 PPM/125 STEL  
ACGIH TLV: 100 PPM/125 STEL 9293  
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO



Ingredient: CUMENE (SARA III) (INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 04  
Percent: 1  
NIOSH (RTECS) Number: GR8575000  
CAS Number: 98-82-8  
OSHA PEL: S, 50 PPM  
ACGIH TLV: S, 50 PPM; 9293  
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO  
Ingredient: PSEUDOCUMENE (1,2,4-TRIMETHYLBENZENE) (SARA III) (INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 05  
Percent: 2  
NIOSH (RTECS) Number: DC3325000  
CAS Number: 95-63-6  
OSHA PEL: 25 PPM  
ACGIH TLV: 25 PPM; 9293  
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO  
Ingredient: XYLENES (O-,M-,P- ISOMERS) (SARA III) (INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 06  
Percent: 12  
NIOSH (RTECS) Number: ZE2100000  
CAS Number: 1330-20-7  
OSHA PEL: 100 PPM/150 STEL  
ACGIH TLV: 100 PPM/150 STEL; 9293  
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO  
Ingredient: TOLUENE (SARA III) (INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 07  
Percent: 15  
NIOSH (RTECS) Number: XS5250000  
CAS Number: 108-88-3  
OSHA PEL: 200 PPM/150 STEL  
ACGIH TLV: 50 PPM; 9293  
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO  
Ingredient: METHYL TERT-BUTYL ETHER (SARA III) (INCLUDED IN GASOLINE)  
Ingredient Sequence Number: 08  
Percent: 0-15  
NIOSH (RTECS) Number: KN5250000  
CAS Number: 1634-04-4  
OSHA PEL: NOT ESTABLISHED  
ACGIH TLV: NOT ESTABLISHED  
Other Recommended Limit: 100 PPM (MFR)

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Physical/Chemical Characteristics

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Appearance And Odor: WATER WHITE TO STRAW YELLOW LIQUID. GASOLINE ODOR.  
Boiling Point: 85-437F  
Vapor Pressure (MM Hg/70 F): 200-475  
Vapor Density (Air=1): >1  
Specific Gravity: 0.7-0.77  
Decomposition Temperature: UNKNOWN  
Evaporation Rate And Ref: UNKNOWN  
Solubility In Water: SLIGHTLY SOLUBLE.  
Percent Volatiles By Volume: 100  
Corrosion Rate (IPY): UNKNOWN  
Autoignition Temperature: 536F

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Fire and Explosion Hazard Data

Flash Point: <-50F,<-46C  
Flash Point Method: TCC  
Lower Explosive Limit: <1  
Upper Explosive Limit: 8  
Extinguishing Media: USE CARBON DIOXIDE, FOAM, OR DRY CHEMICAL. WATER  
STREAM MAY BE INEFFECTIVE.  
Special Fire Fighting Proc: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A  
FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS  
WITH WATER SPRAY.  
Unusual Fire And Expl Hazrds: VAPORS CAN TRAVEL ALONG GROUND AND FLASHBACK  
EXPLOSIVELY. CONTAINERS MAY BURST WITH HEAT OF FIRE. COMBUSTION PRODUCTS  
MAY CONTAIN TOXIC CARBON MONOXIDE.

#### Reactivity Data

Stability: YES  
Cond To Avoid (Stability): HIGH HEAT, OPEN FLAMES, UNDUE EXPOSURE TO AIR.  
Materials To Avoid: STRONG OXIDIZING AGENTS, HALOGENS, STRONG ACIDS AND  
ALKALIES.  
Hazardous Decomp Products: CARBON OXIDES AND VARIOUS HYDROCARBONS WHEN  
BURNED.  
Hazardous Poly Occur: NO  
Conditions To Avoid (Poly): NOT APPLICABLE

#### Health Hazard Data

LD50-LC50 Mixture: LD50 ORAL RAT IS UNKNOWN  
Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: YES  
Route Of Entry - Ingestion: NO  
Health Haz Acute And Chronic: ACUTE: IRRITATION, CENTRAL NERVOUS SYSTEM  
EFFECTS. GASOLINE IF SWALLOWED, MAY BE ASPIRATED INTO LUNGS, RESULTING IN  
PULMONARY EDEMA AND CHEMICAL PNEUMONITIS. CHRONIC: BENZENE IS A CONFIRMED  
CARCINOGEN AND MAY PRODUCE BLOOD CHANGES. PROLONGED EXPOSURE TO HIGH  
CONCENTRATIONS HAS CAUSED KIDNEY AND LIVER CANCER IN RAT/MICE  
Carcinogenicity - NTP: YES  
Carcinogenicity - IARC: YES  
Carcinogenicity - OSHA: YES  
Explanation Carcinogenicity: BENZENE IS A CONFIRMED CARCINOGEN BY NTP,  
IARC AND OSHA.  
Signs/Symptoms Of Overexp: EYES/SKIN: IRRITATION. INHALATION: HEADACHE,  
NAUSEA, WEAKNESS, SEDATION, AND UNCONSCIOUSNESS. INGESTION: IRRITATION OF  
GASTROINTESTINAL SYSTEM. ASPIRATION AFTER INGESTION MAY CAUSE LUNG DAMAGE  
AND DEATH.  
Med Cond Aggravated By Exp: INDIVIDUALS WITH A HISTORY OF SKIN,  
RESPIRATORY OR CENTRAL NERVOUS SYSTEM DISORDERS MAY BE AT INCREASED RISK  
FROM EXPOSURE.  
Emergency/First Aid Proc: EYES: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES.  
SEE DOCTOR. SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH WITH SOAP  
AND WATER. SEE DOCTOR. INHALATION: REMOVE VICTIM TO FRESH AIR. GIVE  
OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DO NOT INDUCE VOMITING. SEE  
DOCTOR IMMEDIATELY. \*\*\* NOTE TO PHYSICIAN: ACTIVATED CHARCOAL SLURRY MAY BE  
ADMINISTERED \*\*\*

#### Precautions for Safe Handling and Use

Steps If Matl Released/Spill: ELIMINATE IGNITION SOURCES. VENTILATE AREA.  
USE NON-SPARKING TOOLS. WEAR PROPER PROTECTIVE EQUIPMENT. STOP LEAK AND  
CONTAIN SPILL. ABSORB IN INERT ABSORBENT AND PLACE INTO APPROPRIATE DISPOSAL  
CONTAINER AND SEAL. WASH AREA WITH PLENTY OF WATER.  
Neutralizing Agent: NOT APPLICABLE  
Waste Disposal Method: CONSULT YOUR LOCAL ENVIRONMENTAL OFFICER. DISPOSE  
OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL ENVIRONMENTAL  
REGULATIONS. BY ITSELF THE LIQUID IS EXPECTED TO BE A RCRA IGNITABLE

HAZARDOUS WASTE.

Precautions-Handling/Storing: STORE IN COOL, DRY, WELL VENTILATED PLACE, AWAY FROM HEAT, IGNITION SOURCES AND INCOMPATIBLE MATERIALS. KEEP CONTAINERS CLOSED.

Other Precautions: AVOID BREATHING VAPORS, AND EYE AND SKIN CONTACT. USE ONLY WITH ADEQUATE VENTILATION. DO NOT SIPHON BY MOUTH. BOND AND GROUND CONTAINERS DURING TRANSFER. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

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Control Measures

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Respiratory Protection: NIOSH/MSHA RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE APPROPRIATE FOR EXPOSURE OF CONCERN OR SCBA IF TLV IS EXCEEDED.

Ventilation: SUFFICIENT MECHANICAL (GENERAL) AND/OR LOCAL EXHAUST VENTILATION. USE EXPLOSION-PROOF EQUIPMENT.

Protective Gloves: NBR, VITON, NITRILE, PVA.

Eye Protection: SAFETY GLASSES WITH SIDE SHIELDS.

Other Protective Equipment: FULL BODY LONG-SLEEVED GARMENTS TO PREVENT REPEATED OR PROLONGED SKIN CONTACT. EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices: AVOID CONTACT WITH EYES AND SKIN. DO NOT BREATHE VAPORS. WASH THOROUGHLY AFTER HANDLING. LAUNDRY CONTAMINATED CLOTHING.

Suppl. Safety & Health Data: THESE PRECAUTIONS ARE FOR NORMAL USES AND CONDITIONS. WHERE SPECIAL OR UNUSUAL CONDITIONS EXIST, CONSULT AN INDUSTRIAL HYGIENIST. RCRA CLASSIFICATION IGNITABLE (D001). EP TOXIC (U019).

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Transportation Data

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Trans Data Review Date: 93215

DOT PSN Code: GTN

DOT Proper Shipping Name: GASOLINE

DOT Class: 3

DOT ID Number: UN1203

DOT Pack Group: II

DOT Label: FLAMMABLE LIQUID

IMO PSN Code: HRV

IMO Proper Shipping Name: GASOLINE

IMO Regulations Page Number: 3141

IMO UN Number: 1203

IMO UN Class: 3.1

IMO Subsidiary Risk Label: -

IATA PSN Code: MUC

IATA UN ID Number: 1203

IATA Proper Shipping Name: GASOLINE

IATA UN Class: 3

IATA Label: FLAMMABLE LIQUID

AFI PSN Code: MUC

AFI Prop. Shipping Name: GASOLINE

AFI Class: 3

AFI ID Number: UN1203

AFI Pack Group: II

AFI Basic Pac Ref: 7-7

Additional Trans Data: BENZENE REPORTABLE QUANTITY IS 10 POUNDS.

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Disposal Data

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Label Data

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Label Required: YES

Technical Review Date: 06AUG93

Label Status: F

Common Name: GASOLINE, SUPERUNLEADED

Signal Word: DANGER!

Acute Health Hazard-Moderate: X

Contact Hazard-Slight: X

Fire Hazard-Severe: X

Reactivity Hazard-None: X

Special Hazard Precautions: ACUTE: IRRITATION, CENTRAL NERVOUS SYSTEM EFFECTS. GASOLINE IF SWALLOWED, MAY BE ASPIRATED INTO LUNGS, RESULTING IN PULMONARY EDEMA AND CHEMICAL PNEUMONITIS. CHRONIC: BENZENE IS A CONFIRMED CARCINOGEN AND MAY PRODUCE BLOOD CHANGES. PROLONGED EXPOSURE TO HIGH EYES: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. SEE DOCTOR. SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH WITH SOAP AND WATER. SEE DOCTOR. INHALATION: REMOVE VICTIM TO FRESH AIR. GIVE OXYGEN/CPR IF NEEDED. SEE DOCTOR. INGESTION: DO NOT INDUCE VOMITING. SEE DOCTOR IMMEDIATELY.

Protect Eye: Y

Protect Skin: Y

Label Name: CONOCO INC

Label P.O. Box: 2197

Label City: HOUSTON

Label State: TX

Label Zip Code: 77252

Label Country: US

Label Emergency Number: 800-441-3637/800-424-9300 (CHEMTREC)

Product Number: 131849

Product Name: 1,2,3,4-Tetrachlorobenzene, 98%

Molecular Formula: C<sub>6</sub>H<sub>2</sub>Cl<sub>4</sub>

Molecular Weight: 215.89

CAS: 634-66-2

Assay: 98%

Comments: Melting Point (°C): 46 to 47 Boiling Point (°C): 254 / 761 Flash Point (°F): >230

ELINCS/EINECS Number: 211-214-0

Beilstein Index: 5,204  
TETRACHLOROBENZENE+98%>

1318491,2,3,4-

Literature References: Aldrich FT-IR Library (Vapor Phase): 3,938C Aldrich NMR Library (60 MHz): 2(1),809A

Miscellaneous: *This chemical is in the EPA inventory under TSCA.* Use: component of dielectric fluids, synthesis. Label Precautions: Irritant Harmful solid

Product Number: 131849

Product Name: 1,2,3,4-Tetrachlorobenzene, 98%

Valid 02/2000 - 04/2000 Aldrich Chemical Co., Inc. 1001 West St. Paul  
Milwaukee, WI 53233 USA Tel: 414-273-3850 MATERIALS  
A F E T Y D A T A S H E E T SECTION 1. - - - - -  
CHEMICAL IDENTIFICATION- - - - - CATALOG #: 131849  
NAME: 1,2,3,4-TETRACHLOROBENZENE, 98% SECTION 2. - - - - -  
COMPOSITION/INFORMATION ON INGREDIENTS - - - - - CAS #: 634-66-2  
MF: C6H2CL4 EC NO: 211-214-0 SYNONYMS 1,2,3,4-TETRACHLOROBENZENE \*  
SECTION 3. - - - - - HAZARDS IDENTIFICATION - - - - -  
LABEL PRECAUTIONARY STATEMENTS HARMFUL HARMFUL IF SWALLOWED.  
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. IN CASE OF CONTACT WITH  
EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. SECTION 4. - - - - -

FIRST-AID MEASURES- - - - - IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER. IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

- EXTINGUISHING MEDIA WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER FIRE CONDITIONS. SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - - WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES. SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE. SECTION 7. - - - - - HANDLING AND STORAGE- - - - - REFER TO SECTION 8. SECTION 8. - - - - -

EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - - WASH CONTAMINATED CLOTHING BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING. NIOSH/MSHA-APPROVED RESPIRATOR. RUBBER GLOVES. CHEMICAL SAFETY GOGGLES. SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. AVOID CONTACT AND INHALATION. DO NOT GET IN EYES, ON SKIN, ON CLOTHING. HARMFUL SOLID. IRRITANT. KEEP TIGHTLY CLOSED. STORE IN A COOL DRY PLACE. SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR WHITE TO LIGHT-TAN CRYSTALLINE POWDER AND/OR CHUNKS  
 PHYSICAL PROPERTIES BOILING POINT: 254 C/761MM. MELTING POINT: 46 C TO 47 C FLASHPOINT >230  
 109C SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -

INCOMPATIBILITIES STRONG OXIDIZING AGENTS STRONG BASES HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS CARBON MONOXIDE, CARBON DIOXIDE HYDROGEN CHLORIDE GAS SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -

ACUTE EFFECTS MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. MAY BE HARMFUL IF INHALED. MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. HARMFUL IF SWALLOWED. CAUSES EYE AND SKIN IRRITATION. TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED. RTECS #: DB9440000 BENZENE, 1,2,3,4-TETRACHLORO-TOXICITY DATA ORL-RAT LD50:1167 MG/KG JTEHD6 11,663,1983 TARGET ORGAN DATA BEHAVIORAL (SOMNOLENCE) GASTROINTESTINAL (HYPERMOTILITY, DIARRHEA) EFFECTS ON FERTILITY (LITTER SIZE) EFFECTS ON EMBRYO OR FETUS (EXTRA EMBRYONIC STRUCTURES) EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY) NUTRITIONAL AND GROSS METABOLIC (BODY TEMPERATURE DECREASE) ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION. SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - -

DATA NOT YET AVAILABLE. SECTION 13. - - - - -

DISPOSAL CONSIDERATIONS - - - - - DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. - - - - - TRANSPORT INFORMATION - - - - - CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION. SECTION 15. - - - - - REGULATORY INFORMATION - - - - - EUROPEAN INFORMATION HARMFUL R 22

HARMFUL IF SWALLOWED. R 36/37/38 IRRITATING TO EYES, RESPIRATORY  
SYSTEM AND SKIN. S 26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY  
WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. S 37/39 WEAR  
SUITABLE GLOVES AND EYE/FACE PROTECTION. REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK EPA TSCA SECTION 8(B) CHEMICAL INVENTORY EPA TSCA 8(A)  
PRELIMINARY ASSESSMENT INFORMATION, FINAL RULE FEREAC 47,26992,82 EPA  
TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES EPA TSCA TEST  
SUBMISSION (TSCATS) DATA BASE, SEPTEMBER 1999 SECTION 16. - - - - -

OTHER INFORMATION- - - - - THE ABOVE INFORMATION IS BELIEVED  
TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED  
ONLY AS A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY  
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Product Number: 442219

Product Name: 1,2,4,5-Tetrachlorobenzene

Valid 10/1999 - 12/1999 Supelco Inc. Supelco Park Bellefonte, PA 16823-0048  
USA Tel: 814-359-3441 MATERIAL SAFETY DATA

SHEET SECTION I - - - - - GENERAL

INFORMATION CATALOG NO 442219 (REORDER PRODUCT BY THIS NO.)

PRODUCT NAME 1,2,4,5-TETRACHLOROBENZENE, 1000MG, NEAT DATA SHEET NO

R472015 1,2,4,5-TETRACHLOROBENZENE CHEMICAL NAME

TETRACHLOROBENZENE, 1,2,4,5- FORMULA C6H2CL4

FORMULA WEIGHT 214 CAS 95-94-3 RTECS DB9450000 SYNONYM

MANUFACTURER SUPELCO INC. PHONE 814-359-3441 ADDRESS SUPELCO

PARK, BELLEFONTE, PA 16823-0048 SECTION II - - - - - HAZARDOUS

INGREDIENTS OF MIXTURES CHEMICAL NAME

COMMON NAME - PERCENTAGE - CAS # (FORMULA) -

PEL(UNITS) - TLV(UNITS) LD50 VALUE - CONDITIONS

N/A SECTION III - - - - -

PHYSICAL DATA BOILING POINT 240. C MELTING POINT 138

C VAPOR PRESSURE N/A VAPOR DENSITY N/A SPECIFIC

GRAVITY N/A PERCENT VOLATILE BY VOLUME 0

WATER SOLUBILITY 0 EVAPORATION RATE N/A APPEARANCE WHITE SOLID

SECTION IV - - - - - FIRE AND EXPLOSION HAZARD DATA FLASH

POINT >230 F FLAMMABLE LIMITS LEL N/A UEL N/A

EXTINGUISHING MEDIA C02 DRY CHEMICAL ALCOHOL FOAM. SPECIAL

FIRE FIGHTING PROCEDURES WEAR SELF CONTAINED BREATHING APPARATUS WHEN

FIGHTING A CHEMICAL FIRE. UNUSUAL FIRE AND EXPLOSION HAZARDS THE

FOLLOWING TOXIC VAPORS ARE FORMED WHEN THIS MATERIAL IS HEATED TO

DECOMPOSITION. HYDROGEN CHLORIDE SECTION V - - - - -

HEALTH HAZARD DATA LD50 1500 MG/KG ORAL RAT

TLV N/A PEL N/A EMERGENCY AND FIRST AID PROCEDURES EYES FLUSH

EYES WITH WATER FOR 15 MINUTES. SKIN FLUSH SKIN WITH LARGE VOLUMES OF

WATER. INHALATION IMMEDIATELY MOVE TO FRESH AIR. GIVE OXYGEN IF

BREATHING IS LABORED IF BREATHING STOPS, GIVE ARTIFICIAL RESPIRATION

INGESTION NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON

NEVER TRY TO MAKE AN UNCONSCIOUS PERSON VOMIT CONTACT A PHYSICIAN.

EFFECTS OF OVEREXPOSURE IRRITATES EYES IRRITATES SKIN IRRITATES

NOSE AND THROAT SECTION VI - - - - - REACTIVITY DATA

STABILITY STABLE. CONDITIONS TO AVOID N/A INCOMPATIBILITY

STRONG BASES OXIDIZING AGENTS HAZARDOUS DECOMPOSITION PRODUCTS

HYDROGEN CHLORIDE HAZARDOUS POLYMERIZATION WILL NOT OCCUR. CONDITIONS

TO AVOID N/A SECTION VII - - - - - SPILL OR LEAK

PROCEDURES STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

SWEEP UP MATERIAL. AVOID GENERATING DUST. WASTE DISPOSAL METHOD

COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL REGULATIONS SECTION VIII

- - - - - SPECIAL PROTECTION INFORMATION RESPIRATORY PROTECTION

(SPECIFIC TYPE) N/A PROTECTIVE GLOVES WEAR RUBBER GLOVES.

EYE PROTECTION WEAR GOGGLES. VENTILATION USE ONLY IN WELL

VENTILATED AREA. SPECIAL N/A OTHER PROTECTIVE EQUIPMENT



N/A SECTION IX ----- SPECIAL PRECAUTIONS STORAGE AND  
HANDLING STORE IN SEALED CONTAINER IN COOL, DRY LOCATION. KEEP AWAY  
FROM ACIDS. KEEP AWAY FROM BASES. AVOID GENERATING DUST. OTHER  
PRECAUTIONS AVOID EYE OR SKIN CONTACT. WHILE THE INFORMATION AND  
RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE  
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RIGHTS RESERVED

Product Number: 131857

Product Name: 1,2,4,5-Tetrachlorobenzene, 98%

Molecular Formula: C<sub>6</sub>H<sub>2</sub>Cl<sub>4</sub>

Molecular Weight: 215.89

CAS: 95-94-3

Assay: 98%

Comments: Melting Point (°C): 139 to 142 Boiling Point (°C): 240 to 246 / 760

Flash Point (°F): >230 Use: Intermediate for herbicides and defoliants, insecticide, impregnant for moisture resistance, electrical insulation.

Product Number: 442216U

Product Name: 1,2,3,5-Tetrachlorobenzene

Valid 10/1999 - 12/1999 Supelco Inc. Supelco Park Bellefonte, PA 16823-0048 USA Tel: 814-359-3441

M A T E R I A L S A F E T Y D A  
T A S H E E T

SECTION I - - - - - GENERAL

INFORMATION CATALOG NO 442216-U (REORDER PRODUCT BY THIS NO.)

PRODUCT NAME 1,2,3,5-TETRACHLORO BENZENE, 100MG, NEAT DATA SHEET NO  
R300620 1,2,3,5-TETRACHLORO BENZENE CHEMICAL NAME

1,2,3,5-TETRACHLORO BENZENE FORMULA C<sub>6</sub>H<sub>2</sub>Cl<sub>4</sub>

FORMULA WEIGHT 215.88 CAS 634-90-2 NRTECS DB9445000 SYNONYM

MANUFACTURER SUPELCO INC. PHONE 814-359-3441 ADDRESS SUPELCO  
PARK, BELLEFONTE, PA 16823-0048 SECTION II - - - - - HAZARDOUS

INGREDIENTS OF MIXTURES CHEMICAL NAME

COMMON NAME - PERCENTAGE - CAS # (FORMULA) -  
PEL (UNITS) - TLV (UNITS) LD50 VALUE - CONDITIONS

N/A SECTION III - - - - -

- - - PHYSICAL DATA BOILING POINT 246 C MELTING POINT 54 C

VAPOR PRESSURE N/A VAPOR DENSITY (AIR=1) >1 SPECIFIC  
GRAVITY N/A PERCENT VOLATILE BY VOLUME 0

WATER SOLUBILITY 0 EVAPORATION RATE N/A APPEARANCE WHITE CRYSTALS

SECTION IV - - - - - FIRE AND EXPLOSION HAZARD DATA FLASH  
POINT 230 F FLAMMABLE LIMITS LEL N/A UEL N/A

EXTINGUISHING MEDIA CO2 DRY CHEMICAL ALCOHOL FOAM. SPECIAL

FIRE FIGHTING PROCEDURES WEAR SELF CONTAINED BREATHING APPARATUS WHEN  
FIGHTING A CHEMICAL FIRE. UNUSUAL FIRE AND EXPLOSION HAZARDS THE  
FOLLOWING TOXIC VAPORS ARE FORMED WHEN THIS MATERIAL IS HEATED TO

DECOMPOSITION.            HYDROGEN CHLORIDE SECTION V - - - - -  
 HEALTH HAZARD DATA    LD50    1727            MG/KG    ORAL RAT  
 TLV N/A    PEL N/A    EMERGENCY AND FIRST AID PROCEDURES    EYES    FLUSH  
 EYES WITH WATER FOR 15 MINUTES.    SKIN    FLUSH SKIN WITH LARGE VOLUMES OF  
 WATER.    INHALATION    IMMEDIATELY MOVE TO FRESH AIR.    INGESTION  
 NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON    NEVER TRY TO MAKE  
 AN UNCONSCIOUS PERSON VOMIT    CONTACT A PHYSICIAN.    EFFECTS OF  
 OVEREXPOSURE    IRRITATES EYES    IRRITATES SKIN    IRRITATES NOSE AND  
 THROAT    GASTROINTESTINAL DISTURBANCES SECTION VI - - - - -  
 - - - REACTIVITY DATA    STABILITY STABLE.    CONDITIONS TO AVOID    N/A  
       INCOMPATIBILITY    STRONG BASES    OXIDIZING AGENTS    HAZARDOUS  
 DECOMPOSITION PRODUCTS    HYDROGEN CHLORIDE    HAZARDOUS POLYMERIZATION  
 WILL NOT OCCUR.    CONDITIONS TO AVOID    N/A SECTION VII - - - - -  
 - - - - - SPILL OR LEAK PROCEDURES    STEPS TO BE TAKEN IN CASE MATERIAL IS  
 RELEASED OR SPILLED    SWEEP UP MATERIAL.    AVOID GENERATING DUST.  
 WASTE DISPOSAL METHOD    COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL  
 REGULATIONS SECTION VIII - - - - - -SPECIAL PROTECTION INFORMATION  
       RESPIRATORY PROTECTION (SPECIFIC TYPE)    N/A    PROTECTIVE GLOVES  
 WEAR GLOVES.    EYE PROTECTION    WEAR PROTECTIVE GLASSES.    VENTILATION  
 USE ONLY IN WELL VENTILATED AREA.    SPECIAL    N/A    OTHER PROTECTIVE  
 EQUIPMENT    N/A SECTION IX - - - - - - SPECIAL  
 PRECAUTIONS    STORAGE AND HANDLING    STORE IN SEALED CONTAINER IN COOL,  
 DRY LOCATION.    KEEP AWAY FROM OXIDIZERS.    KEEP AWAY FROM BASES.  
 AVOID GENERATING DUST.    OTHER PRECAUTIONS    AVOID EYE OR SKIN CONTACT.  
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 0048 3303    ALL RIGHTS RESERVED

1318571.2,4,5-TETRACHLOROBENZENE+98%>

**Literature References:** Aldrich FT-IR Library (Vapor Phase): 3,941D Aldrich  
 NMR Library (60 MHz): 2(1),810D

**Miscellaneous:** This chemical is in the EPA inventory under TSCA. **Label Precautions:** Harmful solid  
 Irritant Target organ: liver, kidneys Target organ: blood Target organ: thyroid

Product Number: 131857

Product Name: 1,2,4,5-Tetrachlorobenzene, 98%

Valid 02/2000 - 04/2000 Aldrich Chemical Co., Inc. 1001 West St. Paul  
Milwaukee, WI 53233 USA Tel: 414-273-3850 M A T E R I A L S  
A F E T Y D A T A S H E E T SECTION 1. - - - - -

CHEMICAL IDENTIFICATION - - - - - CATALOG #: 131857

NAME: 1,2,4,5-TETRACHLOROBENZENE, 98% SECTION 2. - - - - -

COMPOSITION/INFORMATION ON INGREDIENTS - - - - - CAS #: 95-94-3

MF: C6H2CL4 EC NO: 202-466-2 SYNONYMS BENZENE TETRACHLORIDE \* RCRA

WASTE NUMBER U207 \* 1,2,4,5- TETRACHLOROBENZOL (RUSSIAN) \* S-

TETRACHLOROBENZENE \* 1,2,4,5- TETRACHLOROBENZENE \* SECTION 3. - - - - -

- - - - - HAZARDS IDENTIFICATION - - - - - LABEL PRECAUTIONARY

STATEMENTS HARMFUL HARMFUL IF SWALLOWED. IRRITATING TO EYES,

RESPIRATORY SYSTEM AND SKIN. TARGET ORGAN(S): LIVER, KIDNEYS IN

CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK

MEDICAL ADVICE. WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. SECTION 4. -

- - - - - FIRST-AID MEASURES - - - - - IN CASE OF

CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST

15 MINUTES. IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND

COPIOUS AMOUNTS OF WATER. IF INHALED, REMOVE TO FRESH AIR. IF NOT

BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE

OXYGEN. IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS

CONSCIOUS. CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER

OR APPROPRIATE FOAM. SPECIAL FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED

BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN

AND EYES. UNUSUAL FIRE AND EXPLOSIONS HAZARDS EMITS TOXIC FUMES UNDER

FIRE CONDITIONS. SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES - - - - -

- - - - - WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY

RUBBER GLOVES. SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.

AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL

PICKUP IS COMPLETE. SECTION 7. - - - - - HANDLING AND STORAGE - - - - -

- - - - - REFER TO SECTION 8. SECTION 8. - - - - - EXPOSURE

CONTROLS/PERSONAL PROTECTION - - - - - CHEMICAL SAFETY GOGGLES.

RUBBER GLOVES. NIOSH/MSHA-APPROVED RESPIRATOR. SAFETY SHOWER AND EYE

BATH. MECHANICAL EXHAUST REQUIRED. AVOID INHALATION. DO NOT GET IN

EYES, ON SKIN, ON CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. WASH

THOROUGHLY AFTER HANDLING. HARMFUL SOLID. IRRITANT. KEEP TIGHTLY

CLOSED. STORE IN A COOL DRY PLACE. SECTION 9. - - - - - PHYSICAL AND

CHEMICAL PROPERTIES - - - - - APPEARANCE AND ODOR WHITE CHIPS

PHYSICAL PROPERTIES BOILING POINT: 240 C TO 246 C MELTING

POINT: 139 C TO 142 C FLASHPOINT >230

109C SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -

- - - - - INCOMPATIBILITIES STRONG OXIDIZING AGENTS STRONG BASES

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS TOXIC FUMES OF: CARBON

MONOXIDE, CARBON DIOXIDE HYDROGEN CHLORIDE GAS SECTION 11. - - - - -

- TOXICOLOGICAL INFORMATION - - - - - ACUTE EFFECTS HARMFUL IF SWALLOWED. MAY BE HARMFUL IF INHALED. MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. CAUSES EYE AND SKIN IRRITATION. MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. TARGET ORGAN(S): LIVER, KIDNEYS BLOOD THYROID RTECS #: DB9450000  
 BENZENE, 1,2,4,5-TETRACHLORO- TOXICITY DATA ORL-RAT LD50:1500 MG/KG  
 HYSAAV 30(1-3),8,1965 ORL-MUS LD50:1035 MG/KG  
 HYSAAV 30(1-3),8,1965 ORL-RBT LD50:1500 MG/KG  
 GISAAA 30(1),9,1965 TARGET ORGAN DATA BEHAVIORAL (GENERAL ANESTHETIC) BEHAVIORAL (SOMNOLENCE) BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD) BEHAVIORAL (CHANGE IN MOTOR ACTIVITY) BEHAVIORAL (MUSCLE WEAKNESS) ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION. SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - - DATA NOT YET AVAILABLE. SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - - DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS. SECTION 14. - - - - - TRANSPORT INFORMATION - - - - - CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION. SECTION 15. - - - - - REGULATORY INFORMATION - - - - - EUROPEAN INFORMATION HARMFUL R 22 HARMFUL IF SWALLOWED. R 36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. S 26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. S 37/39 WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION. REVIEWS, STANDARDS, AND REGULATIONS OEL=MAK EPA TSCA SECTION 8(B) CHEMICAL INVENTORY EPA TSCA 8(A) PRELIMINARY ASSESSMENT INFORMATION, FINAL RULE FEREAC 47,26992,82 EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES ON EPA IRIS DATABASE EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, SEPTEMBER 1999 NIOSH ANALYTICAL METHOD, 1994: POLYCHLOROBENZENES, 5517 NTP TOXICITY STUDIES, RPT# TOX-07, SEPTEMBER 1999 SECTION 16. - - - - - OTHER INFORMATION- - - - - THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA, ALDRICH, FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE. COPYRIGHT 1999 SIGMA-ALDRICH CO. LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY

Product Number: 442216U

Product Name: 1,2,3,5-Tetrachlorobenzene

Valid 10/1999 - 12/1999 Supelco Inc. Supelco Park Bellefonte, S A F E T Y  
 D A T A S H E E T SECTION I - - - - - GENERAL  
 INFORMATION CATALOG NO 442216-U (REORDER PRODUCT BY THIS NO.)  
 PRODUCT NAME 1,2,3,5-TETRACHLOROENZENE, 100MG, NEAT DATA SHEET NO  
 R300620 1,2,3,5-TETRACHLOROENZENE CHEMICAL NAME  
 1,2,3,5-TETRACHLOROENZENE FORMULA C6H2CL4  
 FORMULA WEIGHT 215.88 CAS 634-90-2 NRTECS DB9445000 SYNONYM  
 MANUFACTURER SUPELCO INC. PHONE 814-359-3441 ADDRESS SUPELCO  
 PARK, BELLEFONTE, PA 16823-0048 SECTION II - - - - - HAZARDOUS  
 INGREDIENTS OF MIXTURES CHEMICAL NAME  
 COMMON NAME - PERCENTAGE - CAS # (FORMULA) -  
 PEL(UNITS) - TLV(UNITS) LD50 VALUE - CONDITIONS

N/A SECTION III - - - - -  
 - - - PHYSICAL DATA BOILING POINT 246 C MELTING POINT 54 C  
 VAPOR PRESSURE N/A VAPOR DENSITY (AIR=1) >1 SPECIFIC  
 GRAVITY N/A PERCENT VOLATILE BY VOLUME 0

SECTION IV - - - - - FIRE AND EXPLOSION HAZARD DATA FLASH  
 POINT 230 F FLAMMABLE LIMITS LEL N/A UEL N/A  
 EXTINGUISHING MEDIA CO2 DRY CHEMICAL ALCOHOL FOAM. SPECIAL  
 FIRE FIGHTING PROCEDURES WEAR SELF CONTAINED BREATHING APPARATUS WHEN  
 FIGHTING A CHEMICAL FIRE. UNUSUAL FIRE AND EXPLOSION HAZARDS THE  
 FOLLOWING TOXIC VAPORS ARE FORMED WHEN THIS MATERIAL IS HEATED TO  
 DECOMPOSITION. HYDROGEN CHLORIDE SECTION V - - - - -

HEALTH HAZARD DATA LD50 1727 MG/KG ORAL RAT  
 TLV N/A PEL N/A EMERGENCY AND FIRST AID PROCEDURES EYES FLUSH  
 EYES WITH WATER FOR 15 MINUTES. SKIN FLUSH SKIN WITH LARGE VOLUMES OF  
 WATER. INHALATION IMMEDIATELY MOVE TO FRESH AIR. INGESTION  
 NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON NEVER TRY TO MAKE  
 AN UNCONSCIOUS PERSON VOMIT CONTACT A PHYSICIAN. EFFECTS OF  
 OVEREXPOSURE IRRITATES EYES IRRITATES SKIN IRRITATES NOSE AND  
 THROAT GASTROINTESTINAL DISTURBANCES SECTION VI - - - - -

- - - REACTIVITY DATA STABILITY STABLE. CONDITIONS TO AVOID N/A  
 INCOMPATIBILITY STRONG BASES OXIDIZING AGENTS HAZARDOUS  
 DECOMPOSITION PRODUCTS HYDROGEN CHLORIDE HAZARDOUS POLYMERIZATION  
 WILL NOT OCCUR. CONDITIONS TO AVOID N/A SECTION VII - - - - -

- - - - - SPILL OR LEAK PROCEDURES STEPS TO BE TAKEN IN CASE MATERIAL IS  
 RELEASED OR SPILLED SWEEP UP MATERIAL. AVOID GENERATING DUST.  
 WASTE DISPOSAL METHOD COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL  
 REGULATIONS SECTION VIII - - - - - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFIC TYPE) N/A PROTECTIVE GLOVES  
 WEAR GLOVES. EYE PROTECTION WEAR PROTECTIVE GLASSES. VENTILATION  
 USE ONLY IN WELL VENTILATED AREA. SPECIAL N/A OTHER PROTECTIVE  
 EQUIPMENT N/A SECTION IX - - - - - SPECIAL

PRECAUTIONS STORAGE AND HANDLING STORE IN SEALED CONTAINER IN COOL,

DRY LOCATION.

KEEP AWAY FROM OXIDIZERS.

KEEP AWAY FROM BASES.

AVOID GENERATING DUST.

OTHER PRECAUTIONS

AVOID EYE OR SKIN CONTACT.

WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, SUPELCO, INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON. LAST REVISED

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**APPENDIX 2**  
**PROJECT FORMS**



**SUBCONTRACTORS HEALTH AND SAFETY**

**ORIENTATION FORM**

SITE \_\_\_\_\_ DATE \_\_\_\_\_

SITE HEALTH AND SAFETY COORDINATOR \_\_\_\_\_

SITE DESCRIPTION \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

POSSIBLE SITE CONTAMINANTS AND HAZARDS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The information summarized below is important for you to read and fully understand. This information has been extracted from the site-specific Health and Safety Plan, and has been compiled to help ensure your health and safety onsite. If you have any questions regarding the information presented below, please ask your escort for clarification.

**HEALTH, SAFETY AND SECURITY INFORMATION**

1. All subcontracting personnel must acknowledge their presence onsite by checking in with the Site Health and Safety Coordinator. This assists in identifying all the personnel at the site in the event of an emergency.
2. All subcontracting personnel will be restricted to their "contracted" area(s). Do not enter any of the contaminated areas (marked with yellow-and-black caution tape) unless you have been authorized by the site management and are wearing the proper protective equipment.
3. Hard hats, safety glasses, and safety boots are **REQUIRED** to be worn while you are working onsite.
4. Please read and heed all safety signs onsite. These signs are there to alert you to possible physical and chemical hazards.
5. Eating and smoking is not allowed onsite. You may eat or smoke in designated clean areas or in your vehicle.



**MSGA TAILGATE SAFETY MEETING REPORT**

Date \_\_\_\_\_ Site \_\_\_\_\_

Attendees \_\_\_\_\_  
\_\_\_\_\_

**ORDER OF BUSINESS**

Topic(s) discussed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Action taken on previous meeting suggestions \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Emergency information \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Injuries and accidents since previous meeting \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Additional comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Meeting conducted by \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Date/Time \_\_\_\_\_  
(MSGA SHSC or FM)

# HEALTH AND SAFETY AIR MONITORING LOG

Instrument Brand and Model:

Instrument "Zero": Date:

Time:

Page of

Location											
Time	Conc.	TWA	Conc.	TWA	Conc.	TWA	Conc.	TWA	Conc.	TWA	Date

Comments:

**EMPLOYEE/VISITOR DAILY ROSTER\***

PROJECT NO. \_\_\_\_\_ SITE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ PROJECT MANAGER: \_\_\_\_\_

DATE	NAME	COMPANY	TIME ONSITE	TIME OFFSITE

\* This roster is required for emergency response planning. All personnel arriving to and from the site must sign this roster. This log does not replace the H&S Orientation.



## DAILY DRILL RIG CHECKLIST

Date \_\_\_\_\_ Rig Description \_\_\_\_\_  
 Project # \_\_\_\_\_ Serial or License # \_\_\_\_\_  
 (Note: This # should match the # on the equipment certification form.)  
 Location \_\_\_\_\_ Rig Owner \_\_\_\_\_

Item Name	Requirement	Yes	No*	Comment
Hydraulic systems controls and levers	No leaking fittings or connections. Levers are in good operating condition. Fluid levels are full.			
Fuel, oil, water, and coolant lines	No leaks.			
Hoses	No leaks in hoses or connections. No signs of excessive wear, kinked or bent hoses.			
Gauges	Operational and visible to operator.			
Emergency kill switch and lifeline	Operational and accessible to operator.			
Shear pins	In place.			
Drive chains	No signs of excessive wear, broken or defective links.			
Parking brakes	Set and operational.			
Outriggers	No leaks. Set on pads (as necessary to avoid damage).			
Windshield wipers	Operational.			
Lights (head, tail, and running lights)	Operational and without cracked lenses.			
Cables and ropes	No fraying, birdnesting, flattening, stretching. Must be braided or properly clamped at connections.			
Backup alarm	Operational, spotter used.			

### DAILY DRILL RIG CHECKLIST (Continued)

Item Name	Requirement	Yes	No*	Comment
Pulleys, drums and spools	No excessive wear or cracking.			
Derrick/Mast	Locked in position. Frame is not cracked or bent.			
Hoists	Properly spooled cable, rated to lift loads.			
Safety equipment	Safety harness, fire extinguisher, flares, safety reflectors, first-aid kit, grounding wire for fueling, and spill response equipment (for fueling & repairs).			
Guards	Power take-offs (PTOs) and all rotating parts designed with guards. Guards must have warning labels.			
Miscellaneous (as applicable)	Diverter systems; auger and head seals; cyclones; grout plant guards; etc. (list):			

\* Deficiencies (Explain all negative responses and list corrective actions; all deficiencies must be corrected before the rig is entered into service):

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Other Repairs or Routine Maintenance: \_\_\_\_\_

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Inspection Conducted and  
Rig Certified by:  
(Owner/Operator)

Name and Date

Report Reviewed by:

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## DAILY BACKHOE CHECKLIST

Date \_\_\_\_\_ Backhoe Description \_\_\_\_\_  
 Project # \_\_\_\_\_ Serial or License # \_\_\_\_\_  
 (Note: This # should match the # on the equipment certification form.)  
 Location \_\_\_\_\_ Backhoe Owner \_\_\_\_\_

Item Name	Requirement	OK	No*	Comment
Hydraulic systems controls and levers	Leaking fittings or connections. Levers are in good operating condition. Levels of fluid are full.			
Fuel, oil, water, and coolant lines	Any leaks.			
Hoses	Leaks in hoses or connections. Signs of excessive wear, kinked or bent hoses.			
Bucket Operations	Front loader hinge pins with lock rings. Rear bucket upper and lower shaft pins and lock rings in place. Safety vertical lock operational.			
Brake System	Foot brakes operational. Emergency brakes operational.			
Cylinders	Leaking seals, deep scratches on chrome rams.			
Outriggers	Pads in place. Engine off. Safety check of internal fluid bypass. Any leaks.			
Lights (turn signals, emergency flashers).	Operational and without cracked lenses.			

\* Deficiencies (Explain all negative responses and list corrective actions; all deficiencies must be corrected before the backhoe is entered into service):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Other Repairs or Routine Maintenance Performed this Date: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Inspection Conducted  
 and Certified by: (Ogden SHSC or FM)  
 (Owner/Operator)

Report Reviewed by:

**RECORD OF CHANGE  
SITE-SPECIFIC HEALTH AND SAFETY PLAN**

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**GENERAL SITE INFORMATION**

**SITE NAME:**

**DATE:**

**PROJECT NUMBER:**

**SITE H&S COORDINATOR:**

**PROJECT MANAGER:**

**SITE MANAGER:**

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**DESCRIPTION OF AND JUSTIFICATION FOR CHANGE**

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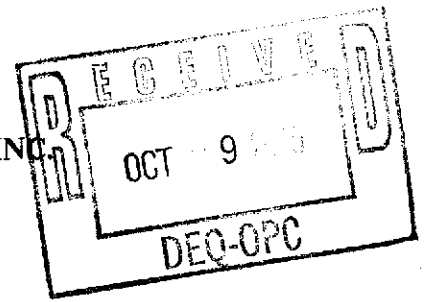
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SHSC SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

AUTHORIZATION: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

PARADIGM ANALYTICAL LABORATORIES, INC.  
2627 Northchase Parkway S.E.  
Wilmington, North Carolina 28405  
(910) 350-1903  
Fax (910) 350-1557



Mr. Tim Fitzpatrick  
Ogden Environmental & Engineering  
P.O. Box 3142  
Huntersville NC 28070

September 19, 2000

**FILE COPY**

Report Number: G185-80

Dear Mr. Fitzpatrick,

Enclosed are the results of the analytical services performed under the referenced project. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call for assistance. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,

Paradigm Analytical Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Mark Randall", written over a horizontal line.

Laboratory Director  
Mark Randall

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 455-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94187  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/29/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 91.8

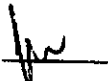
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	180	BQL
Arochlor-1221	180	BQL
Arochlor-1232	180	BQL
Arochlor-1242	180	BQL
Arochlor-1248	180	BQL
Arochlor-1254	180	BQL
Arochlor-1260	180	BQL
Arochlor-1262	180	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	89	89

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs

by EPA 8082

Client Sample ID: DP 505-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94188  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: 8/25/00  
Date Received: 8/29/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 90.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	230 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	85	85

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs  
by EPA 8082**

Client Sample ID: DP 509-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94189  
 Lab Project ID: G185-80  
 Matrix: Soil

%SOLIDS: 89.9

Date Collected: 8/25/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/7/00  
 Analyzed By: CLP  
 Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	<b>310</b>
Arochlor-1262	170	BQL

<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
TCMX	100	74	74

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs  
by EPA 8082**

Client Sample ID: DP 526-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94190  
 Lab Project ID: G185-80  
 Matrix: Soil

%SOLIDS: 88.7

Date Collected: 8/25/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/7/00  
 Analyzed By: CLP  
 Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	<b>640</b>
Arochlor-1262	170	BQL

<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
TCMX	100	49	49

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs

by EPA 8082

Client Sample ID: DP 529-0.5'  
Client Project ID: Kuhman Electric  
Lab Sample ID: 94191  
Lab Project ID: G185-80  
Matrix: Soil

%SOLIDS: 95.1

Date Collected: 8/25/00  
Date Received: 8/29/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	59	59

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs**

by EPA 8082

Client Sample ID: DP 534-0.5'  
 Client Project ID: Kuhiman Electric  
 Lab Sample ID: 94192  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/13/00  
 Analyzed By: CLP  
 Dilution: 10

%SOLIDS: 86.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	1800	BQL
Arochlor-1221	1800	BQL
Arochlor-1232	1800	BQL
Arochlor-1242	1800	BQL
Arochlor-1248	1800	BQL
Arochlor-1254	1800	BQL
Arochlor-1260	1800	BQL
Arochlor-1262	1800	4300 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs

by EPA 8082

Client Sample ID: DP 556-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94193  
Lab Project ID: G185-80  
Matrix: Soil

%SOLIDS: 95.9

Date Collected: 8/26/00  
Date Received: 8/29/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1


Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	75	75

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 546-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94194  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 8/29/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 20

%SOLIDS: 81.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	1000	BQL
Arochlor-1221	1000	BQL
Arochlor-1232	1000	BQL
Arochlor-1242	1000	BQL
Arochlor-1248	1000	BQL
Arochlor-1254	1000	BQL
Arochlor-1260	1000	BQL
Arochlor-1262	1000	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

Notes:

Sample diluted due to high levels of DDT.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 548-0.5'  
Client Project ID: Kuhman Electric  
Lab Sample ID: 94195  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 8/29/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 76.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	240	BQL
Arochlor-1221	240	BQL
Arochlor-1232	240	BQL
Arochlor-1242	240	BQL
Arochlor-1248	240	BQL
Arochlor-1254	240	BQL
Arochlor-1260	240	BQL
Arochlor-1262	240	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	51	51

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs

by EPA 8082

Client Sample ID: DP 559-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94196  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 8/29/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 5

%SOLIDS: 90.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	240	BQL
Arochlor-1221	240	BQL
Arochlor-1232	240	BQL
Arochlor-1242	240	BQL
Arochlor-1248	240	BQL
Arochlor-1254	240	BQL
Arochlor-1260	240	3500
Arochlor-1262	240	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	55	55

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: ER 8-28  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94197  
Lab Project ID: G185-80  
Matrix: Water

Date Collected: 8/28/00  
Date Received: 8/29/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

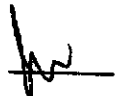
Compound	Quantitation Limit (ug/L)	Result (ug/L)
Arochlor-1016	5.0	BQL
Arochlor-1221	5.0	BQL
Arochlor-1232	5.0	BQL
Arochlor-1242	5.0	BQL
Arochlor-1248	5.0	BQL
Arochlor-1254	5.0	BQL
Arochlor-1260	5.0	BQL
Arochlor-1262	5.0	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	51	51

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: FB 8-28  
Client Project ID: Kuhiman Electric  
Lab Sample ID: 94198  
Lab Project ID: G185-80  
Matrix: Water

Date Collected: 8/28/00  
Date Received: 8/29/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Arochlor-1016	5.0	BQL
Arochlor-1221	5.0	BQL
Arochlor-1232	5.0	BQL
Arochlor-1242	5.0	BQL
Arochlor-1248	5.0	BQL
Arochlor-1254	5.0	BQL
Arochlor-1260	5.0	BQL
Arochlor-1262	5.0	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	79	79

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 455-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94187

Lab Project ID: G185-80

Matrix: Soil

%Solids: 91.8

Date Collected: 8/22/00

Date Received: 8/29/00

Date Analyzed: 9/6/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	460	BQL
Acenaphthylene	460	BQL
Anthracene	460	BQL
Benzo[a]anthracene	460	BQL
Benzo[a]pyrene	460	BQL
Benzo[b]fluoranthene	460	BQL
Benzo[g,h,i]perylene	460	BQL
Benzo[k]fluoranthene	460	BQL
Benzoic Acid	920	BQL
Bis(2-chloroethoxy)methane	460	BQL
Bis(2-chloroethyl)ether	460	BQL
Bis(2-chloroisopropyl)ether	460	BQL
Bis(2-ethylhexyl)phthalate	460	BQL
4-bromophenyl phenyl ether	460	BQL
Butylbenzylphthalate	460	BQL
4-Chloroaniline	460	BQL
4-Chloro-3-methylphenol	460	BQL
2-Chloronaphthalene	460	BQL
2-Chlorophenol	460	BQL
4-Chlorophenyl phenyl ether	460	BQL
Chrysene	460	BQL
Di-n-Butylphthalate	460	BQL
Di-n-octylphthalate	460	BQL
Dibenzo[a,h]anthracene	460	BQL
Dibenzofuran	460	BQL
1,2-Dichlorobenzene	460	BQL
1,3-Dichlorobenzene	460	BQL
1,4-Dichlorobenzene	460	BQL
3,3'-Dichlorobenzidine	920	BQL
2,4-Dichlorophenol	460	BQL
Diethylphthalate	460	BQL
2,4-Dimethylphenol	460	BQL
Dimethylphthalate	460	BQL
4,6-Dinitro-2-methylphenol	2300	BQL
2,4-Dinitrophenol	2300	BQL
2,4-Dinitrotoluene	460	BQL
2,6-Dinitrotoluene	460	BQL
Fluoranthene	460	BQL
Fluorene	460	BQL
Hexachlorobenzene	460	BQL
Hexachlorobutadiene	460	BQL
Hexachlorocyclopentadiene	920	BQL
Hexachloroethane	460	BQL
Indeno(1,2,3-c,d)pyrene	460	BQL
Isophorone	460	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 455-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94187  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 91.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	460	BQL
2-Methylphenol	460	BQL
3- & 4-Methylphenol	460	BQL
N-Nitrosodi-n-propylamine	460	BQL
N-Nitrosodiphenylamine	460	BQL
Naphthalene	460	BQL
2-Nitroaniline	460	BQL
3-Nitroaniline	460	BQL
4-Nitroaniline	460	BQL
Nitrobenzene	460	BQL
2-Nitrophenol	460	BQL
4-Nitrophenol	2300	BQL
Pentachlorobenzene	460	BQL
Pentachlorophenol	2300	BQL
Phenanthrene	460	BQL
Phenol	460	BQL
Pyrene	460	BQL
1,2,3,4-Tetrachlorobenzene	460	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	460	BQL
1,2,3-Trichlorobenzene	460	BQL
1,2,4-Trichlorobenzene	460	BQL
1,3,5-Trichlorobenzene	460	BQL
2,4,5-Trichlorophenol	460	BQL
2,4,6-Trichlorophenol	460	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.3	103
2-Fluorophenol	10	8.9	89
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	9.6	96
2,4,6-Tribromophenol	10	6.8	68
4-Terphenyl-d14	10	10.9	109

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results of Library Search for Semivolatile Compounds  
by GCMS**

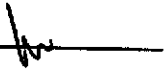
Client Sample ID: DP 455-0.5'	Date Collected: 8/22/00
Client Project ID: Kuhlman Electric	Date Received: 8/29/00
Lab Sample ID: 94187	Date Analyzed: 9/6/00
Lab Project ID: G185-80	Analyzed By: MRC
Matrix: Soil      %SOLIDS      91.8	Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 505-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94188

Lab Project ID: G185-80

Matrix: Soil

%Solids: 90.4

Date Collected: 8/25/00

Date Received: 8/29/00

Date Analyzed: 9/6/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	690	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	690	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	620
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	690	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 505-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94188  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: 8/25/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 90.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	580
Phenol	340	BQL
Pyrene	340	500
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.8	108
2-Fluorophenol	10	10	100
Nitrobenzene-d5	10	10.5	105
Phenol-d6	10	10.7	107
2,4,6-Tribromophenol	10	9.7	97
4-Terphenyl-d14	10	12	120

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 505-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94188

Lab Project ID: G185-80

Matrix: Soil %SOLIDS 90.4

Date Collected: 8/25/00

Date Received: 8/29/00

Date Analyzed: 9/6/00

Analyzed By: MRC

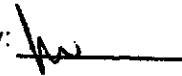
Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			900
2	Alkane, Unknown			840
3	Alcohol, Unknown			740
4	Unknown			560
5	Unknown			450
6	Unknown			360
7	Unknown			230
8	Unknown			180
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 509-0.5'

Date Collected: 8/25/00

Client Project ID: Kuhlman Electric

Date Received: 8/29/00

Lab Sample ID: 94189

Date Analyzed: 9/6/00

Lab Project ID: G185-80

Analyzed By: MRC

Matrix: Soil

%Solids: 89.9

Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	370	BQL
Acenaphthylene	370	BQL
Anthracene	370	BQL
Benzo[a]anthracene	370	BQL
Benzo[a]pyrene	370	BQL
Benzo[b]fluoranthene	370	BQL
Benzo[g,h,i]perylene	370	BQL
Benzo[k]fluoranthene	370	BQL
Benzoic Acid	740	BQL
Bis(2-chloroethoxy)methane	370	BQL
Bis(2-chloroethyl)ether	370	BQL
Bis(2-chloroisopropyl)ether	370	BQL
Bis(2-ethylhexyl)phthalate	370	BQL
4-bromophenyl phenyl ether	370	BQL
Butylbenzylphthalate	370	BQL
4-Chloroaniline	370	BQL
4-Chloro-3-methylphenol	370	BQL
2-Chloronaphthalene	370	BQL
2-Chlorophenol	370	BQL
4-Chlorophenyl phenyl ether	370	BQL
Chrysene	370	BQL
Di-n-Butylphthalate	370	BQL
Di-n-octylphthalate	370	BQL
Dibenzo[a,h]anthracene	370	BQL
Dibenzofuran	370	BQL
1,2-Dichlorobenzene	370	BQL
1,3-Dichlorobenzene	370	BQL
1,4-Dichlorobenzene	370	BQL
3,3'-Dichlorobenzidine	740	BQL
2,4-Dichlorophenol	370	BQL
Diethylphthalate	370	BQL
2,4-Dimethylphenol	370	BQL
Dimethylphthalate	370	BQL
4,6-Dinitro-2-methylphenol	1800	BQL
2,4-Dinitrophenol	1800	BQL
2,4-Dinitrotoluene	370	BQL
2,6-Dinitrotoluene	370	BQL
Fluoranthene	370	BQL
Fluorene	370	BQL
Hexachlorobenzene	370	BQL
Hexachlorobutadiene	370	BQL
Hexachlorocyclopentadiene	740	BQL
Hexachloroethane	370	BQL
Indeno(1,2,3-c,d)pyrene	370	BQL
Isophorone	370	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 509-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94189

Lab Project ID: G185-80

Matrix: Soil

Date Collected: 8/25/00

Date Received: 8/29/00

Date Analyzed: 9/6/00

Analyzed By: MRC

Dilution: 1

%Solids: 89.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	370	BQL
2-Methylphenol	370	BQL
3- & 4-Methylphenol	370	BQL
N-Nitrosodi-n-propylamine	370	BQL
N-Nitrosodiphenylamine	370	BQL
Naphthalene	370	BQL
2-Nitroaniline	370	BQL
3-Nitroaniline	370	BQL
4-Nitroaniline	370	BQL
Nitrobenzene	370	BQL
2-Nitrophenol	370	BQL
4-Nitrophenol	1800	BQL
Pentachlorobenzene	370	BQL
Pentachlorophenol	1800	BQL
Phenanthrene	370	BQL
Phenol	370	BQL
Pyrene	370	BQL
1,2,3,4-Tetrachlorobenzene	370	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	370	BQL
1,2,3-Trichlorobenzene	370	BQL
1,2,4-Trichlorobenzene	370	BQL
1,3,5-Trichlorobenzene	370	BQL
2,4,5-Trichlorophenol	370	BQL
2,4,6-Trichlorophenol	370	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.9	109
2-Fluorophenol	10	9.4	94
Nitrobenzene-d5	10	10.6	106
Phenol-d6	10	10.5	105
2,4,6-Tribromophenol	10	9.4	95
4-Terphenyl-d14	10	12.6	126

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 509-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94189  
Lab Project ID: G185-80

Date Collected: 8/25/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1


Matrix: Soil      %SOLIDS      89.9

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			3800
2	Alkane, Unknown			3000
3	Alkane, Unknown			2700
4	Alkane, Unknown			2500
5	Unknown			1700
6	Unknown			1200
7	Unknown			820
8	Unknown			750
9	Carboxylic Acid, Unknown			700
10	Unknown			660

**Comment:**

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Reviewed by: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 526-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94190  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 88.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	320	BQL
Acenaphthylene	320	BQL
Anthracene	320	BQL
Benzo[a]anthracene	320	BQL
Benzo[a]pyrene	320	BQL
Benzo[b]fluoranthene	320	BQL
Benzo[g,h,i]perylene	320	BQL
Benzo[k]fluoranthene	320	BQL
Benzoic Acid	650	BQL
Bis(2-chloroethoxy)methane	320	BQL
Bis(2-chloroethyl)ether	320	BQL
Bis(2-chloroisopropyl)ether	320	BQL
Bis(2-ethylhexyl)phthalate	320	BQL
4-bromophenyl phenyl ether	320	BQL
Butylbenzylphthalate	320	BQL
4-Chloroaniline	320	BQL
4-Chloro-3-methylphenol	320	BQL
2-Chloronaphthalene	320	BQL
2-Chlorophenol	320	BQL
4-Chlorophenyl phenyl ether	320	BQL
Chrysene	320	BQL
Di-n-Butylphthalate	320	BQL
Di-n-octylphthalate	320	BQL
Dibenzo[a,h]anthracene	320	BQL
Dibenzofuran	320	BQL
1,2-Dichlorobenzene	320	BQL
1,3-Dichlorobenzene	320	BQL
1,4-Dichlorobenzene	320	BQL
3,3'-Dichlorobenzidine	650	BQL
2,4-Dichlorophenol	320	BQL
Diethylphthalate	320	BQL
2,4-Dimethylphenol	320	BQL
Dimethylphthalate	320	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	320	BQL
2,6-Dinitrotoluene	320	BQL
Fluoranthene	320	BQL
Fluorene	320	400
Hexachlorobenzene	320	BQL
Hexachlorobutadiene	320	BQL
Hexachlorocyclopentadiene	650	BQL
Hexachloroethane	320	BQL
Indeno(1,2,3-c,d)pyrene	320	BQL
Isophorone	320	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 526-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94190  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 88.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	320	BQL
2-Methylphenol	320	BQL
3- & 4-Methylphenol	320	BQL
N-Nitrosodi-n-propylamine	320	BQL
N-Nitrosodiphenylamine	320	BQL
Naphthalene	320	BQL
2-Nitroaniline	320	BQL
3-Nitroaniline	320	BQL
4-Nitroaniline	320	BQL
Nitrobenzene	320	BQL
2-Nitrophenol	320	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	320	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	320	BQL
Phenol	320	BQL
Pyrene	320	BQL
1,2,3,4-Tetrachlorobenzene	320	390
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	320	BQL
1,2,3-Trichlorobenzene	320	BQL
1,2,4-Trichlorobenzene	320	BQL
1,3,5-Trichlorobenzene	320	BQL
2,4,5-Trichlorophenol	320	BQL
2,4,6-Trichlorophenol	320	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	8.2	82
Nitrobenzene-d5	10	10.1	101
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	7.4	74
4-Terphenyl-d14	10	13.6	136

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 526-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94190  
Lab Project ID: G185-80

Date Collected: 8/25/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

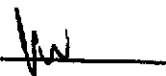
Matrix: Soil      %SOLIDS      88.7

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			530
2	Unknown			410
3	Unknown			340
4	Unknown			340
5	Unknown			280
6	Unknown			270
7	Aromatic, Unknown			250
8	Unknown			170
9	Unknown			170
10	Unknown			160

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 529-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94191  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 95.1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	620	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	620	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1500	BQL
2,4-Dinitrophenol	1500	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	620	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 529-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94191  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 95.1

Date Collected: 8/25/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1500	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1500	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.4	94
2-Fluorophenol	10	8	80
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	9.1	91
2,4,6-Tribromophenol	10	7.3	73
4-Terphenyl-d14	10	11.8	119

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 529-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94191

Lab Project ID: G185-80

Matrix: Soil

%SOLIDS

95.1

Date Collected: 8/25/00

Date Received: 8/29/00

Date Analyzed: 9/6/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			6300
2	Unknown			350
3	Unknown			250
4	Unknown			230
5	Unknown			120
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 534-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94192  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 86.3

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	420	BQL
Acenaphthylene	420	BQL
Anthracene	420	BQL
Benzo[a]anthracene	420	1100
Benzo[a]pyrene	420	1500
Benzo[b]fluoranthene	420	2000
Benzo[g,h,i]perylene	420	1000
Benzo[k]fluoranthene	420	1300
Benzoic Acid	840	BQL
Bis(2-chloroethoxy)methane	420	BQL
Bis(2-chloroethyl)ether	420	BQL
Bis(2-chloroisopropyl)ether	420	BQL
Bis(2-ethylhexyl)phthalate	420	BQL
4-bromophenyl phenyl ether	420	BQL
Butylbenzylphthalate	420	BQL
4-Chloroaniline	420	BQL
4-Chloro-3-methylphenol	420	BQL
2-Chloronaphthalene	420	BQL
2-Chlorophenol	420	BQL
4-Chlorophenyl phenyl ether	420	BQL
Chrysene	420	1500
Di-n-Butylphthalate	420	BQL
Di-n-octylphthalate	420	BQL
Dibenzo[a,h]anthracene	420	BQL
Dibenzofuran	420	BQL
1,2-Dichlorobenzene	420	BQL
1,3-Dichlorobenzene	420	BQL
1,4-Dichlorobenzene	420	BQL
3,3'-Dichlorobenzidine	840	BQL
2,4-Dichlorophenol	420	BQL
Diethylphthalate	420	BQL
2,4-Dimethylphenol	420	BQL
Dimethylphthalate	420	BQL
4,6-Dinitro-2-methylphenol	2100	BQL
2,4-Dinitrophenol	2100	BQL
2,4-Dinitrotoluene	420	BQL
2,6-Dinitrotoluene	420	BQL
Fluoranthene	420	BQL
Fluorene	420	2600
Hexachlorobenzene	420	BQL
Hexachlorobutadiene	420	BQL
Hexachlorocyclopentadiene	840	BQL
Hexachloroethane	420	BQL
Indeno(1,2,3-c,d)pyrene	420	BQL
Isophorone	420	1200
		BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 534-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94192  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 86.3

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	420	BQL
2-Methylphenol	420	BQL
3- & 4-Methylphenol	420	BQL
N-Nitrosodi-n-propylamine	420	BQL
N-Nitrosodiphenylamine	420	BQL
Naphthalene	420	BQL
2-Nitroaniline	420	BQL
3-Nitroaniline	420	BQL
4-Nitroaniline	420	BQL
Nitrobenzene	420	BQL
2-Nitrophenol	420	BQL
4-Nitrophenol	2100	BQL
Pentachlorobenzene	420	BQL
Pentachlorophenol	2100	BQL
Phenanthrene	420	BQL
Phenol	420	740
Pyrene	420	BQL
1,2,3,4-Tetrachlorobenzene	420	2200
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	420	BQL
1,2,3-Trichlorobenzene	420	BQL
1,2,4-Trichlorobenzene	420	BQL
1,3,5-Trichlorobenzene	420	BQL
2,4,5-Trichlorophenol	420	BQL
2,4,6-Trichlorophenol	420	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.8	98
2-Fluorophenol	10	7.9	79
Nitrobenzene-d5	10	9.7	97
Phenol-d6	10	9.4	94
2,4,6-Tribromophenol	10	7.5	74
4-Terphenyl-d14	10	12.2	122

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 534-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94192

Lab Project ID: G185-80

Matrix: Soil

%SOLIDS

86.3

Date Collected: 8/26/00

Date Received: 8/29/00

Date Analyzed: 9/6/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Aromatic, Unknown			1800
2	Alkane, Unknown			1300
3	Alkane, Unknown			920
4	Unknown			640
5	Unknown			400
6	Unknown			390
7	Unknown			380
8	Unknown			360
9	Unknown			360
10	Unknown			350

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 556-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94193  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 95.9

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	320	BQL
Acenaphthylene	320	BQL
Anthracene	320	BQL
Benzo[a]anthracene	320	BQL
Benzo[a]pyrene	320	BQL
Benzo[b]fluoranthene	320	BQL
Benzo[g,h,i]perylene	320	BQL
Benzo[k]fluoranthene	320	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	320	BQL
Bis(2-chloroethyl)ether	320	BQL
Bis(2-chloroisopropyl)ether	320	BQL
Bis(2-ethylhexyl)phthalate	320	BQL
4-bromophenyl phenyl ether	320	BQL
Butylbenzylphthalate	320	BQL
4-Chloroaniline	320	BQL
4-Chloro-3-methylphenol	320	BQL
2-Chloronaphthalene	320	BQL
2-Chlorophenol	320	BQL
4-Chlorophenyl phenyl ether	320	BQL
Chrysene	320	BQL
Di-n-Butylphthalate	320	BQL
Di-n-octylphthalate	320	BQL
Dibenzo[a,h]anthracene	320	BQL
Dibenzofuran	320	BQL
1,2-Dichlorobenzene	320	BQL
1,3-Dichlorobenzene	320	BQL
1,4-Dichlorobenzene	320	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	320	BQL
Diethylphthalate	320	BQL
2,4-Dimethylphenol	320	BQL
Dimethylphthalate	320	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	320	BQL
2,6-Dinitrotoluene	320	BQL
Fluoranthene	320	BQL
Fluorene	320	400
Hexachlorobenzene	320	BQL
Hexachlorobutadiene	320	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	320	BQL
Indeno(1,2,3-c,d)pyrene	320	BQL
Isophorone	320	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 556-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94193  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 95.9

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	320	BQL
2-Methylphenol	320	BQL
3- & 4-Methylphenol	320	BQL
N-Nitrosodi-n-propylamine	320	BQL
N-Nitrosodiphenylamine	320	BQL
Naphthalene	320	BQL
2-Nitroaniline	320	BQL
3-Nitroaniline	320	BQL
4-Nitroaniline	320	BQL
Nitrobenzene	320	BQL
2-Nitrophenol	320	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	320	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	320	BQL
Phenol	320	BQL
Pyrene	320	BQL
1,2,3,4-Tetrachlorobenzene	320	320
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	320	BQL
1,2,3-Trichlorobenzene	320	BQL
1,2,4-Trichlorobenzene	320	BQL
1,3,5-Trichlorobenzene	320	BQL
2,4,5-Trichlorophenol	320	BQL
2,4,6-Trichlorophenol	320	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	9.9	99
Nitrobenzene-d5	10	10.3	103
Phenol-d6	10	10.6	106
2,4,6-Tribromophenol	10	11.1	111
4-Terphenyl-d14	10	13.1	131

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 556-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94193

Lab Project ID: G185-80

Matrix: Soil

%SOLIDS

95.9

Date Collected: 8/26/00

Date Received: 8/29/00

Date Analyzed: 9/6/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1600
2	Alkane, Unknown			1400
3	Unknown			1300
4	Unknown			840
5	Unknown			740
6	Unknown			590
7	Unknown			490
8	Unknown			470
9	Unknown			360
10	Vanillin	000121-33-5	95	340

**Comment:**

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Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 546-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94194  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 81.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	540	BQL
Acenaphthylene	540	BQL
Anthracene	540	BQL
Benzo[a]anthracene	540	BQL
Benzo[a]pyrene	540	BQL
Benzo[b]fluoranthene	540	BQL
Benzo[g,h,i]perylene	540	BQL
Benzo[k]fluoranthene	540	BQL
Benzoic Acid	1100	BQL
Bis(2-chloroethoxy)methane	540	BQL
Bis(2-chloroethyl)ether	540	BQL
Bis(2-chloroisopropyl)ether	540	BQL
Bis(2-ethylhexyl)phthalate	540	BQL
4-bromophenyl phenyl ether	540	BQL
Butylbenzylphthalate	540	BQL
4-Chloroaniline	540	BQL
4-Chloro-3-methylphenol	540	BQL
2-Chloronaphthalene	540	BQL
2-Chlorophenol	540	BQL
4-Chlorophenyl phenyl ether	540	BQL
Chrysene	540	BQL
Di-n-Butylphthalate	540	BQL
Di-n-octylphthalate	540	BQL
Dibenzo[a,h]anthracene	540	BQL
Dibenzofuran	540	BQL
1,2-Dichlorobenzene	540	BQL
1,3-Dichlorobenzene	540	BQL
1,4-Dichlorobenzene	540	BQL
3,3'-Dichlorobenzidine	1100	BQL
2,4-Dichlorophenol	540	BQL
Diethylphthalate	540	BQL
2,4-Dimethylphenol	540	BQL
Dimethylphthalate	540	BQL
4,6-Dinitro-2-methylphenol	2700	BQL
2,4-Dinitrophenol	2700	BQL
2,4-Dinitrotoluene	540	BQL
2,6-Dinitrotoluene	540	BQL
Fluoranthene	540	BQL
Fluorene	540	BQL
Hexachlorobenzene	540	BQL
Hexachlorobutadiene	540	BQL
Hexachlorocyclopentadiene	1100	BQL
Hexachloroethane	540	BQL
Indeno(1,2,3-c,d)pyrene	540	BQL
Isophorone	540	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 546-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94194  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 81.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	540	BQL
2-Methylphenol	540	BQL
3- & 4-Methylphenol	540	BQL
N-Nitrosodi-n-propylamine	540	BQL
N-Nitrosodiphenylamine	540	BQL
Naphthalene	540	BQL
2-Nitroaniline	540	BQL
3-Nitroaniline	540	BQL
4-Nitroaniline	540	BQL
Nitrobenzene	540	BQL
2-Nitrophenol	540	BQL
4-Nitrophenol	540	BQL
Pentachlorobenzene	2700	BQL
Pentachlorophenol	540	BQL
Phenanthrene	2700	BQL
Phenol	540	BQL
Pyrene	540	BQL
1,2,3,4-Tetrachlorobenzene	540	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	540	BQL
1,2,3-Trichlorobenzene	540	BQL
1,2,4-Trichlorobenzene	540	BQL
1,3,5-Trichlorobenzene	540	BQL
2,4,5-Trichlorophenol	540	BQL
2,4,6-Trichlorophenol	540	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	96
2-Fluorophenol	10	7.1	71
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	9.1	91
2,4,6-Tribromophenol	10	7.4	74
4-Terphenyl-d14	10	12.1	121

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 546-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94194  
Lab Project ID: G185-80

Date Collected: 8/26/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil %SOLIDS 81.4

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Chlordane	000057-74-9	91	2600
2	Alkane, Unknown			2300
3	Unknown			2300
4	Unknown			2000
5	Chlordane	000057-74-9	90	1800
6	Carboxylic Acid, Unknown			1800
7	Unknown			1600
8	Unknown			1500
9	Unknown			1400
10	Unknown			1400

**Comment:**

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Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 548-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94195  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 76.5

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/7/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	460	BQL
Acenaphthylene	460	BQL
Anthracene	460	BQL
Benzo[a]anthracene	460	BQL
Benzo[a]pyrene	460	BQL
Benzo[b]fluoranthene	460	BQL
Benzo[g,h,i]perylene	460	BQL
Benzo[k]fluoranthene	460	BQL
Benzoic Acid	930	BQL
Bis(2-chloroethoxy)methane	460	BQL
Bis(2-chloroethyl)ether	460	BQL
Bis(2-chloroisopropyl)ether	460	BQL
Bis(2-ethylhexyl)phthalate	460	BQL
4-bromophenyl phenyl ether	460	BQL
Butylbenzylphthalate	460	BQL
4-Chloroaniline	460	BQL
4-Chloro-3-methylphenol	460	BQL
2-Chloronaphthalene	460	BQL
2-Chlorophenol	460	BQL
4-Chlorophenyl phenyl ether	460	BQL
Chrysene	460	BQL
Di-n-Butylphthalate	460	BQL
Di-n-octylphthalate	460	BQL
Dibenzo[a,h]anthracene	460	BQL
Dibenzofuran	460	BQL
1,2-Dichlorobenzene	460	BQL
1,3-Dichlorobenzene	460	BQL
1,4-Dichlorobenzene	460	BQL
3,3'-Dichlorobenzidine	930	BQL
2,4-Dichlorophenol	460	BQL
Diethylphthalate	460	BQL
2,4-Dimethylphenol	460	BQL
Dimethylphthalate	460	BQL
4,6-Dinitro-2-methylphenol	2300	BQL
2,4-Dinitrophenol	2300	BQL
2,4-Dinitrotoluene	460	BQL
2,6-Dinitrotoluene	460	BQL
Fluoranthene	460	BQL
Fluorene	460	520
Hexachlorobenzene	460	BQL
Hexachlorobutadiene	460	BQL
Hexachlorocyclopentadiene	930	BQL
Hexachloroethane	460	BQL
Indeno(1,2,3-c,d)pyrene	460	BQL
Isophorone	460	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 548-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94195  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 76.5

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/7/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	460	BQL
2-Methylphenol	460	BQL
3- & 4-Methylphenol	460	BQL
N-Nitrosodi-n-propylamine	460	BQL
N-Nitrosodiphenylamine	460	BQL
Naphthalene	460	BQL
2-Nitroaniline	460	BQL
3-Nitroaniline	460	BQL
4-Nitroaniline	460	BQL
Nitrobenzene	460	BQL
2-Nitrophenol	460	BQL
4-Nitrophenol	2300	BQL
Pentachlorobenzene	460	BQL
Pentachlorophenol	2300	BQL
Phenanthrene	460	BQL
Phenol	460	530
Pyrene	460	BQL
1,2,3,4-Tetrachlorobenzene	460	470
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	460	BQL
1,2,3-Trichlorobenzene	460	BQL
1,2,4-Trichlorobenzene	460	BQL
1,3,5-Trichlorobenzene	460	BQL
2,4,5-Trichlorophenol	460	BQL
2,4,6-Trichlorophenol	460	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	97
2-Fluorophenol	10	4.2	42
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	7.1	71
2,4,6-Tribromophenol	10	4.8	48
4-Terphenyl-d14	10	11.9	119

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results of Library Search for Semivolatile Compounds  
by GCMS**


Client Sample ID: DP 548-0.5'	Date Collected: 8/26/00
Client Project ID: Kuhlman Electric	Date Received: 8/29/00
Lab Sample ID: 94195	Date Analyzed: 9/6/00
Lab Project ID: G185-80	Analyzed By: MRC
Matrix: Soil      %SOLIDS      76.5	Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			1500
2	Alkane, Unknown			1400
3	Unknown			1300
4	Carboxylic Acid, Unknown			1100
5	Unknown			750
6	Unknown			640
7	Unknown			560
8	Vanillin	000121-33-5	95	560
9	Unknown			560
10	Unknown			550

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 559-0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 94196

Lab Project ID: G185-80

Matrix: Soil

%Solids: 90.0

Date Collected: 8/26/00

Date Received: 8/29/00

Date Analyzed: 9/7/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	390	BQL
Acenaphthylene	390	BQL
Anthracene	390	BQL
Benzo[a]anthracene	390	580
Benzo[a]pyrene	390	750
Benzo[b]fluoranthene	390	1000
Benzo[g,h,i]perylene	390	BQL
Benzo[k]fluoranthene	390	720
Benzoic Acid	780	BQL
Bis(2-chloroethoxy)methane	390	BQL
Bis(2-chloroethyl)ether	390	BQL
Bis(2-chloroisopropyl)ether	390	BQL
Bis(2-ethylhexyl)phthalate	390	780
4-bromophenyl phenyl ether	390	BQL
Butylbenzylphthalate	390	BQL
4-Chloroaniline	390	BQL
4-Chloro-3-methylphenol	390	BQL
2-Chloronaphthalene	390	BQL
2-Chlorophenol	390	BQL
4-Chlorophenyl phenyl ether	390	BQL
Chrysene	390	740
Di-n-Butylphthalate	390	BQL
Di-n-octylphthalate	390	BQL
Dibenzo[a,h]anthracene	390	BQL
Dibenzofuran	390	BQL
1,2-Dichlorobenzene	390	BQL
1,3-Dichlorobenzene	390	BQL
1,4-Dichlorobenzene	390	BQL
3,3'-Dichlorobenzidine	780	BQL
2,4-Dichlorophenol	390	BQL
Diethylphthalate	390	BQL
2,4-Dimethylphenol	390	BQL
Dimethylphthalate	390	BQL
4,6-Dinitro-2-methylphenol	1900	BQL
2,4-Dinitrophenol	1900	BQL
2,4-Dinitrotoluene	390	BQL
2,6-Dinitrotoluene	390	BQL
Fluoranthene	390	1300
Fluorene	390	BQL
Hexachlorobenzene	390	BQL
Hexachlorobutadiene	390	BQL
Hexachlorocyclopentadiene	780	BQL
Hexachloroethane	390	BQL
Indeno(1,2,3-c,d)pyrene	390	BQL
Isophorone	390	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 559-0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94196  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 90.0

Date Collected: 8/26/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/7/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	390	BQL
2-Methylphenol	390	BQL
3- & 4-Methylphenol	390	BQL
N-Nitrosodi-n-propylamine	390	BQL
N-Nitrosodiphenylamine	390	BQL
Naphthalene	390	BQL
2-Nitroaniline	390	BQL
3-Nitroaniline	390	BQL
4-Nitroaniline	390	BQL
Nitrobenzene	390	BQL
2-Nitrophenol	390	BQL
4-Nitrophenol	1900	BQL
Pentachlorobenzene	390	BQL
Pentachlorophenol	1900	BQL
Phenanthrene	390	BQL
Phenol	390	BQL
Pyrene	390	BQL
1,2,3,4-Tetrachlorobenzene	390	1100
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	390	BQL
1,2,3-Trichlorobenzene	390	BQL
1,2,4-Trichlorobenzene	390	BQL
1,3,5-Trichlorobenzene	390	BQL
2,4,5-Trichlorophenol	390	BQL
2,4,6-Trichlorophenol	390	BQL

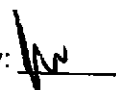
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	100
2-Fluorophenol	10	7.1	71
Nitrobenzene-d5	10	9.9	98
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	7.3	73
4-Terphenyl-d14	10	12.6	126

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 559-0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94196  
Lab Project ID: G185-80

Date Collected: 8/26/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

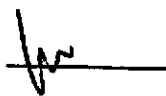
Matrix: Soil      %SOLIDS      90.0

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1900
2	Alkane, Unknown			1600
3	Carboxylic Acid, Unknown			1000
4	Aromatic, Unknown			770
5	Unknown			310
6	Unknown			280
7	Unknown			190
8	Unknown			160
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: ER 8-28  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94197  
 Lab Project ID: G185-80  
 Matrix: Water

Date Collected: 8/28/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acenaphthene	10	BQL
Acenaphthylene	10	BQL
Anthracene	10	BQL
Benzo[a]anthracene	10	BQL
Benzo[a]pyrene	10	BQL
Benzo[b]fluoranthene	10	BQL
Benzo[g,h,i]perylene	10	BQL
Benzo[k]fluoranthene	10	BQL
Benzoic Acid	20	BQL
Bis(2-chloroethoxy)methane	10	BQL
Bis(2-chloroethyl)ether	10	BQL
Bis(2-chloroisopropyl)ether	10	BQL
Bis(2-ethylhexyl)phthalate	10	BQL
4-bromophenyl phenyl ether	10	BQL
Butylbenzylphthalate	10	BQL
4-Chloroaniline	10	BQL
4-Chloro-3-methylphenol	10	BQL
2-Chloronaphthalene	10	BQL
2-Chlorophenol	10	BQL
4-Chlorophenyl phenyl ether	10	BQL
Chrysene	10	BQL
Di-n-Butylphthalate	10	BQL
Di-n-octylphthalate	10	BQL
Dibenzo[a,h]anthracene	10	BQL
Dibenzofuran	10	BQL
1,2-Dichlorobenzene	10	BQL
1,3-Dichlorobenzene	10	BQL
1,4-Dichlorobenzene	10	BQL
3,3'-Dichlorobenzidine	20	BQL
2,4-Dichlorophenol	10	BQL
Diethylphthalate	10	BQL
2,4-Dimethylphenol	10	BQL
Dimethylphthalate	10	BQL
4,6-Dinitro-2-methylphenol	50	BQL
2,4-Dinitrophenol	50	BQL
2,4-Dinitrotoluene	10	BQL
2,6-Dinitrotoluene	10	BQL
Fluoranthene	10	BQL
Fluorene	10	BQL
Hexachlorobenzene	10	BQL
Hexachlorobutadiene	10	BQL
Hexachlorocyclopentadiene	20	BQL
Hexachloroethane	10	BQL
Indeno(1,2,3-c,d)pyrene	10	BQL
Isophorone	10	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: ER 8-28  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94197  
 Lab Project ID: G185-80  
 Matrix: Water

Date Collected: 8/28/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
2-Methylnaphthalene	10	BQL
2-Methylphenol	10	BQL
3- & 4-Methylphenol	10	BQL
N-Nitrosodi-n-propylamine	10	BQL
N-Nitrosodiphenylamine	10	BQL
Naphthalene	10	BQL
2-Nitroaniline	10	BQL
3-Nitroaniline	10	BQL
4-Nitroaniline	10	BQL
Nitrobenzene	10	BQL
2-Nitrophenol	10	BQL
4-Nitrophenol	50	BQL
Pentachlorobenzene	10	BQL
Pentachlorophenol	50	BQL
Phenanthrene	10	BQL
Phenol	10	BQL
Pyrene	10	BQL
1,2,3,4-Tetrachlorobenzene	10	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	10	BQL
1,2,3-Trichlorobenzene	10	BQL
1,2,4-Trichlorobenzene	10	BQL
1,3,5-Trichlorobenzene	10	BQL
2,4,5-Trichlorophenol	10	BQL
2,4,6-Trichlorophenol	10	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.3	103
2-Fluorophenol	10	9.9	99
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	10.5	105
2,4,6-Tribromophenol	10	8.3	83
4-Terphenyl-d14	10	12.8	128

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: ER 8-28  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94197  
Lab Project ID: G185-80  
Matrix: Water

Date Collected: 8/28/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/L)
1	Unknown			61
2	Unknown			34
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: FB 8-28  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94198  
 Lab Project ID: G185-80  
 Matrix: Water

Date Collected: 8/28/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acenaphthene	10	BQL
Acenaphthylene	10	BQL
Anthracene	10	BQL
Benzo[a]anthracene	10	BQL
Benzo[a]pyrene	10	BQL
Benzo[b]fluoranthene	10	BQL
Benzo[g,h,i]perylene	10	BQL
Benzo[k]fluoranthene	10	BQL
Benzoic Acid	20	BQL
Bis(2-chloroethoxy)methane	10	BQL
Bis(2-chloroethyl)ether	10	BQL
Bis(2-chloroisopropyl)ether	10	BQL
Bis(2-ethylhexyl)phthalate	10	BQL
4-bromophenyl phenyl ether	10	BQL
Butylbenzylphthalate	10	BQL
4-Chloroaniline	10	BQL
4-Chloro-3-methylphenol	10	BQL
2-Chloronaphthalene	10	BQL
2-Chlorophenol	10	BQL
4-Chlorophenyl phenyl ether	10	BQL
Chrysene	10	BQL
Di-n-Butylphthalate	10	BQL
Di-n-octylphthalate	10	BQL
Dibenzo[a,h]anthracene	10	BQL
Dibenzofuran	10	BQL
1,2-Dichlorobenzene	10	BQL
1,3-Dichlorobenzene	10	BQL
1,4-Dichlorobenzene	10	BQL
3,3'-Dichlorobenzidine	20	BQL
2,4-Dichlorophenol	10	BQL
Diethylphthalate	10	BQL
2,4-Dimethylphenol	10	BQL
Dimethylphthalate	10	BQL
4,6-Dinitro-2-methylphenol	50	BQL
2,4-Dinitrophenol	50	BQL
2,4-Dinitrotoluene	10	BQL
2,6-Dinitrotoluene	10	BQL
Fluoranthene	10	BQL
Fluorene	10	BQL
Hexachlorobenzene	10	BQL
Hexachlorobutadiene	10	BQL
Hexachlorocyclopentadiene	20	BQL
Hexachloroethane	10	BQL
Indeno(1,2,3-c,d)pyrene	10	BQL
isophorone	10	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: FB 8-28  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94198  
 Lab Project ID: G185-80  
 Matrix: Water

Date Collected: 8/28/00  
 Date Received: 8/29/00  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
2-Methylnaphthalene	10	BQL
2-Methylphenol	10	BQL
3- & 4-Methylphenol	10	BQL
N-Nitrosodi-n-propylamine	10	BQL
N-Nitrosodiphenylamine	10	BQL
Naphthalene	10	BQL
2-Nitroaniline	10	BQL
3-Nitroaniline	10	BQL
4-Nitroaniline	10	BQL
Nitrobenzene	10	BQL
2-Nitrophenol	10	BQL
4-Nitrophenol	50	BQL
Pentachlorobenzene	10	BQL
Pentachlorophenol	50	BQL
Phenanthrene	10	BQL
Phenol	10	BQL
Pyrene	10	BQL
1,2,3,4-Tetrachlorobenzene	10	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	10	BQL
1,2,3-Trichlorobenzene	10	BQL
1,2,4-Trichlorobenzene	10	BQL
1,3,5-Trichlorobenzene	10	BQL
2,4,5-Trichlorophenol	10	BQL
2,4,6-Trichlorophenol	10	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	100
2-Fluorophenol	10	9.1	91
Nitrobenzene-d5	10	9	90
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	7.7	77
4-Terphenyl-d14	10	13.2	132

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: FB 8-28  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94198  
Lab Project ID: G185-80  
Matrix: Water

Date Collected: 8/28/00  
Date Received: 8/29/00  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/L)
1	Unknown			43
2	Unknown			11
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: WBLK-083100-A  
Lab Project ID: G185-80  
Matrix: Water

Date Collected: NA  
Date Received: NA  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acenaphthene	10	BQL
Acenaphthylene	10	BQL
Anthracene	10	BQL
Benzo[a]anthracene	10	BQL
Benzo[a]pyrene	10	BQL
Benzo[b]fluoranthene	10	BQL
Benzo[g,h,i]perylene	10	BQL
Benzo[k]fluoranthene	10	BQL
Benzoic Acid	20	BQL
Bis(2-chloroethoxy)methane	10	BQL
Bis(2-chloroethyl)ether	10	BQL
Bis(2-chloroisopropyl)ether	10	BQL
Bis(2-ethylhexyl)phthalate	10	BQL
4-bromophenyl phenyl ether	10	BQL
Butylbenzylphthalate	10	BQL
4-Chloroaniline	10	BQL
4-Chloro-3-methylphenol	10	BQL
2-Chloronaphthalene	10	BQL
2-Chlorophenol	10	BQL
4-Chlorophenyl phenyl ether	10	BQL
Chrysene	10	BQL
Di-n-Butylphthalate	10	BQL
Di-n-octylphthalate	10	BQL
Dibenzo[a,h]anthracene	10	BQL
Dibenzofuran	10	BQL
1,2-Dichlorobenzene	10	BQL
1,3-Dichlorobenzene	10	BQL
1,4-Dichlorobenzene	10	BQL
3,3'-Dichlorobenzidine	20	BQL
2,4-Dichlorophenol	10	BQL
Diethylphthalate	10	BQL
2,4-Dimethylphenol	10	BQL
Dimethylphthalate	10	BQL
4,6-Dinitro-2-methylphenol	50	BQL
2,4-Dinitrophenol	50	BQL
2,4-Dinitrotoluene	10	BQL
2,6-Dinitrotoluene	10	BQL
Fluoranthene	10	BQL
Fluorene	10	BQL
Hexachlorobenzene	10	BQL
Hexachlorobutadiene	10	BQL
Hexachlorocyclopentadiene	20	BQL
Hexachloroethane	10	BQL
Indeno(1,2,3-c,d)pyrene	10	BQL
Isophorone	10	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: WBLK-083100-A  
 Lab Project ID: G185-80  
 Matrix: Water

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
2-Methylnaphthalene	10	BQL
2-Methylphenol	10	BQL
3- & 4-Methylphenol	10	BQL
N-Nitrosodi-n-propylamine	10	BQL
N-Nitrosodiphenylamine	10	BQL
Naphthalene	10	BQL
2-Nitroaniline	10	BQL
3-Nitroaniline	10	BQL
4-Nitroaniline	10	BQL
Nitrobenzene	10	BQL
2-Nitrophenol	10	BQL
4-Nitrophenol	50	BQL
Pentachlorobenzene	10	BQL
Pentachlorophenol	50	BQL
Phenanthrene	10	BQL
Phenol	10	BQL
Pyrene	10	BQL
1,2,3,4-Tetrachlorobenzene	10	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	10	BQL
1,2,3-Trichlorobenzene	10	BQL
1,2,4-Trichlorobenzene	10	BQL
1,3,5-Trichlorobenzene	10	BQL
2,4,5-Trichlorophenol	10	BQL
2,4,6-Trichlorophenol	10	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	8.6	86
Nitrobenzene-d5	10	9.4	94
Phenol-d6	10	9.4	94
2,4,6-Tribromophenol	10	7.2	72
4-Terphenyl-d14	10	14.2	142

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: ASE-083100-A  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: NA  
Date Received: NA  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 100.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-083100-A  
 Lab Project ID: G185-80  
 Matrix: Soil

%Solids: 100.0

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.1	101
2-Fluorophenol	10	9.2	92
Nitrobenzene-d5	10	9	90
Phenol-d6	10	9.5	95
2,4,6-Tribromophenol	10	7.4	74
4-Terphenyl-d14	10	12.4	124

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: WBLK-083000-A  
Lab Project ID: G185-80  
Matrix: Water

Date Collected: NA  
Date Received: NA  
Date Analyzed: 9/6/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Acenaphthene	10	BQL
Acenaphthylene	10	BQL
Anthracene	10	BQL
Benzo[a]anthracene	10	BQL
Benzo[a]pyrene	10	BQL
Benzo[b]fluoranthene	10	BQL
Benzo[g,h,i]perylene	10	BQL
Benzo[k]fluoranthene	10	BQL
Benzoic Acid	20	BQL
Bis(2-chloroethoxy)methane	10	BQL
Bis(2-chloroethyl)ether	10	BQL
Bis(2-chloroisopropyl)ether	10	BQL
Bis(2-ethylhexyl)phthalate	10	BQL
4-bromophenyl phenyl ether	10	BQL
Butylbenzylphthalate	10	BQL
4-Chloroaniline	10	BQL
4-Chloro-3-methylphenol	10	BQL
2-Chloronaphthalene	10	BQL
2-Chlorophenol	10	BQL
4-Chlorophenyl phenyl ether	10	BQL
Chrysene	10	BQL
Di-n-Butylphthalate	10	BQL
Di-n-octylphthalate	10	BQL
Dibenzo[a,h]anthracene	10	BQL
Dibenzofuran	10	BQL
1,2-Dichlorobenzene	10	BQL
1,3-Dichlorobenzene	10	BQL
1,4-Dichlorobenzene	10	BQL
3,3'-Dichlorobenzidine	20	BQL
2,4-Dichlorophenol	10	BQL
Diethylphthalate	10	BQL
2,4-Dimethylphenol	10	BQL
Dimethylphthalate	10	BQL
4,6-Dinitro-2-methylphenol	50	BQL
2,4-Dinitrophenol	50	BQL
2,4-Dinitrotoluene	10	BQL
2,6-Dinitrotoluene	10	BQL
Fluoranthene	10	BQL
Fluorene	10	BQL
Hexachlorobenzene	10	BQL
Hexachlorobutadiene	10	BQL
Hexachlorocyclopentadiene	20	BQL
Hexachloroethane	10	BQL
Indeno(1,2,3-c,d)pyrene	10	BQL
Isophorone	10	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: WBLK-083000-A  
 Lab Project ID: G185-80  
 Matrix: Water

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/6/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
2-Methylnaphthalene	10	BQL
2-Methylphenol	10	BQL
3- & 4-Methylphenol	10	BQL
N-Nitrosodi-n-propylamine	10	BQL
N-Nitrosodiphenylamine	10	BQL
Naphthalene	10	BQL
2-Nitroaniline	10	BQL
3-Nitroaniline	10	BQL
4-Nitroaniline	10	BQL
Nitrobenzene	10	BQL
2-Nitrophenol	10	BQL
4-Nitrophenol	50	BQL
Pentachlorobenzene	10	BQL
Pentachlorophenol	50	BQL
Phenanthrene	10	BQL
Phenol	10	BQL
Pyrene	10	BQL
1,2,3,4-Tetrachlorobenzene	10	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	10	BQL
1,2,3-Trichlorobenzene	10	BQL
1,2,4-Trichlorobenzene	10	BQL
1,3,5-Trichlorobenzene	10	BQL
2,4,5-Trichlorophenol	10	BQL
2,4,6-Trichlorophenol	10	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.4	84
2-Fluorophenol	10	7.2	72
Nitrobenzene-d5	10	7.4	74
Phenol-d6	10	8.2	82
2,4,6-Tribromophenol	10	7.2	72
4-Terphenyl-d14	10	14.3	143

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: W-MS.MSD-310  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 08/28/00  
 Date Received: 08/29/00  
 Date Analyzed: 09/06/00  
 Analyzed By: MRC

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit
					Lower %	Upper %		Max. %
Acenaphthene	BQL	10	101	100	56	146	1.5	30
Acenaphthylene	BQL	10	105	106	40	184	0.7	30
Anthracene	BQL	10	112	104	53	156	7.2	30
Benzo[a]anthracene	BQL	10	112	104	60	127	7.4	30
Benzo[a]pyrene	BQL	10	120	109	61	137	10.1	30
Benzo[b]fluoranthene	BQL	10	124	115	67	151	6.8	30
Benzo[g,h,i]perylene	BQL	10	112	104	66	122	7.3	30
Benzo[k]fluoranthene	BQL	10	125	114	54	161	9.6	30
Bis(2-chloroethoxy)methane	BQL	10	76	79	29	149	4.4	30
Bis(2-chloroethyl)ether	BQL	10	67	74	34	117	10.1	30
Bis(2-chloroisopropyl)ether	BQL	10	70	78	22	151	11.2	30
Bis(2-ethylhexyl)phthalate	BQL	10	81	82	62	136	0.7	30
4-Bromophenyl phenyl ether	BQL	10	86	85	33	152	1.4	30
Butylbenzylphthalate	BQL	10	75	72	63	130	3.4	30
4-Chloro-3-methylphenol	BQL	10	113	110	74	132	2.9	30
2-Chloronaphthalene	BQL	10	96	98	58	142	2.0	30
2-Chlorophenol	BQL	10	91	101	58	120	9.4	30
4-Chlorophenyl phenyl ether	BQL	10	82	79	34	159	4.2	30
Chrysene	BQL	10	102	97	49	137	5.7	30
Di-n-Butylphthalate	BQL	10	122	116	59	163	5.2	30
Di-n-octylphthalate	BQL	10	87	84	60	155	3.2	30
Dibenzo[a,h]anthracene	BQL	10	127	116	75	128	9.3	30
Dibenzofuran	BQL	10	98	95	56	149	2.3	30
1,2-Dichlorobenzene	BQL	10	81	91	33	130	12.1	30
1,3-Dichlorobenzene	BQL	10	75	88	29	120	15.5	30
1,4-Dichlorobenzene	BQL	10	77	90	40	122	14.6	30
2,4-Dichlorophenol	BQL	10	104	104	71	128	0.8	30
Diethylphthalate	BQL	10	111	106	52	177	4.6	30
2,4-Dimethylphenol	BQL	10	65	70	10	143	7.5	30
Dimethylphthalate	BQL	10	101	95	59	136	5.5	30
4,6-Dinitro-2-methylphenol	BQL	10	120	109	73	152	9.6	30
2,4-Dinitrophenol	BQL	10	117	107	57	153	8.7	30
2,4-Dinitrotoluene	BQL	10	111	102	73	137	8.6	30
2,6-Dinitrotoluene	BQL	10	111	104	73	131	6.6	30

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)  
by GCMS 8270**

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: W-MS.MSD-310  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 08/28/00  
 Date Received: 08/29/00  
 Date Analyzed: 09/06/00  
 Analyzed By: MRC

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit Max. %
					Lower %	Upper %		
Fluoranthene	BQL	10	108	98	52	161	9.5	30
Fluorene	BQL	10	106	102	48	172	4.4	30
Hexachlorobenzene	BQL	10	111	110	69	135	1.0	30
Hexachlorobutadiene	BQL	10	77	83	48	128	7.6	30
Hexachloroethane	BQL	10	74	87	26	129	16.7	30
Indeno(1,2,3-c,d)pyrene	BQL	10	103	95	64	113	8.2	30
Isophorone	BQL	10	101	102	69	131	1.7	30
2-Methylnaphthalene	BQL	10	89	91	52	130	1.6	30
2-Methylphenol	BQL	10	93	99	60	125	6.3	30
3- & 4-Methylphenol	BQL	20	97	95	59	132	1.6	30
N-Nitrosodi-n-propylamine	BQL	10	76	80	41	123	5.3	30
N-Nitrosodiphenylamine	BQL	20	54	54	10	211	0.5	30
Naphthalene	BQL	10	95	100	51	137	4.6	30
Nitrobenzene	BQL	10	98	101	50	151	3.4	30
2-Nitrophenol	BQL	10	92	97	65	125	5.4	30
4-Nitrophenol	BQL	10	108	93	45	165	14.6	30
Pentachlorobenzene	BQL	10	88	92	NA	NA	3.6	30
Pentachlorophenol	BQL	10	102	91	49	163	11.8	30
Phenanthrene	BQL	10	113	106	55	157	6.1	30
Phenol	BQL	10	102	107	56	140	4.8	30
Pyrene	BQL	10	131	126	50	138	3.9	30
1,2,3,4-Tetrachlorobenzene	BQL	10	72	76	NA	NA	4.9	30
1,2,3,5-Tetrachlorobenzene*	BQL	20	112	121	NA	NA	8.1	30
1,2,3-Trichlorobenzene	BQL	10	62	69	NA	NA	10.8	30
1,2,4-Trichlorobenzene	BQL	10	83	91	53	125	8.5	30
1,3,5-Trichlorobenzene	BQL	10	52	59	NA	NA	12.1	30
2,4,5-Trichlorophenol	BQL	10	113	110	77	137	2.9	30
2,4,6-Trichlorophenol	BQL	10	106	103	74	131	2.3	30

**Comments:**

Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: W-LCS-310  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 09/06/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Acenaphthene	10	10.41	104	68	137
Acenaphthylene	10	11.11	111	52	177
Anthracene	10	10.92	109	66	145
Benzo[a]anthracene	10	10.85	109	74	117
Benzo[a]pyrene	10	11.06	111	81	122
Benzo[b]fluoranthene	10	12.01	120	89	132
Benzo[g,h,i]perylene	10	10.18	102	75	113
Benzo[k]fluoranthene	10	11.82	118	77	146
Bis(2-chloroethoxy)methane	10	8.60	86	30	150
Bis(2-chloroethyl)ether	10	8.03	80	34	120
Bis(2-chloroisopropyl)ether	10	8.47	85	23	153
Bis(2-ethylhexyl)phthalate	10	7.75	77	74	124
4-Bromophenyl phenyl ether	10	8.65	87	10	165
Butylbenzylphthalate	10	7.12	74	73	122
4-Chloro-3-methylphenol	10	11.72	117	84	121
2-Chloronaphthalene	10	10.25	103	71	132
2-Chlorophenol	10	10.57	106	70	112
4-Chlorophenyl phenyl ether	10	8.33	83	36	158
Chrysene	10	10.08	101	67	123
Di-n-Butylphthalate	10	11.78	118	69	155
Di-n-octylphthalate	10	8.20	82	80	139
Dibenzo[a,h]anthracene	10	11.41	114	82	123
Dibenzofuran	10	10.20	102	68	139
1,2-Dichlorobenzene	10	9.83	98	54	123
1,3-Dichlorobenzene	10	9.55	95	51	114
1,4-Dichlorobenzene	10	9.39	94	52	115
2,4-Dichlorophenol	10	11.07	111	82	119
Diethylphthalate	10	11.07	111	62	169
2,4-Dimethylphenol	10	7.87	79	10	128
Dimethylphthalate	10	10.06	101	70	128
4,6-Dinitro-2-methylphenol	10	10.85	109	81	138
2,4-Dinitrophenol	10	10.70	107	72	138
2,4-Dinitrotoluene	10	10.81	108	83	128
2,6-Dinitrotoluene	10	10.70	107	87	121
Fluoranthene	10	10.48	105	67	145

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270**

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: W-LCS-310  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: N/A  
 Date Received: N/A  
 Date Analyzed: 09/06/00  
 Analyzed By: MRC  
 Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Fluorene	10	10.90	109	59	164
Hexachlorobenzene	10	10.91	109	81	126
Hexachlorobutadiene	10	8.89	89	66	119
Hexachloroethane	10	9.22	92	50	122
Indeno(1,2,3-c,d)pyrene	10	9.50	95	67	111
Isophorone	10	10.99	110	78	123
2-Methylnaphthalene	10	9.82	98	68	121
2-Methylphenol	10	10.48	105	70	113
3- & 4-Methylphenol	20	22.09	110	71	121
N-Nitrosodi-n-propylamine	10	8.18	82	53	114
N-Nitrosodiphenylamine	10	11.19	112	16	205
Naphthalene	10	10.73	107	63	133
Nitrobenzene	10	10.87	109	71	126
2-Nitrophenol	10	10.26	103	74	118
4-Nitrophenol	10	9.43	94	49	151
Pentachlorobenzene	10	9.73	97	NA	NA
Pentachlorophenol	10	8.91	89	42	155
Phenanthrene	10	11.08	111	66	147
Phenol	10	11.56	116	67	131
Pyrene	10	12.50	121	67	122
1,2,3,4-Tetrachlorobenzene	10	8.39	84	NA	NA
1,2,3,5-Tetrachlorobenzene*	20	26.55	133	NA	NA
1,2,3-Trichlorobenzene	10	7.81	78	NA	NA
1,2,4-Trichlorobenzene	10	9.57	96	68	118
1,3,5-Trichlorobenzene	10	6.94	69	NA	NA
2,4,5-Trichlorophenol	10	11.47	115	84	129
2,4,6-Trichlorophenol	10	10.88	109	82	123

**Comments:**

Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established

Reviewed By:

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-163  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 08/22/00  
 Date Received: 08/22/00  
 Date Analyzed: 08/30/00  
 Analyzed By: MRC  
 Solids: 82.1

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit Max. %
					Lower %	Upper %		
Acenaphthene	BQL	10	104	105	55	138	0.5	30
Acenaphthylene	BQL	10	111	110	51	158	0.9	30
Anthracene	BQL	10	104	105	53	142	0.5	30
Benzo[a]anthracene	BQL	10	103	104	55	122	0.6	30
Benzo[a]pyrene	BQL	10	108	110	58	133	1.6	30
Benzo[b]fluoranthene	BQL	10	104	104	62	134	0.3	30
Benzo[g,h,i]perylene	BQL	10	109	106	55	124	3.0	30
Benzo[k]fluoranthene	BQL	10	114	115	51	147	0.9	30
Bis(2-chloroethoxy)methane	BQL	10	82	81	25	166	1.3	30
Bis(2-chloroethyl)ether	BQL	10	80	80	11	187	0.2	30
Bis(2-chloroisopropyl)ether	BQL	10	80	80	10	219	0.2	30
Bis(2-ethylhexyl)phthalate	BQL	10	142 *	145 *	62	128	1.7	30
4-Bromophenyl phenyl ether	BQL	10	83	83	18	178	0.4	30
Butylbenzylphthalate	BQL	10	128 *	134 *	61	123	4.5	30
4-Chloro-3-methylphenol	BQL	10	115	115	60	129	0.4	30
2-Chloronaphthalene	BQL	10	102	102	59	137	0.6	30
2-Chlorophenol	BQL	10	102	104	62	122	2.3	30
4-Chlorophenyl phenyl ether	BQL	10	81	82	25	177	0.5	30
Chrysene	BQL	10	93	95	51	120	2.5	30
Di-n-Butylphthalate	BQL	10	112	113	63	136	0.8	30
Di-n-octylphthalate	BQL	10	143	146	54	152	2.1	30
Dibenzo[a,h]anthracene	BQL	10	120	117	63	134	2.9	30
Dibenzofuran	BQL	10	99	100	59	137	0.9	30
1,2-Dichlorobenzene	BQL	10	95	95	57	134	0.3	30
1,3-Dichlorobenzene	BQL	10	93	93	62	125	0.0	30
1,4-Dichlorobenzene	BQL	10	94	94	61	124	0.6	30
2,4-Dichlorophenol	BQL	10	109	109	62	129	0.1	30
Diethylphthalate	BQL	10	108	107	59	142	0.7	30
2,4-Dimethylphenol	BQL	10	136	134	10	151	1.6	30
Dimethylphthalate	BQL	10	99	99	52	126	0.1	30
4,6-Dinitro-2-methylphenol	BQL	10	109	114	31	163	4.2	30
2,4-Dinitrophenol	BQL	10	112	108	10	159	3.2	30
2,4-Dinitrotoluene	BQL	10	107	105	58	136	1.6	30
2,6-Dinitrotoluene	BQL	10	105	105	54	145	0.0	30

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-163  
 Lab Project ID: G185-80  
 Matrix: Soil

Date Collected: 08/22/00  
 Date Received: 08/22/00  
 Date Analyzed: 08/30/00  
 Analyzed By: MRC  
 Solids: 82.1

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit Max. %
					Lower %	Upper %		
Fluoranthene	BQL	10	101	103	54	139	1.4	30
Fluorene	BQL	10	106	106	58	145	0.4	30
Hexachlorobenzene	BQL	10	105	107	58	140	2.0	30
Hexachlorobutadiene	BQL	10	91	91	64	130	0.5	30
Hexachloroethane	BQL	10	90	91	51	138	1.4	30
Indeno(1,2,3-c,d)pyrene	BQL	10	102	95	53	118	6.6	30
Isophorone	BQL	10	105	105	67	126	0.3	30
2-Methylnaphthalene	BQL	10	95	96	63	127	0.6	30
2-Methylphenol	BQL	10	107	107	41	127	0.1	30
3- & 4-Methylphenol	BQL	20	105	97	45	125	8.5	30
N-Nitrosodi-n-propylamine	BQL	10	86	87	43	128	1.6	30
N-Nitrosodiphenylamine	BQL	10	104	100	10	296	3.7	30
Naphthalene	BQL	10	105	104	67	131	0.2	30
Nitrobenzene	BQL	10	102	101	63	133	1.5	30
2-Nitrophenol	BQL	10	101	100	60	133	1.3	30
4-Nitrophenol	BQL	10	99	90	40	156	10.1	30
Pentachlorobenzene	BQL	10	61	61	NA	NA	0.2	30
Pentachlorophenol	BQL	10	90	91	40	160	0.5	30
Phenanthrene	BQL	10	107	107	57	135	0.2	30
Phenol	BQL	10	113	113	52	128	0.2	30
Pyrene	BQL	10	114	117	57	129	2.9	30
1,2,3,4-Tetrachlorobenzene	BQL	10	78	81	NA	NA	3.2	30
1,2,3,5-Tetrachlorobenzene*	BQL	20	113	116	NA	NA	2.3	30
1,2,3-Trichlorobenzene	BQL	10	78	82	NA	NA	4.2	30
1,2,4-Trichlorobenzene	BQL	10	95	95	62	129	0.4	30
1,3,5-Trichlorobenzene	BQL	10	77	80	NA	NA	3.3	30
2,4,5-Trichlorophenol	BQL	10	112	111	63	144	1.2	30
2,4,6-Trichlorophenol	BQL	10	108	109	57	136	0.9	30

**Comments:**

Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established.

Reviewed By: WA

PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: ASE-LCS-163  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 09/06/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Acenaphthene	10	10.20	102	74	122
Acenaphthylene	10	10.87	109	67	150
Anthracene	10	10.31	103	73	127
Benzo[a]anthracene	10	10.01	100	72	108
Benzo[a]pyrene	10	11.17	112	78	120
Benzo[b]fluoranthene	10	10.95	109	74	129
Benzo[g,h,i]perylene	10	9.75	98	61	116
Benzo[k]fluoranthene	10	11.23	112	75	133
Bis(2-chloroethoxy)methane	10	8.00	80	21	166
Bis(2-chloroethyl)ether	10	7.61	76	14	171
Bis(2-chloroisopropyl)ether	10	7.98	80	10	197
Bis(2-ethylhexyl)phthalate	10	11.40	114	74	115
4-Bromophenyl phenyl ether	10	7.95	79	24	163
Butylbenzylphthalate	10	11.50	115	71	117
4-Chloro-3-methylphenol	10	11.29	113	74	127
2-Chloronaphthalene	10	9.86	99	77	119
2-Chlorophenol	10	10.36	104	76	115
4-Chlorophenyl phenyl ether	10	8.08	81	28	165
Chrysene	10	9.14	91	68	107
Di-n-Butylphthalate	10	10.68	107	77	126
Di-n-octylphthalate	10	13.20	132	74	136
Dibenzo[a,h]anthracene	10	10.75	107	64	134
Dibenzofuran	10	9.75	98	72	124
1,2-Dichlorobenzene	10	9.51	95	71	121
1,3-Dichlorobenzene	10	9.12	91	72	115
1,4-Dichlorobenzene	10	9.15	92	71	114
2,4-Dichlorophenol	10	10.54	105	78	121
Diethylphthalate	10	10.41	104	73	134
2,4-Dimethylphenol	10	11.40	114	64	123
Dimethylphthalate	10	9.38	94	77	109
4,6-Dinitro-2-methylphenol	10	9.89	99	61	144
2,4-Dinitrophenol	10	9.48	95	46	135
2,4-Dinitrotoluene	10	10.24	102	75	125
2,6-Dinitrotoluene	10	10.35	104	78	122
Fluoranthene	10	10.03	100	72	124



PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: ASE-LCS-163  
Lab Project ID: G185-80  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 09/06/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Fluorene	10	10.62	106	73	133
Hexachlorobenzene	10	10.08	101	78	120
Hexachlorobutadiene	10	8.68	87	74	119
Hexachloroethane	10	8.89	89	70	122
Indeno(1,2,3-c,d)pyrene	10	8.84	88	54	118
Isophorone	10	10.27	103	81	117
2-Methylnaphthalene	10	9.34	93	70	119
2-Methylphenol	10	10.84	108	76	114
3- & 4-Methylphenol	20	21.96	110	61	141
N-Nitrosodi-n-propylamine	10	9.03	90	60	111
N-Nitrosodiphenylamine	10	11.32	113	10	366
Naphthalene	10	10.34	103	74	123
Nitrobenzene	10	10.11	101	76	122
2-Nitrophenol	10	9.63	96	72	117
4-Nitrophenol	10	4.88	49	20	149
Pentachlorobenzene	10	9.80	98	NA	NA
Pentachlorophenol	10	7.92	79	40	155
Phenanthrene	10	8.33	83	74	123
Phenol	10	8.29	83	73	128
Pyrene	10	8.21	82	64	123
1,2,3,4-Tetrachlorobenzene	10	8.58	86	NA	NA
1,2,3,5-Tetrachlorobenzene*	20	28.25	141	NA	NA
1,2,3-Trichlorobenzene	10	8.68	87	NA	NA
1,2,4-Trichlorobenzene	10	7.95	79	77	114
1,3,5-Trichlorobenzene	10	8.34	83	NA	NA
2,4,5-Trichlorophenol	10	8.72	87	77	131
2,4,6-Trichlorophenol	10	8.67	87	79	119

Comments:

Concentrations are on column amounts.

Flags:

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established

Reviewed By: 

Results for Laboratory Control Spike (LCS)  
PARADIGM ANALYTICAL LABORATORIES, INC.  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: WLCS 1  
Lab Project ID: G185-80  
Matrix: Water

Date Analyzed: 9/18/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Spiked (ug/L)	Result (ug/L)	Limits	
			Lower	Upper
Arochlor 1260	10	9.0	7.0	13.0

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
MS/MSD Results for PCBs  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: WQC 1  
Lab Project ID: G185-80  
Matrix: Water

Date Analyzed: 9/18/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Sample	MS	%Rec	MSD	%Rec	RPD
Aroclor-1260	BQL	625	63%	655	66%	4.7

**Comments:**

BQL = Below Quantitation Limit

Results reported are on-column amounts in ug/L.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

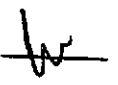
Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: WBLK 090100  
Lab Project ID: G185-80  
Matrix: Water

Date Collected:  
Date Received:  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/L)	Result (ug/L)
Arochlor-1016	5.0	BQL
Arochlor-1221	5.0	BQL
Arochlor-1232	5.0	BQL
Arochlor-1242	5.0	BQL
Arochlor-1248	5.0	BQL
Arochlor-1254	5.0	BQL
Arochlor-1260	5.0	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	50	50

Comments:  
BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

Results for Laboratory Control Spike (LCS)  
PARADIGM ANALYTICAL LABORATORIES, INC.  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SLCS 13  
Lab Project ID: G185-80  
Matrix: Soil

Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Spiked (ug/KG)	Result (ug/KG)	Limits	
			Lower	Upper
Arochlor 1260	313	225	219	406

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
MS/MSD Results for PCBs  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SQC 13  
Lab Project ID: G185-80  
Matrix: Soil

Date Analyzed: 9/8/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Sample	MS	%Rec	MSD	%Rec	RPD
Aroclor-1260	60	1075	101%	1084	102%	0.9

**Comments:**

BQL = Below Quantitation Limit

Results reported are on-column amounts in ug/L.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SBLK 083100  
Lab Project ID: G185-80  
Matrix: Soil

%SOLIDS: 100.0

Date Collected:  
Date Received:  
Date Analyzed: 9/8/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	80	80

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



**Environmental Chemistry Consulting Services, Inc.**  
 2525 Advance Road,  
 Phone 808-221-8700 FAX 808-221-4889

**CHAIN OF CUSTODY**

No. 002696

Page 1 of 1

Turn Around (circle one) Normal Rush

Project Number: \_\_\_\_\_  
 Project Name: Muhimpu Electric  
 Project Location: Crystal Springs, MS  
 Sampled By (Print): Tim Fitzpatrick  
 Mail Report To: Tim Fitzpatrick  
 Company: Osgen  
 Address: PO Box 3142  
Huntersville NC 28070

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
DP 455-0.5'	8/22	11:43	S	1	NA	PCBs, Chlor. Benz.	PCB by 8082, chlor.	
DP 505-0.5'	8/25	10:40	S	1	NA	PCBs, Chlor. Benz.	benzenes by 8270	
DP 509-0.5'	8/25	11:28	S	1	NA	PCBs, Chlor. Benz.		
DP 526-0.5'	8/25	16:40	S	1	NA	PCBs, Chlor. Benz.		
DP 529-0.5'	8/25	17:00	S	1	NA	PCBs, Chlor. Benz.		
DP 534-0.5'	8/26	10:10	S	1	NA	PCBs, Chlor. Benz.		
DP 556-0.5'	8/26	10:29	S	1	NA	PCBs, Chlor. Benz.		
DP 546-0.5'	8/26	12:32	S	1	NA	PCBs, Chlor. Benz.		A185-80
DP 548-0.5'	8/26	14:28	S	1	NA	PCBs, Chlor. Benz.		
DP 559-0.5'	8/26	16:15	S	1	NA	PCBs, Chlor. Benz.		
ER 8-2B	8/28	13:45	L	2	NA			
FB 8-2B	8/28	13:55	L	2	NA			

Relinquished By: [Signature] Date/Time: 8/29/00 11:20  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: [Signature] Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Receipt Temp: 21.5C  
 Temp Blank Y N

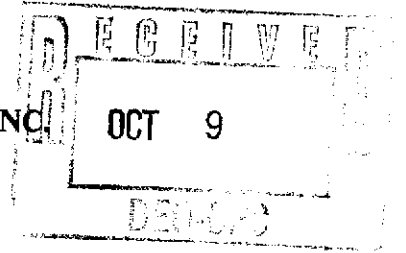
\*Preservation Code  
 A=None B=HCL C=H2SO4  
 D=HNO3 E=EnCore F=Methanol  
 G=NaOH O=Other(Indicate)

Custody Seal: Present/Absent  
 Shipped Via: \_\_\_\_\_

WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER/SUBMITTER



PARADIGM ANALYTICAL LABORATORIES, INC.  
2627 Northchase Parkway S.E.  
Wilmington, North Carolina 28405  
(910) 350-1903  
Fax (910) 350-1557



Mr. Tim Fitzpatrick  
Ogden Environmental & Engineering  
P.O. Box 3142  
Huntersville NC 28070

September 19, 2000

**FILE COPY**

Report Number: G185-78

Dear Mr. Fitzpatrick,

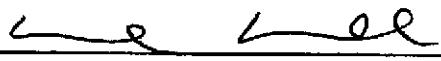
Enclosed are the results of the analytical services performed under the referenced project. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call for assistance. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,

Paradigm Analytical Laboratories, Inc.

  
\_\_\_\_\_  
Laboratory Director  
Mark Randall

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP301 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93674  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 89.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	350	BQL
Acenaphthylene	350	BQL
Anthracene	350	BQL
Benzo[a]anthracene	350	BQL
Benzo[a]pyrene	350	BQL
Benzo[b]fluoranthene	350	BQL
Benzo[g,h,i]perylene	350	BQL
Benzo[k]fluoranthene	350	BQL
Benzoic Acid	700	BQL
Bis(2-chloroethoxy)methane	350	BQL
Bis(2-chloroethyl)ether	350	BQL
Bis(2-chloroisopropyl)ether	350	BQL
Bis(2-ethylhexyl)phthalate	350	BQL
4-bromophenyl phenyl ether	350	BQL
Butylbenzylphthalate	350	BQL
4-Chloroaniline	350	BQL
4-Chloro-3-methylphenol	350	BQL
2-Chloronaphthalene	350	BQL
2-Chlorophenol	350	BQL
4-Chlorophenyl phenyl ether	350	BQL
Chrysene	350	BQL
Di-n-Butylphthalate	350	BQL
Di-n-octylphthalate	350	BQL
Dibenzo[a,h]anthracene	350	BQL
Dibenzofuran	350	BQL
1,2-Dichlorobenzene	350	BQL
1,3-Dichlorobenzene	350	BQL
1,4-Dichlorobenzene	350	BQL
3,3'-Dichlorobenzidine	700	BQL
2,4-Dichlorophenol	350	BQL
Diethylphthalate	350	BQL
2,4-Dimethylphenol	350	BQL
Dimethylphthalate	350	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	350	BQL
2,6-Dinitrotoluene	350	BQL
Fluoranthene	350	BQL
Fluorene	350	BQL
Hexachlorobenzene	350	BQL
Hexachlorobutadiene	350	BQL
Hexachlorocyclopentadiene	700	BQL
Hexachloroethane	350	BQL
Indeno(1,2,3-c,d)pyrene	350	BQL
Isophorone	350	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP301 - 0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 93674

Lab Project ID: G185-78

Matrix: Soil

%Solids: 89.0

Date Collected: 8/16/00

Date Received: 8/18/00

Date Analyzed: 8/30/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	350	BQL
2-Methylphenol	350	BQL
3- & 4-Methylphenol	350	BQL
N-Nitrosodi-n-propylamine	350	BQL
N-Nitrosodiphenylamine	350	BQL
Naphthalene	350	BQL
2-Nitroaniline	350	BQL
3-Nitroaniline	350	BQL
4-Nitroaniline	350	BQL
Nitrobenzene	350	BQL
2-Nitrophenol	350	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	350	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	350	BQL
Phenol	350	BQL
Pyrene	350	BQL
1,2,3,4-Tetrachlorobenzene	350	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	350	BQL
1,2,3-Trichlorobenzene	350	BQL
1,2,4-Trichlorobenzene	350	BQL
1,3,5-Trichlorobenzene	350	BQL
2,4,5-Trichlorophenol	350	BQL
2,4,6-Trichlorophenol	350	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	8.9	89
Nitrobenzene-d5	10	10.1	101
Phenol-d6	10	10	100
2,4,6-Tribromophenol	10	8.9	89
4-Terphenyl-d14	10	10.3	103

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP301 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93674  
Lab Project ID: G185-78

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      89.0

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			2500
2	Alkane, Unknown			850
3	Unknown			840
4	Unknown			730
5	Unknown			680
6	Alkane, Unknown			400
7	Unknown			310
8	Unknown			290
9	Unknown			290
10	Unknown			

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP302 - 4'

Client Project ID: Kuhlman Electric

Lab Sample ID: 93675

Lab Project ID: G185-78

Matrix: Soil

%Solids: 92.0

Date Collected: 8/16/00

Date Received: 8/18/00

Date Analyzed: 8/30/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	670	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	670	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	670	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP302 - 4'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93675  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.9	99
2-Fluorophenol	10	7.5	75
Nitrobenzene-d5	10	9.7	97
Phenol-d6	10	8.5	85
2,4,6-Tribromophenol	10	7.2	72
4-Terphenyl-d14	10	10.1	101

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP302 - 4'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93675  
Lab Project ID: G185-78

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      92.0

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP304 - 0.5'

Client Project ID: Kuhlman Electric

Lab Sample ID: 93676

Lab Project ID: G185-78

Matrix: Soil

%Solids: 86.5

Date Collected: 8/16/00

Date Received: 8/18/00

Date Analyzed: 8/30/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	360	BQL
Acenaphthylene	360	BQL
Anthracene	360	BQL
Benzo[a]anthracene	360	BQL
Benzo[a]pyrene	360	BQL
Benzo[b]fluoranthene	360	BQL
Benzo[g,h,i]perylene	360	BQL
Benzo[k]fluoranthene	360	BQL
Benzoic Acid	720	BQL
Bis(2-chloroethoxy)methane	360	BQL
Bis(2-chloroethyl)ether	360	BQL
Bis(2-chloroisopropyl)ether	360	BQL
Bis(2-ethylhexyl)phthalate	360	BQL
4-bromophenyl phenyl ether	360	BQL
Butylbenzylphthalate	360	BQL
4-Chloroaniline	360	BQL
4-Chloro-3-methylphenol	360	BQL
2-Chloronaphthalene	360	BQL
2-Chlorophenol	360	BQL
4-Chlorophenyl phenyl ether	360	BQL
Chrysene	360	BQL
Di-n-Butylphthalate	360	BQL
Di-n-octylphthalate	360	BQL
Dibenzo[a,h]anthracene	360	BQL
Dibenzofuran	360	BQL
1,2-Dichlorobenzene	360	BQL
1,3-Dichlorobenzene	360	BQL
1,4-Dichlorobenzene	360	BQL
3,3'-Dichlorobenzidine	720	BQL
2,4-Dichlorophenol	360	BQL
Diethylphthalate	360	BQL
2,4-Dimethylphenol	360	BQL
Dimethylphthalate	360	BQL
4,6-Dinitro-2-methylphenol	1800	BQL
2,4-Dinitrophenol	1800	BQL
2,4-Dinitrotoluene	360	BQL
2,6-Dinitrotoluene	360	BQL
Fluoranthene	360	BQL
Fluorene	360	BQL
Hexachlorobenzene	360	BQL
Hexachlorobutadiene	360	BQL
Hexachlorocyclopentadiene	720	BQL
Hexachloroethane	360	BQL
Indeno(1,2,3-c,d)pyrene	360	BQL
Isophorone	360	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP304 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93676  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 86.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	360	BQL
2-Methylphenol	360	BQL
3- & 4-Methylphenol	360	BQL
N-Nitrosodi-n-propylamine	360	BQL
N-Nitrosodiphenylamine	360	BQL
Naphthalene	360	BQL
2-Nitroaniline	360	BQL
3-Nitroaniline	360	BQL
4-Nitroaniline	360	BQL
Nitrobenzene	360	BQL
2-Nitrophenol	360	BQL
4-Nitrophenol	1800	BQL
Pentachlorobenzene	360	BQL
Pentachlorophenol	1800	BQL
Phenanthrene	360	BQL
Phenol	360	BQL
Pyrene	360	BQL
1,2,3,4-Tetrachlorobenzene	360	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	360	BQL
1,2,3-Trichlorobenzene	360	BQL
1,2,4-Trichlorobenzene	360	BQL
1,3,5-Trichlorobenzene	360	BQL
2,4,5-Trichlorophenol	360	BQL
2,4,6-Trichlorophenol	360	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	100
2-Fluorophenol	10	9.5	95
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	10.1	101
2,4,6-Tribromophenol	10	10.6	106
4-Terphenyl-d14	10	9.8	98

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP304 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93676  
 Lab Project ID: G185-78

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

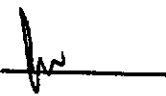
Matrix: Soil      %SOLIDS      86.5

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1700
2	Unknown			1100
3	Alkane, Unknown			960
4	Carboxylic Acid, Unknown			860
5	Alkane, Unknown			790
6	Unknown			700
7	Unknown			430
8	Unknown			370
9	Unknown			340
10	Vanillin	000121-33-5	91	340

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP305 - 0.5'  
 Client Project ID: Kuhiman Electric  
 Lab Sample ID: 93677  
 Lab Project ID: G185-78

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

Matrix: Soil %Solids: 81.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	380	BQL
Acenaphthylene	380	BQL
Anthracene	380	BQL
Benzo[a]anthracene	380	BQL
Benzo[a]pyrene	380	440
Benzo[b]fluoranthene	380	530
Benzo[g,h,i]perylene	380	450
Benzo[k]fluoranthene	380	380
Benzoic Acid	760	BQL
Bis(2-chloroethoxy)methane	380	BQL
Bis(2-chloroethyl)ether	380	BQL
Bis(2-chloroisopropyl)ether	380	BQL
Bis(2-ethylhexyl)phthalate	380	BQL
4-bromophenyl phenyl ether	380	BQL
Butylbenzylphthalate	380	BQL
4-Chloroaniline	380	BQL
4-Chloro-3-methylphenol	380	BQL
2-Chloronaphthalene	380	BQL
2-Chlorophenol	380	BQL
4-Chlorophenyl phenyl ether	380	BQL
Chrysene	380	BQL
Di-n-Butylphthalate	380	BQL
Di-n-octylphthalate	380	BQL
Dibenzo[a,h]anthracene	380	BQL
Dibenzofuran	380	BQL
1,2-Dichlorobenzene	380	BQL
1,3-Dichlorobenzene	380	BQL
1,4-Dichlorobenzene	380	BQL
3,3'-Dichlorobenzidine	760	BQL
2,4-Dichlorophenol	380	BQL
Diethylphthalate	380	BQL
2,4-Dimethylphenol	380	BQL
Dimethylphthalate	380	BQL
4,6-Dinitro-2-methylphenol	1900	BQL
2,4-Dinitrophenol	1900	BQL
2,4-Dinitrotoluene	380	BQL
2,6-Dinitrotoluene	380	BQL
Fluoranthene	380	520
Fluorene	380	BQL
Hexachlorobenzene	380	BQL
Hexachlorobutadiene	380	BQL
Hexachlorocyclopentadiene	760	BQL
Hexachloroethane	380	BQL
Indeno(1,2,3-c,d)pyrene	380	BQL
Isophorone	380	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP305 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93677  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 81.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	380	BQL
2-Methylphenol	380	BQL
3- & 4-Methylphenol	380	BQL
N-Nitrosodi-n-propylamine	380	BQL
N-Nitrosodiphenylamine	380	BQL
Naphthalene	380	BQL
2-Nitroaniline	380	BQL
3-Nitroaniline	380	BQL
4-Nitroaniline	380	BQL
Nitrobenzene	380	BQL
2-Nitrophenol	380	BQL
4-Nitrophenol	1900	BQL
Pentachlorobenzene	380	BQL
Pentachlorophenol	1900	BQL
Phenanthrene	380	BQL
Phenol	380	BQL
Pyrene	380	BQL
1,2,3,4-Tetrachlorobenzene	380	420
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	380	BQL
1,2,3-Trichlorobenzene	380	BQL
1,2,4-Trichlorobenzene	380	BQL
1,3,5-Trichlorobenzene	380	BQL
2,4,5-Trichlorophenol	380	BQL
2,4,6-Trichlorophenol	380	BQL

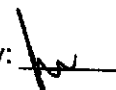
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.1	91
2-Fluorophenol	10	5.2	52
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	7.5	74
2,4,6-Tribromophenol	10	6.6	66
4-Terphenyl-d14	10	9.7	97

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP305 - 0.5'	Date Collected: 8/16/00
Client Project ID: Kuhlman Electric	Date Received: 8/18/00
Lab Sample ID: 93677	Date Analyzed: 8/31/00
Lab Project ID: G185-78	Analyzed By: MRC
Matrix: Soil      %SOLIDS      81.5	Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			1800
2	Carboxylic Acid, Unknown			1600
3	Unknown			920
4	Unknown			780
5	Alkane, Unknown			770
6	Unknown			740
7	Unknown			500
8	Alkane, Unknown			500
9	Unknown			440
10	Unknown			400

**Comment:**

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Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP307 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93678  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 95.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	320	BQL
Acenaphthylene	320	BQL
Anthracene	320	BQL
Benzo[a]anthracene	320	BQL
Benzo[a]pyrene	320	BQL
Benzo[b]fluoranthene	320	BQL
Benzo[g,h,i]perylene	320	BQL
Benzo[k]fluoranthene	320	BQL
Benzoic Acid	640	BQL
Bis(2-chloroethoxy)methane	320	BQL
Bis(2-chloroethyl)ether	320	BQL
Bis(2-chloroisopropyl)ether	320	BQL
Bis(2-ethylhexyl)phthalate	320	BQL
4-bromophenyl phenyl ether	320	BQL
Butylbenzylphthalate	320	BQL
4-Chloroaniline	320	BQL
4-Chloro-3-methylphenol	320	BQL
2-Chloronaphthalene	320	BQL
2-Chlorophenol	320	BQL
4-Chlorophenyl phenyl ether	320	BQL
Chrysene	320	BQL
Di-n-Butylphthalate	320	BQL
Di-n-octylphthalate	320	BQL
Dibenzo[a,h]anthracene	320	BQL
Dibenzofuran	320	BQL
1,2-Dichlorobenzene	320	BQL
1,3-Dichlorobenzene	320	BQL
1,4-Dichlorobenzene	320	BQL
3,3'-Dichlorobenzidine	640	BQL
2,4-Dichlorophenol	320	BQL
Diethylphthalate	320	BQL
2,4-Dimethylphenol	320	BQL
Dimethylphthalate	320	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	320	BQL
2,6-Dinitrotoluene	320	BQL
Fluoranthene	320	BQL
Fluorene	320	BQL
Hexachlorobenzene	320	BQL
Hexachlorobutadiene	320	BQL
Hexachlorocyclopentadiene	640	BQL
Hexachloroethane	320	BQL
Indeno(1,2,3-c,d)pyrene	320	BQL
Isophorone	320	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP307 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93678  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 95.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	320	BQL
2-Methylphenol	320	BQL
3- & 4-Methylphenol	320	BQL
N-Nitrosodi-n-propylamine	320	BQL
N-Nitrosodiphenylamine	320	BQL
Naphthalene	320	BQL
2-Nitroaniline	320	BQL
3-Nitroaniline	320	BQL
4-Nitroaniline	320	BQL
Nitrobenzene	320	BQL
2-Nitrophenol	320	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	320	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	320	BQL
Phenol	320	BQL
Pyrene	320	BQL
1,2,3,4-Tetrachlorobenzene	320	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	320	BQL
1,2,3-Trichlorobenzene	320	BQL
1,2,4-Trichlorobenzene	320	BQL
1,3,5-Trichlorobenzene	320	BQL
2,4,5-Trichlorophenol	320	BQL
2,4,6-Trichlorophenol	320	BQL

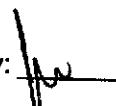
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.7	107
2-Fluorophenol	10	9.1	91
Nitrobenzene-d5	10	10.6	106
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	11.1	111

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP307 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93678  
Lab Project ID: G185-78

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      95.2

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			380
2	Unknown			190
3	Unknown			150
4	Unknown			150
5	Unknown			130
6				
7				
8				
9				
10				

**Comment:**

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Reviewed by: \_\_\_\_\_





PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP310 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93679  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 83.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	370	BQL
Acenaphthylene	370	BQL
Anthracene	370	BQL
Benzo[a]anthracene	370	BQL
Benzo[a]pyrene	370	BQL
Benzo[b]fluoranthene	370	BQL
Benzo[g,h,i]perylene	370	BQL
Benzo[k]fluoranthene	370	BQL
Benzoic Acid	730	BQL
Bis(2-chloroethoxy)methane	370	BQL
Bis(2-chloroethyl)ether	370	BQL
Bis(2-chloroisopropyl)ether	370	BQL
Bis(2-ethylhexyl)phthalate	370	BQL
4-bromophenyl phenyl ether	370	BQL
Butylbenzylphthalate	370	BQL
4-Chloroaniline	370	BQL
4-Chloro-3-methylphenol	370	BQL
2-Chloronaphthalene	370	BQL
2-Chlorophenol	370	BQL
4-Chlorophenyl phenyl ether	370	BQL
Chrysene	370	BQL
Di-n-Butylphthalate	370	BQL
Di-n-octylphthalate	370	BQL
Dibenzo[a,h]anthracene	370	BQL
Dibenzofuran	370	BQL
1,2-Dichlorobenzene	370	BQL
1,3-Dichlorobenzene	370	BQL
1,4-Dichlorobenzene	370	BQL
3,3'-Dichlorobenzidine	730	BQL
2,4-Dichlorophenol	370	BQL
Diethylphthalate	370	BQL
2,4-Dimethylphenol	370	BQL
Dimethylphthalate	370	BQL
4,6-Dinitro-2-methylphenol	1800	BQL
2,4-Dinitrophenol	1800	BQL
2,4-Dinitrotoluene	370	BQL
2,6-Dinitrotoluene	370	BQL
Fluoranthene	370	BQL
Fluorene	370	BQL
Hexachlorobenzene	370	BQL
Hexachlorobutadiene	370	BQL
Hexachlorocyclopentadiene	730	BQL
Hexachloroethane	370	BQL
Indeno(1,2,3-c,d)pyrene	370	BQL
Isophorone	370	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP310 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93679  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 83.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	370	BQL
2-Methylphenol	370	BQL
3- & 4-Methylphenol	370	BQL
N-Nitrosodi-n-propylamine	370	BQL
N-Nitrosodiphenylamine	370	BQL
Naphthalene	370	BQL
2-Nitroaniline	370	BQL
3-Nitroaniline	370	BQL
4-Nitroaniline	370	BQL
Nitrobenzene	370	BQL
2-Nitrophenol	370	BQL
4-Nitrophenol	1800	BQL
Pentachlorobenzene	370	BQL
Pentachlorophenol	1800	BQL
Phenanthrene	370	BQL
Phenol	370	BQL
Pyrene	370	BQL
1,2,3,4-Tetrachlorobenzene	370	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	370	BQL
1,2,3-Trichlorobenzene	370	BQL
1,2,4-Trichlorobenzene	370	BQL
1,3,5-Trichlorobenzene	370	BQL
2,4,5-Trichlorophenol	370	BQL
2,4,6-Trichlorophenol	370	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.5	95
2-Fluorophenol	10	8.2	82
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	7.1	71
4-Terphenyl-d14	10	10.3	103

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP314 - 0.5'  
Client Project ID: Kuhiman Electric  
Lab Sample ID: 93680  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 80.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	390	BQL
Acenaphthylene	390	BQL
Anthracene	390	BQL
Benzo[a]anthracene	390	BQL
Benzo[a]pyrene	390	BQL
Benzo[b]fluoranthene	390	BQL
Benzo[g,h,i]perylene	390	BQL
Benzo[k]fluoranthene	390	BQL
Benzoic Acid	770	BQL
Bis(2-chloroethoxy)methane	390	BQL
Bis(2-chloroethyl)ether	390	BQL
Bis(2-chloroisopropyl)ether	390	BQL
Bis(2-ethylhexyl)phthalate	390	BQL
4-bromophenyl phenyl ether	390	BQL
Butylbenzylphthalate	390	BQL
4-Chloroaniline	390	BQL
4-Chloro-3-methylphenol	390	BQL
2-Chloronaphthalene	390	BQL
2-Chlorophenol	390	BQL
4-Chlorophenyl phenyl ether	390	BQL
Chrysene	390	BQL
Di-n-Butylphthalate	390	BQL
Di-n-octylphthalate	390	BQL
Dibenzo[a,h]anthracene	390	BQL
Dibenzofuran	390	BQL
1,2-Dichlorobenzene	390	BQL
1,3-Dichlorobenzene	390	BQL
1,4-Dichlorobenzene	390	BQL
3,3'-Dichlorobenzidine	770	BQL
2,4-Dichlorophenol	390	BQL
Diethylphthalate	390	BQL
2,4-Dimethylphenol	390	BQL
Dimethylphthalate	390	BQL
4,6-Dinitro-2-methylphenol	1900	BQL
2,4-Dinitrophenol	1900	BQL
2,4-Dinitrotoluene	390	BQL
2,6-Dinitrotoluene	390	BQL
Fluoranthene	390	BQL
Fluorene	390	BQL
Hexachlorobenzene	390	BQL
Hexachlorobutadiene	390	BQL
Hexachlorocyclopentadiene	770	BQL
Hexachloroethane	390	BQL
Indeno(1,2,3-c,d)pyrene	390	BQL
Isophorone	390	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP314 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93680  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 80.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	390	BQL
2-Methylphenol	390	BQL
3- & 4-Methylphenol	390	BQL
N-Nitrosodi-n-propylamine	390	BQL
N-Nitrosodiphenylamine	390	BQL
Naphthalene	390	BQL
2-Nitroaniline	390	BQL
3-Nitroaniline	390	BQL
4-Nitroaniline	390	BQL
Nitrobenzene	390	BQL
2-Nitrophenol	390	BQL
4-Nitrophenol	1900	BQL
Pentachlorobenzene	390	BQL
Pentachlorophenol	1900	BQL
Phenanthrene	390	BQL
Phenol	390	BQL
Pyrene	390	BQL
1,2,3,4-Tetrachlorobenzene	390	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	390	BQL
1,2,3-Trichlorobenzene	390	BQL
1,2,4-Trichlorobenzene	390	BQL
1,3,5-Trichlorobenzene	390	BQL
2,4,5-Trichlorophenol	390	BQL
2,4,6-Trichlorophenol	390	BQL

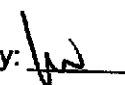
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.9	99
2-Fluorophenol	10	3.2	32
Nitrobenzene-d5	10	10.1	101
Phenol-d6	10	5.8	58
2,4,6-Tribromophenol	10	1.5	15
4-Terphenyl-d14	10	10.2	102

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP314 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93680  
 Lab Project ID: G185-78

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

Matrix: Soil      %SOLIDS      80.7

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			930
2	Alkane, Unknown			850
3	Unknown			800
4	Alkane, Unknown			650
5	Unknown			540
6	Alkane, Unknown			470
7	Unknown			390
8	Vanillin	000121-33-5	90	320
9	Alkane, Unknown			280
10	Unknown			200

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP315 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93681  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 90.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	690	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	690	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	690	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP315 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93681  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 90.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	9	90
Nitrobenzene-d5	10	10.5	105
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	10.9	109

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By:   NN



PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP315 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93681  
Lab Project ID: G185-78

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      90.8

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			440
2	Unknown			400
3	Unknown			260
4	Unknown			160
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP316 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93682  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 88.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	350	BQL
Acenaphthylene	350	BQL
Anthracene	350	BQL
Benzo[a]anthracene	350	BQL
Benzo[a]pyrene	350	BQL
Benzo[b]fluoranthene	350	BQL
Benzo[g,h,i]perylene	350	BQL
Benzo[k]fluoranthene	350	BQL
Benzoic Acid	690	BQL
Bis(2-chloroethoxy)methane	350	BQL
Bis(2-chloroethyl)ether	350	BQL
Bis(2-chloroisopropyl)ether	350	BQL
Bis(2-ethylhexyl)phthalate	350	BQL
4-bromophenyl phenyl ether	350	BQL
Butylbenzylphthalate	350	BQL
4-Chloroaniline	350	BQL
4-Chloro-3-methylphenol	350	BQL
2-Chloronaphthalene	350	BQL
2-Chlorophenol	350	BQL
4-Chlorophenyl phenyl ether	350	BQL
Chrysene	350	BQL
Di-n-Butylphthalate	350	BQL
Di-n-octylphthalate	350	BQL
Dibenzo[a,h]anthracene	350	BQL
Dibenzofuran	350	BQL
1,2-Dichlorobenzene	350	BQL
1,3-Dichlorobenzene	350	BQL
1,4-Dichlorobenzene	350	BQL
3,3'-Dichlorobenzidine	690	BQL
2,4-Dichlorophenol	350	BQL
Diethylphthalate	350	BQL
2,4-Dimethylphenol	350	BQL
Dimethylphthalate	350	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	350	BQL
2,6-Dinitrotoluene	350	BQL
Fluoranthene	350	BQL
Fluorene	350	BQL
Hexachlorobenzene	350	BQL
Hexachlorobutadiene	350	BQL
Hexachlorocyclopentadiene	690	BQL
Hexachloroethane	350	BQL
Indeno(1,2,3-c,d)pyrene	350	BQL
Isophorone	350	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP316 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93682  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 88.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	350	BQL
2-Methylphenol	350	BQL
3- & 4-Methylphenol	350	BQL
N-Nitrosodi-n-propylamine	350	BQL
N-Nitrosodiphenylamine	350	BQL
Naphthalene	350	BQL
2-Nitroaniline	350	BQL
3-Nitroaniline	350	BQL
4-Nitroaniline	350	BQL
Nitrobenzene	350	BQL
2-Nitrophenol	350	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	350	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	350	BQL
Phenol	350	BQL
Pyrene	350	BQL
1,2,3,4-Tetrachlorobenzene	350	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	350	BQL
1,2,3-Trichlorobenzene	350	BQL
1,2,4-Trichlorobenzene	350	BQL
1,3,5-Trichlorobenzene	350	BQL
2,4,5-Trichlorophenol	350	BQL
2,4,6-Trichlorophenol	350	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.1	111
2-Fluorophenol	10	8.5	85
Nitrobenzene-d5	10	11	110
Phenol-d6	10	10.4	104
2,4,6-Tribromophenol	10	7.5	75
4-Terphenyl-d14	10	11.2	112

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results of Library Search for Semivolatile Compounds  
by GCMS**

Client Sample ID: DP316 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93682  
 Lab Project ID: G185-78

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

Matrix: Soil      %SOLIDS      88.9

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1300
2	Alkane, Unknown			1100
3	Alkane, Unknown			440
4	Unknown			430
5	Alkane, Unknown			320
6	Unknown			310
7	Unknown			210
8	Unknown			190
9	Vanillin	000121-33-5	90	190
10	Unknown			180

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP319 - 0.5'  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 93683  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 8/16/00  
 Date Received: 8/18/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	670	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	670	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	670	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP319 - 0.5'  
Client Project ID: Kuhiman Electric  
Lab Sample ID: 93683  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.1	111
2-Fluorophenol	10	7.3	73
Nitrobenzene-d5	10	10.8	108
Phenol-d6	10	9.4	95
2,4,6-Tribromophenol	10	4.2	42
4-Terphenyl-d14	10	11.3	113

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP319 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93683  
Lab Project ID: G185-78

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1


Matrix: Soil      %SOLIDS      92.1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			2300
2	Alkane, Unknown			1700
3	Unknown			660
4	Unknown			560
5	Vanillin	000121-33-5	95	450
6	Unknown			430
7	Unknown			250
8	Unknown			240
9	Unknown			220
10	Unknown			200

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP319 - 4'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93684  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 87.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	690	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	690	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	690	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP319 - 4'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93684  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 87.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	6.9	69
Nitrobenzene-d5	10	9.4	94
Phenol-d6	10	7.5	75
2,4,6-Tribromophenol	10	7.7	77
4-Terphenyl-d14	10	10.4	104

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP319 - 4'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93684  
Lab Project ID: G185-78

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      87.4

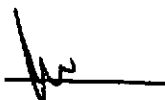
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP324 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93685  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 93.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	BQL
Benzo[a]pyrene	330	BQL
Benzo[b]fluoranthene	330	BQL
Benzo[g,h,i]perylene	330	BQL
Benzo[k]fluoranthene	330	BQL
Benzoic Acid	660	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	BQL
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	BQL
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	BQL
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	660	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	BQL
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	660	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	BQL
Isophorone	330	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP324 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93685  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 93.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	330	BQL
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	BQL
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	330	BQL
Phenol	330	BQL
Pyrene	330	BQL
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL


Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	100
2-Fluorophenol	10	8	80
Nitrobenzene-d5	10	9.7	97
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	8.4	84
4-Terphenyl-d14	10	10.3	103

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP324 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93685  
Lab Project ID: G185-78

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      93.5

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1200
2	Alkane, Unknown			810
3	Alkane, Unknown			520
4	Alkane, Unknown			410
5	Unknown			320
6	Unknown			210
7	Unknown			160
8	Unknown			150
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP301 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93674  
Lab Project ID: G185-78  
Matrix: Soil

%SOLIDS: 89.0

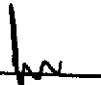
Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	77	77

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP302 - 4'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93675  
Lab Project ID: G185-78  
Matrix: Soil

%SOLIDS: 92.0

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	66	66

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP304 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93676  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 86.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	180	BQL
Arochlor-1221	180	BQL
Arochlor-1232	180	BQL
Arochlor-1242	180	BQL
Arochlor-1248	180	BQL
Arochlor-1254	180	BQL
Arochlor-1260	180	BQL
Arochlor-1262	180	340 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	64	64

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP305 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93677  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 81.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	390 BQL

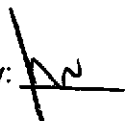
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	69	69

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP307 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93678  
Lab Project ID: G185-78  
Matrix: Soil

%SOLIDS: 95.2

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	72	72

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP310 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93679  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 83.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	71	71

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP314 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93680  
Lab Project ID: G185-78  
Matrix: Soil

%SOLIDS: 80.7

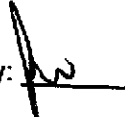
Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	64	64

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP315 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93681  
Lab Project ID: G185-78  
Matrix: Soil

%SOLIDS: 90.8

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	74	74

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP316 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93682  
Lab Project ID: G185-78  
Matrix: Soil

%SOLIDS: 88.9

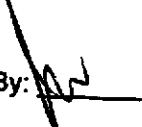
Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	280	BQL
Arochlor-1221	280	BQL
Arochlor-1232	280	BQL
Arochlor-1242	280	BQL
Arochlor-1248	280	BQL
Arochlor-1254	280	BQL
Arochlor-1260	280	BQL
Arochlor-1262	280	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	72	72

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP319 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93683  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	190 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	93	93

\*Sample was quantitated as Arochlor 1260, but appears to contain a mixture of Arochlor 1260 and Arochlor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP319 - 4'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93684  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 87.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	91	91

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP324 - 0.5'  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 93685  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: 8/16/00  
Date Received: 8/18/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 93.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	260 BQL

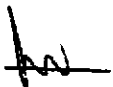
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	101	101

\*Sample was quantitated as Arochlor 1260, but appears to contain a mixture of Arochlor 1260 and Arochlor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SBik 8/24/00  
Lab Project ID: G185-78  
Matrix: Soil

%SOLIDS: 100.0

Date Collected:  
Date Received:  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

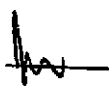
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	31	BQL
Arochlor-1221	31	BQL
Arochlor-1232	31	BQL
Arochlor-1242	31	BQL
Arochlor-1248	31	BQL
Arochlor-1254	31	BQL
Arochlor-1260	31	BQL
Arochlor-1262	31	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	95	95

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

Results for Laboratory Control Spike (LCS)  
PARADIGM ANALYTICAL LABORATORIES, INC.  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SLCS 12  
Lab Project ID: G185-78  
Matrix: Soil

Date Analyzed: 8/24/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Spiked (ug/KG)	Result (ug/KG)	Limits	
			Lower	Upper
Arochlor 1260	313	321	219	406

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
MS/MSD Results for PCBs  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SQC 12  
Lab Project ID: G185-78  
Matrix: Soil

Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Sample	MS	%Rec	MSD	%Rec	RPD
Aroclor-1260	BQL	727	73%	832	83%	13.5

**Comments:**

BQL = Below Quantitation Limit

Results reported are on-column amounts in ug/L.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: SBLK-082300-A  
 Lab Project ID: G185-78  
 Matrix: Soil

%Solids: 100.0

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: SBLK-082300-A  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 100.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	8.1	81
Nitrobenzene-d5	10	8.2	82
Phenol-d6	10	8.7	87
2,4,6-Tribromophenol	10	7.4	74
4-Terphenyl-d14	10	10	100

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By:

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)  
by GCMS 8270**

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-160  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 08/15/00  
 Date Received: 08/15/00  
 Date Analyzed: 08/22/00  
 Analyzed By: MRC  
 Solids: 84.7

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit Max. %
					Lower %	Upper %		
Acenaphthene	BQL	10	88	85	56	108	3.8	30
Acenaphthylene	BQL	10	91	90	40	124	1.4	30
Anthracene	BQL	10	94	86	55	109	8.5	30
Benzo[a]anthracene	BQL	10	83	86	52	109	3.0	30
Benzo[a]pyrene	BQL	10	87	88	57	110	1.6	30
Benzo[b]fluoranthene	BQL	10	95	103 *	59	101	7.3	30
Benzo[g,h,i]perylene	BQL	10	75	67	53	101	10.1	30
Benzo[k]fluoranthene	BQL	10	86	87	54	117	1.7	30
Bis(2-chloroethoxy)methane	BQL	10	93	93	28	120	0.0	30
Bis(2-chloroethyl)ether	BQL	10	91	91	33	129	0.5	30
Bis(2-chloroisopropyl)ether	BQL	10	95	96	38	115	0.7	30
Bis(2-ethylhexyl)phthalate	BQL	10	89	99	38	127	11.1	30
4-Bromophenyl phenyl ether	BQL	10	91	94	34	127	3.3	30
Butylbenzylphthalate	BQL	10	89	100	40	115	10.9	30
4-Chloro-3-methylphenol	BQL	10	89	89	50	109	0.1	30
2-Chloronaphthalene	BQL	10	87	88	58	115	1.5	30
2-Chlorophenol	BQL	10	85	86	48	109	2.1	30
4-Chlorophenyl phenyl ether	BQL	10	89	88	34	125	1.0	30
Chrysene	BQL	10	81	77	51	114	5.6	30
Di-n-Butylphthalate	BQL	10	87	88	51	113	0.8	30
Di-n-octylphthalate	BQL	10	107	135 *	53	127	22.8	30
Dibenzo[a,h]anthracene	BQL	10	81	79	61	110	2.2	30
Dibenzofuran	BQL	10	85	85	61	107	0.6	30
1,2-Dichlorobenzene	BQL	10	85	86	41	118	1.1	30
1,3-Dichlorobenzene	BQL	10	84	86	33	118	1.8	30
1,4-Dichlorobenzene	BQL	10	83	84	40	116	1.7	30
2,4-Dichlorophenol	BQL	10	91	93	52	109	2.2	30
Diethylphthalate	BQL	10	89	90	47	122	0.5	30
2,4-Dimethylphenol	BQL	10	54	43	10	148	21.3	30
Dimethylphthalate	BQL	10	84	84	36	129	0.1	30
4,6-Dinitro-2-methylphenol	BQL	10	92	94	10	150	2.7	30
2,4-Dinitrophenol	BQL	10	82	77	10	149	6.2	30
2,4-Dinitrotoluene	BQL	10	86	87	40	122	0.7	30
2,6-Dinitrotoluene	BQL	10	86	88	29	125	2.1	30

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-160  
 Lab Project ID: G185-78  
 Matrix: Soil

Date Collected: 08/15/00  
 Date Received: 08/15/00  
 Date Analyzed: 08/22/00  
 Analyzed By: MRC  
 Solids: 84.7

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit Max. %
					Lower %	Upper %		
Fluoranthene	BQL	10	84	81	52	124	3.0	30
Fluorene	BQL	10	85	85	56	118	0.1	30
Hexachlorobenzene	BQL	10	87	89	61	113	2.7	30
Hexachlorobutadiene	BQL	10	85	85	44	124	0.5	30
Hexachloroethane	BQL	10	81	81	14	119	0.1	30
Indeno(1,2,3-c,d)pyrene	BQL	10	72	71	46	116	2.6	30
Isophorone	BQL	10	90	91	51	103	1.2	30
2-Methylnaphthalene	BQL	10	87	87	54	115	0.4	30
2-Methylphenol	BQL	10	75	70	30	115	6.7	30
3- & 4-Methylphenol	BQL	20	72	68	18	119	5.1	30
N-Nitrosodi-n-propylamine	BQL	10	82	86	44	108	3.7	30
N-Nitrosodiphenylamine	BQL	10	85	85	21	119	0.0	30
Naphthalene	BQL	10	95	91	51	117	3.8	30
Nitrobenzene	BQL	10	89	89	24	132	0.7	30
2-Nitrophenol	BQL	10	87	89	10	141	2.6	30
4-Nitrophenol	BQL	10	59	66	40	129	9.9	30
Pentachlorobenzene	BQL	10	61	61	NA	NA	0.2	30
Pentachlorophenol	BQL	10	98	101	40	127	2.4	30
Phenanthrene	BQL	10	89	91	59	114	2.0	30
Phenol	BQL	10	82	84	50	109	2.6	30
Pyrene	BQL	10	90	101	47	110	10.8	30
1,2,3,4-Tetrachlorobenzene	BQL	10	78	81	NA	NA	3.2	30
1,2,3,5-Tetrachlorobenzene*	BQL	20	113	116	NA	NA	2.3	30
1,2,3-Trichlorobenzene	BQL	10	78	82	NA	NA	4.2	30
1,2,4-Trichlorobenzene	BQL	10	84	85	52	113	1.4	30
1,3,5-Trichlorobenzene	BQL	10	77	80	NA	NA	3.3	30
2,4,5-Trichlorophenol	BQL	10	91	93	59	115	2.7	30
2,4,6-Trichlorophenol	BQL	10	86	87	49	120	1.5	30

**Comments:**

Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory Limits not established.

BQL = Below quantitation limit.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: ASE-LCS-160  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 08/28/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Acenaphthene	10	8.12	81	74	122
Acenaphthylene	10	8.90	89	67	150
Anthracene	10	8.58	86	73	127
Benzo[a]anthracene	10	8.08	81	72	108
Benzo[a]pyrene	10	8.81	88	78	120
Benzo[b]fluoranthene	10	9.16	92	74	129
Benzo[g,h,i]perylene	10	6.45	65	61	116
Benzo[k]fluoranthene	10	9.27	93	75	133
Bis(2-chloroethoxy)methane	10	8.82	88	21	166
Bis(2-chloroethyl)ether	10	8.56	86	14	171
Bis(2-chloroisopropyl)ether	10	8.78	88	10	197
Bis(2-ethylhexyl)phthalate	10	8.99	90	74	115
4-Bromophenyl phenyl ether	10	8.76	88	24	163
Butylbenzylphthalate	10	8.54	85	71	117
4-Chloro-3-methylphenol	10	8.56	86	74	127
2-Chloronaphthalene	10	8.30	83	77	119
2-Chlorophenol	10	8.21	82	76	115
4-Chlorophenyl phenyl ether	10	8.78	88	28	165
Chrysene	10	7.47	75	68	107
Di-n-Butylphthalate	10	8.72	87	77	126
Di-n-octylphthalate	10	11.26	113	74	136
Dibenzo[a,h]anthracene	10	6.85	68	64	134
Dibenzofuran	10	8.16	82	72	124
1,2-Dichlorobenzene	10	7.86	79	71	121
1,3-Dichlorobenzene	10	7.61	76	72	115
1,4-Dichlorobenzene	10	7.76	78	71	114
2,4-Dichlorophenol	10	8.68	87	78	121
Diethylphthalate	10	8.83	88	73	134
2,4-Dimethylphenol	10	9.47	95	64	123
Dimethylphthalate	10	8.32	83	77	109
4,6-Dinitro-2-methylphenol	10	8.41	84	61	144
2,4-Dinitrophenol	10	7.47	75	46	135
2,4-Dinitrotoluene	10	8.65	87	75	125
2,6-Dinitrotoluene	10	8.48	85	78	122
Fluoranthene	10	8.16	82	72	124

PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: ASE-LCS-160  
Lab Project ID: G185-78  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 08/28/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Fluorene	10	8.41	84	73	133
Hexachlorobenzene	10	8.44	84	78	120
Hexachlorobutadiene	10	7.86	79	74	119
Hexachloroethane	10	7.58	76	70	122
Indeno(1,2,3-c,d)pyrene	10	6.08	61	54	118
Isophorone	10	8.59	86	81	117
2-Methylnaphthalene	10	7.68	77	70	119
2-Methylphenol	10	8.52	85	76	114
3- & 4-Methylphenol	20	21.91	110	61	141
N-Nitrosodi-n-propylamine	10	7.53	75	60	111
N-Nitrosodiphenylamine	10	9.56	96	10	366
Naphthalene	10	8.15	81	74	123
Nitrobenzene	10	8.47	85	76	122
2-Nitrophenol	10	8.10	81	72	117
4-Nitrophenol	10	4.88	49	20	149
Pentachlorobenzene	10	6.06	61	NA	NA
Pentachlorophenol	10	7.92	79	40	155
Phenanthrene	10	8.33	83	74	123
Phenol	10	8.29	83	73	128
Pyrene	10	8.21	82	64	123
1,2,3,4-Tetrachlorobenzene	10	7.80	78	NA	NA
1,2,3,5-Tetrachlorobenzene*	20	22.68	113	NA	NA
1,2,3-Trichlorobenzene	10	7.84	78	NA	NA
1,2,4-Trichlorobenzene	10	7.95	79	77	114
1,3,5-Trichlorobenzene	10	7.71	77	NA	NA
2,4,5-Trichlorophenol	10	8.72	87	77	131
2,4,6-Trichlorophenol	10	8.67	87	79	119

Comments:

Concentrations are on column amounts.

Flags:

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established

Reviewed By: 



**Environmental Chemistry  
Consulting Services, Inc.**

2525 Advance Road,  
Madison, WI 53718  
Phone 608-221-8700 FAX 608-221-4888

**CHAIN OF CUSTODY**

No. 002644 \*

09100-10

Page 1 of 1  
Turn Around (circle one) (Normal) Rush  
Report Due:

Project Number: \_\_\_\_\_  
 Project Name: Kuhlman Electric  
 Project Location: Crystal Springs, MS  
 Sampled By: (Print) Tim Fitzpatrick

Mail Report To: Tim Fitzpatrick  
 Company: OGDEN  
 Address: PO Box 3142  
Huntersville NC 28070

P.O. No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_

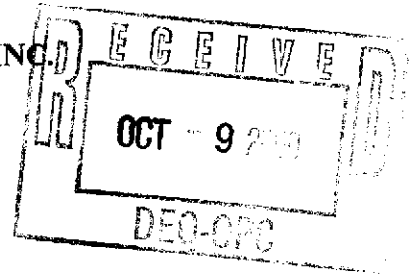
Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
DP 301 - 0.5'	8/16	09:12	S	1	NA	PCBS, CHLOR. BENZENES		
DP 302 - 4'		09:22						
DP 304 - 0.5'		10:46						
DP 305 - 0.5'		10:02						
DP 307 - 0.5'		11:12						
DP 30 - 0.5'		11:47						
DP 314 - 0.5'		12:17						
DP 315 - 0.5'		12:22						
DP 316 - 0.5'		15:05						
DP 319 - 0.5'		15:30						
DP 319 - 4'		15:32						
DP 324 - 0.5'		17:15						

Relinquished By: Tim Fitzpatrick Date/Time: 8/17/00 1530  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: John S. Sargent Date/Time: 8/18/00  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

\*Preservation Code  
 A=None B=HCL C=H2SO4  
 D=HNO3 E=EnCore F=Methanol  
 G NaOH O=Other(Indicate)  
 Custody Seal: Present/Absent  
 Intact/Not Intact Seal #'s  
 Shipped Via: Fed-Ex

WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER/SUBMITTER

PARADIGM ANALYTICAL LABORATORIES, INC.  
2627 Northchase Parkway S.E.  
Wilmington, North Carolina 28405  
(910) 350-1903  
Fax (910) 350-1557



September 19, 2000

Mr. Tim Fitzpatrick  
Ogden Environmental & Engineering  
P.O. Box 3142  
Huntersville NC 28070

**FILE COPY**

Report Number: G185-79

Dear Mr. Fitzpatrick,

Enclosed are the results of the analytical services performed under the referenced project. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call for assistance. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,

Paradigm Analytical Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Mark Randall", written over a horizontal line.

Laboratory Director  
Mark Randall

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs  
by EPA 8082**

Client Sample ID: DP 453-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93906  
 Lab Project ID: G185-79  
 Matrix: Soil

%SOLIDS: 94.1

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 8/30/00  
 Analyzed By: CLP  
 Dilution: 1

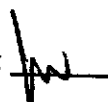
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	150	BQL
Arochlor-1221	150	BQL
Arochlor-1232	150	BQL
Arochlor-1242	150	BQL
Arochlor-1248	150	BQL
Arochlor-1254	150	BQL
Arochlor-1260	150	BQL
Arochlor-1262	150	190 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	97	97

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 456-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93907  
Lab Project ID: G185-79  
Matrix: Soil

%SOLIDS: 88.1

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	270	BQL
Arochlor-1221	270	BQL
Arochlor-1232	270	BQL
Arochlor-1242	270	BQL
Arochlor-1248	270	BQL
Arochlor-1254	270	BQL
Arochlor-1260	270	BQL
Arochlor-1262	270	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	73	73

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 449-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93908  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 90.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	330	BQL
Arochlor-1221	330	BQL
Arochlor-1232	330	BQL
Arochlor-1242	330	BQL
Arochlor-1248	330	BQL
Arochlor-1254	330	BQL
Arochlor-1260	330	BQL
Arochlor-1262	330	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	52	52

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 462-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93909  
Lab Project ID: G185-79  
Matrix: Soil

%SOLIDS: 95.1

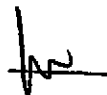
Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	100	100

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 432-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93910  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 10

%SOLIDS: 84.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	1800	BQL
Arochlor-1221	1800	BQL
Arochlor-1232	1800	BQL
Arochlor-1242	1800	BQL
Arochlor-1248	1800	BQL
Arochlor-1254	1800	BQL
Arochlor-1260	1800	BQL
Arochlor-1262	1800	2200 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 412-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93911  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 93.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	340 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	96	96

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 436-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93912  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	570 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	60	60

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 446-0.5  
Client Project ID: Kuhman  
Lab Sample ID: 93913  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 94.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	98	98

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 447-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93914  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 89.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	850 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	71	71

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 444-0.5  
Client Project ID: Kuhiman  
Lab Sample ID: 93915  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 91.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	100	100

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 441-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93916  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	650 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	105	105

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: HA-9-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93917  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	75	75

**Comments:**

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 453-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93906  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 94.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	490	BQL
Acenaphthylene	490	BQL
Anthracene	490	BQL
Benzo[a]anthracene	490	BQL
Benzo[a]pyrene	490	BQL
Benzo[b]fluoranthene	490	BQL
Benzo[g,h,i]perylene	490	BQL
Benzo[k]fluoranthene	490	BQL
Benzoic Acid	990	BQL
Bis(2-chloroethoxy)methane	490	BQL
Bis(2-chloroethyl)ether	490	BQL
Bis(2-chloroisopropyl)ether	490	BQL
Bis(2-ethylhexyl)phthalate	490	BQL
4-bromophenyl phenyl ether	490	BQL
Butylbenzylphthalate	490	BQL
4-Chloroaniline	490	BQL
4-Chloro-3-methylphenol	490	BQL
2-Chloronaphthalene	490	BQL
2-Chlorophenol	490	BQL
4-Chlorophenyl phenyl ether	490	BQL
Chrysene	490	BQL
Di-n-Butylphthalate	490	BQL
Di-n-octylphthalate	490	BQL
Dibenzo[a,h]anthracene	490	BQL
Dibenzofuran	490	BQL
1,2-Dichlorobenzene	490	BQL
1,3-Dichlorobenzene	490	BQL
1,4-Dichlorobenzene	490	BQL
3,3'-Dichlorobenzidine	990	BQL
2,4-Dichlorophenol	490	BQL
Diethylphthalate	490	BQL
2,4-Dimethylphenol	490	BQL
Dimethylphthalate	490	BQL
4,6-Dinitro-2-methylphenol	2500	BQL
2,4-Dinitrophenol	2500	BQL
2,4-Dinitrotoluene	490	BQL
2,6-Dinitrotoluene	490	BQL
Fluoranthene	490	BQL
Fluorene	490	BQL
Hexachlorobenzene	490	BQL
Hexachlorobutadiene	490	BQL
Hexachlorocyclopentadiene	990	BQL
Hexachloroethane	490	BQL
Indeno(1,2,3-c,d)pyrene	490	BQL
Isophorone	490	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 453-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93906  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 94.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	490	BQL
2-Methylphenol	490	BQL
3- & 4-Methylphenol	490	BQL
N-Nitrosodi-n-propylamine	490	BQL
N-Nitrosodiphenylamine	490	BQL
Naphthalene	490	BQL
2-Nitroaniline	490	BQL
3-Nitroaniline	490	BQL
4-Nitroaniline	490	BQL
Nitrobenzene	490	BQL
2-Nitrophenol	490	BQL
4-Nitrophenol	2500	BQL
Pentachlorobenzene	490	BQL
Pentachlorophenol	2500	BQL
Phenanthrene	490	BQL
Phenol	490	BQL
Pyrene	490	BQL
1,2,3,4-Tetrachlorobenzene	490	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	490	BQL
1,2,3-Trichlorobenzene	490	BQL
1,2,4-Trichlorobenzene	490	BQL
1,3,5-Trichlorobenzene	490	BQL
2,4,5-Trichlorophenol	490	BQL
2,4,6-Trichlorophenol	490	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11	110
2-Fluorophenol	10	8.4	84
Nitrobenzene-d5	10	10.6	106
Phenol-d6	10	9.4	94
2,4,6-Tribromophenol	10	8	80
4-Terphenyl-d14	10	11.4	114

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 453-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93906

Lab Project ID: G185-79

Matrix: Soil %SOLIDS 94.1

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			3500
2	Unknown			800
3	Unknown			700
4	Unknown			400
5	Unknown			200
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 456-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93907  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 88.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	530	BQL
Acenaphthylene	530	BQL
Anthracene	530	BQL
Benzo[a]anthracene	530	BQL
Benzo[a]pyrene	530	BQL
Benzo[b]fluoranthene	530	BQL
Benzo[g,h,i]perylene	530	BQL
Benzo[k]fluoranthene	530	BQL
Benzoic Acid	1100	BQL
Bis(2-chloroethoxy)methane	530	BQL
Bis(2-chloroethyl)ether	530	BQL
Bis(2-chloroisopropyl)ether	530	BQL
Bis(2-ethylhexyl)phthalate	530	BQL
4-bromophenyl phenyl ether	530	BQL
Butylbenzylphthalate	530	BQL
4-Chloroaniline	530	BQL
4-Chloro-3-methylphenol	530	BQL
2-Chloronaphthalene	530	BQL
2-Chlorophenol	530	BQL
4-Chlorophenyl phenyl ether	530	BQL
Chrysene	530	BQL
Di-n-Butylphthalate	530	BQL
Di-n-octylphthalate	530	BQL
Dibenzo[a,h]anthracene	530	BQL
Dibenzofuran	530	BQL
1,2-Dichlorobenzene	530	BQL
1,3-Dichlorobenzene	530	BQL
1,4-Dichlorobenzene	530	BQL
3,3'-Dichlorobenzidine	1100	BQL
2,4-Dichlorophenol	530	BQL
Diethylphthalate	530	BQL
2,4-Dimethylphenol	530	BQL
Dimethylphthalate	530	BQL
4,6-Dinitro-2-methylphenol	2700	BQL
2,4-Dinitrophenol	2700	BQL
2,4-Dinitrotoluene	530	BQL
2,6-Dinitrotoluene	530	BQL
Fluoranthene	530	BQL
Fluorene	530	BQL
Hexachlorobenzene	530	BQL
Hexachlorobutadiene	530	BQL
Hexachlorocyclopentadiene	1100	BQL
Hexachloroethane	530	BQL
Indeno(1,2,3-c,d)pyrene	530	BQL
Isophorone	530	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 456-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93907  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 88.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	530	BQL
2-Methylphenol	530	BQL
3- & 4-Methylphenol	530	BQL
N-Nitrosodi-n-propylamine	530	BQL
N-Nitrosodiphenylamine	530	BQL
Naphthalene	530	BQL
2-Nitroaniline	530	BQL
3-Nitroaniline	530	BQL
4-Nitroaniline	530	BQL
Nitrobenzene	530	BQL
2-Nitrophenol	530	BQL
4-Nitrophenol	2700	BQL
Pentachlorobenzene	530	BQL
Pentachlorophenol	2700	BQL
Phenanthrene	530	BQL
Phenol	530	BQL
Pyrene	530	BQL
1,2,3,4-Tetrachlorobenzene	530	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	530	BQL
1,2,3-Trichlorobenzene	530	BQL
1,2,4-Trichlorobenzene	530	BQL
1,3,5-Trichlorobenzene	530	BQL
2,4,5-Trichlorophenol	530	BQL
2,4,6-Trichlorophenol	530	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	9.8	98
Nitrobenzene-d5	10	10.1	101
Phenol-d6	10	10.1	101
2,4,6-Tribromophenol	10	10	100
4-Terphenyl-d14	10	11	110

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.  
Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 456-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93907

Lab Project ID: G185-79

Matrix: Soil      %SOLIDS      88.1

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			1600
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 449-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93908

Lab Project ID: G185-79

Matrix: Soil

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

%Solids: 90.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	500	BQL
Acenaphthylene	500	BQL
Anthracene	500	BQL
Benzo[a]anthracene	500	BQL
Benzo[a]pyrene	500	BQL
Benzo[b]fluoranthene	500	BQL
Benzo[g,h,i]perylene	500	BQL
Benzo[k]fluoranthene	500	BQL
Benzoic Acid	1000	BQL
Bis(2-chloroethoxy)methane	500	BQL
Bis(2-chloroethyl)ether	500	BQL
Bis(2-chloroisopropyl)ether	500	BQL
Bis(2-ethylhexyl)phthalate	500	BQL
4-bromophenyl phenyl ether	500	BQL
Butylbenzylphthalate	500	BQL
4-Chloroaniline	500	BQL
4-Chloro-3-methylphenol	500	BQL
2-Chloronaphthalene	500	BQL
2-Chlorophenol	500	BQL
4-Chlorophenyl phenyl ether	500	BQL
Chrysene	500	BQL
Di-n-Butylphthalate	500	BQL
Di-n-octylphthalate	500	BQL
Dibenzo[a,h]anthracene	500	BQL
Dibenzofuran	500	BQL
1,2-Dichlorobenzene	500	BQL
1,3-Dichlorobenzene	500	BQL
1,4-Dichlorobenzene	500	BQL
3,3'-Dichlorobenzidine	1000	BQL
2,4-Dichlorophenol	500	BQL
Diethylphthalate	500	BQL
2,4-Dimethylphenol	500	BQL
Dimethylphthalate	500	BQL
4,6-Dinitro-2-methylphenol	2500	BQL
2,4-Dinitrophenol	2500	BQL
2,4-Dinitrotoluene	500	BQL
2,6-Dinitrotoluene	500	BQL
Fluoranthene	500	BQL
Fluorene	500	BQL
Hexachlorobenzene	500	BQL
Hexachlorobutadiene	500	BQL
Hexachlorocyclopentadiene	1000	BQL
Hexachloroethane	500	BQL
Indeno(1,2,3-c,d)pyrene	500	BQL
Isophorone	500	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 449-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93908  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 90.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	500	BQL
2-Methylphenol	500	BQL
3- & 4-Methylphenol	500	BQL
N-Nitrosodi-n-propylamine	500	BQL
N-Nitrosodiphenylamine	500	BQL
Naphthalene	500	BQL
2-Nitroaniline	500	BQL
3-Nitroaniline	500	BQL
4-Nitroaniline	500	BQL
Nitrobenzene	500	BQL
2-Nitrophenol	500	BQL
4-Nitrophenol	2500	BQL
Pentachlorobenzene	500	BQL
Pentachlorophenol	2500	BQL
Phenanthrene	500	BQL
Phenol	500	BQL
Pyrene	500	BQL
1,2,3,4-Tetrachlorobenzene	500	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	500	BQL
1,2,3-Trichlorobenzene	500	BQL
1,2,4-Trichlorobenzene	500	BQL
1,3,5-Trichlorobenzene	500	BQL
2,4,5-Trichlorophenol	500	BQL
2,4,6-Trichlorophenol	500	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.2	102
2-Fluorophenol	10	7.8	78
Nitrobenzene-d5	10	9.7	97
Phenol-d6	10	9.1	91
2,4,6-Tribromophenol	10	7.7	77
4-Terphenyl-d14	10	10.9	109

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 449-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93908

Lab Project ID: G185-79

Matrix: Soil

%SOLIDS 90.2

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	4,4'-DDT	000050-29-3	91	6400
2	4,4'-DDD	000053-19-0	90	3600
3	Aromatic, Unknown			2700
4	Unknown			660
5	Unknown			480
6	Chlordane, Isomer of			300
7	Chlordane, Isomer of			300
8	Unknown			250
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 462-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93909  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 95.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	450	BQL
Acenaphthylene	450	BQL
Anthracene	450	BQL
Benzo[a]anthracene	450	BQL
Benzo[a]pyrene	450	BQL
Benzo[b]fluoranthene	450	BQL
Benzo[g,h,i]perylene	450	BQL
Benzo[k]fluoranthene	450	BQL
Benzoic Acid	900	BQL
Bis(2-chloroethoxy)methane	450	BQL
Bis(2-chloroethyl)ether	450	BQL
Bis(2-chloroisopropyl)ether	450	BQL
Bis(2-ethylhexyl)phthalate	450	BQL
4-bromophenyl phenyl ether	450	BQL
Butylbenzylphthalate	450	BQL
4-Chloroaniline	450	BQL
4-Chloro-3-methylphenol	450	BQL
2-Chloronaphthalene	450	BQL
2-Chlorophenol	450	BQL
4-Chlorophenyl phenyl ether	450	BQL
Chrysene	450	BQL
Di-n-Butylphthalate	450	BQL
Di-n-octylphthalate	450	BQL
Dibenzo[a,h]anthracene	450	BQL
Dibenzofuran	450	BQL
1,2-Dichlorobenzene	450	BQL
1,3-Dichlorobenzene	450	BQL
1,4-Dichlorobenzene	450	BQL
3,3'-Dichlorobenzidine	900	BQL
2,4-Dichlorophenol	450	BQL
Diethylphthalate	450	BQL
2,4-Dimethylphenol	450	BQL
Dimethylphthalate	450	BQL
4,6-Dinitro-2-methylphenol	2300	BQL
2,4-Dinitrophenol	2300	BQL
2,4-Dinitrotoluene	450	BQL
2,6-Dinitrotoluene	450	BQL
Fluoranthene	450	BQL
Fluorene	450	BQL
Hexachlorobenzene	450	BQL
Hexachlorobutadiene	450	BQL
Hexachlorocyclopentadiene	900	BQL
Hexachloroethane	450	BQL
Indeno(1,2,3-c,d)pyrene	450	BQL
Isophorone	450	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 462-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93909  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 95.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	450	BQL
2-Methylphenol	450	BQL
3- & 4-Methylphenol	450	BQL
N-Nitrosodi-n-propylamine	450	BQL
N-Nitrosodiphenylamine	450	BQL
Naphthalene	450	BQL
2-Nitroaniline	450	BQL
3-Nitroaniline	450	BQL
4-Nitroaniline	450	BQL
Nitrobenzene	450	BQL
2-Nitrophenol	450	BQL
4-Nitrophenol	2300	BQL
Pentachlorobenzene	450	BQL
Pentachlorophenol	2300	BQL
Phenanthrene	450	BQL
Phenol	450	BQL
Pyrene	450	BQL
1,2,3,4-Tetrachlorobenzene	450	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	450	BQL
1,2,3-Trichlorobenzene	450	BQL
1,2,4-Trichlorobenzene	450	BQL
1,3,5-Trichlorobenzene	450	BQL
2,4,5-Trichlorophenol	450	BQL
2,4,6-Trichlorophenol	450	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.9	109
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	10.1	101
Phenol-d6	10	9.7	97
2,4,6-Tribromophenol	10	7	70
4-Terphenyl-d14	10	11.8	118

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 432-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93910  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 84.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	390	BQL
Acenaphthylene	390	BQL
Anthracene	390	BQL
Benzo[a]anthracene	390	1200
Benzo[a]pyrene	390	1200
Benzo[b]fluoranthene	390	1200
Benzo[g,h,i]perylene	390	430
Benzo[k]fluoranthene	390	990
Benzoic Acid	790	BQL
Bis(2-chloroethoxy)methane	390	BQL
Bis(2-chloroethyl)ether	390	BQL
Bis(2-chloroisopropyl)ether	390	BQL
Bis(2-ethylhexyl)phthalate	390	BQL
4-bromophenyl phenyl ether	390	BQL
Butylbenzylphthalate	390	BQL
4-Chloroaniline	390	BQL
4-Chloro-3-methylphenol	390	BQL
2-Chloronaphthalene	390	BQL
2-Chlorophenol	390	BQL
4-Chlorophenyl phenyl ether	390	BQL
Chrysene	390	1100
Di-n-Butylphthalate	390	BQL
Di-n-octylphthalate	390	BQL
Dibenzo[a,h]anthracene	390	BQL
Dibenzofuran	390	BQL
1,2-Dichlorobenzene	390	BQL
1,3-Dichlorobenzene	390	BQL
1,4-Dichlorobenzene	390	BQL
3,3'-Dichlorobenzidine	790	BQL
2,4-Dichlorophenol	390	BQL
Diethylphthalate	390	BQL
2,4-Dimethylphenol	390	BQL
Dimethylphthalate	390	BQL
4,6-Dinitro-2-methylphenol	2000	BQL
2,4-Dinitrophenol	2000	BQL
2,4-Dinitrotoluene	390	BQL
2,6-Dinitrotoluene	390	BQL
Fluoranthene	390	2800
Fluorene	390	BQL
Hexachlorobenzene	390	BQL
Hexachlorobutadiene	390	BQL
Hexachlorocyclopentadiene	790	BQL
Hexachloroethane	390	BQL
Indeno(1,2,3-c,d)pyrene	390	530
Isophorone	390	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 462-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93909

Lab Project ID: G185-79

Matrix: Soil      %SOLIDS      95.1

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

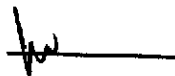
Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			2000
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 432-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93910

Lab Project ID: G185-79

Matrix: Soil

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

%Solids: 84.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	390	BQL
2-Methylphenol	390	BQL
3- & 4-Methylphenol	390	BQL
N-Nitrosodi-n-propylamine	390	BQL
N-Nitrosodiphenylamine	390	BQL
Naphthalene	390	BQL
2-Nitroaniline	390	BQL
3-Nitroaniline	390	BQL
4-Nitroaniline	390	BQL
Nitrobenzene	390	BQL
2-Nitrophenol	390	BQL
4-Nitrophenol	2000	BQL
Pentachlorobenzene	390	BQL
Pentachlorophenol	2000	BQL
Phenanthrene	390	BQL
Phenol	390	1300
Pyrene	390	BQL
1,2,3,4-Tetrachlorobenzene	390	1900
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	390	BQL
1,2,3-Trichlorobenzene	390	BQL
1,2,4-Trichlorobenzene	390	BQL
1,3,5-Trichlorobenzene	390	BQL
2,4,5-Trichlorophenol	390	BQL
2,4,6-Trichlorophenol	390	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	96
2-Fluorophenol	10	0.58	5.8
Nitrobenzene-d5	10	8.9	89
Phenol-d6	10	2.6	26
2,4,6-Tribromophenol	10	3.5	35
4-Terphenyl-d14	10	9.1	91

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 432-0.5

Date Collected: 8/22/00

Client Project ID: Kuhlman

Date Received: 8/23/00

Lab Sample ID: 93910

Date Analyzed: 8/31/00

Lab Project ID: G185-79

Analyzed By: MRC

Matrix: Soil      %SOLIDS      84.4

Dilution: 1

Num.	Compound	CAS#	Match Probablility	Result (ug/KG)
1	Aromatic, Unknown			950
2	Unknown			540
3	Unknown			420
4	Unknown			390
5	Unknown			380
6	Alkane, Unknown			370
7	Unknown			360
8	Unknown			330
9	Unknown			320
10	Unknown			320

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 412-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93911  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 93.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	500	BQL
Acenaphthylene	500	BQL
Anthracene	500	BQL
Benzo[a]anthracene	500	BQL
Benzo[a]pyrene	500	BQL
Benzo[b]fluoranthene	500	BQL
Benzo[g,h,i]perylene	500	BQL
Benzo[k]fluoranthene	500	BQL
Benzoic Acid	1000	BQL
Bis(2-chloroethoxy)methane	500	BQL
Bis(2-chloroethyl)ether	500	BQL
Bis(2-chloroisopropyl)ether	500	BQL
Bis(2-ethylhexyl)phthalate	500	BQL
4-bromophenyl phenyl ether	500	BQL
Butylbenzylphthalate	500	BQL
4-Chloroaniline	500	BQL
4-Chloro-3-methylphenol	500	BQL
2-Chloronaphthalene	500	BQL
2-Chlorophenol	500	BQL
4-Chlorophenyl phenyl ether	500	BQL
Chrysene	500	BQL
Di-n-Butylphthalate	500	BQL
Di-n-octylphthalate	500	BQL
Dibenzo[a,h]anthracene	500	BQL
Dibenzofuran	500	BQL
1,2-Dichlorobenzene	500	BQL
1,3-Dichlorobenzene	500	BQL
1,4-Dichlorobenzene	500	BQL
3,3'-Dichlorobenzidine	1000	BQL
2,4-Dichlorophenol	500	BQL
Diethylphthalate	500	BQL
2,4-Dimethylphenol	500	BQL
Dimethylphthalate	500	BQL
4,6-Dinitro-2-methylphenol	2500	BQL
2,4-Dinitrophenol	2500	BQL
2,4-Dinitrotoluene	500	BQL
2,6-Dinitrotoluene	500	BQL
Fluoranthene	500	BQL
Fluorene	500	530
Hexachlorobenzene	500	BQL
Hexachlorobutadiene	500	BQL
Hexachlorocyclopentadiene	1000	BQL
Hexachloroethane	500	BQL
Indeno(1,2,3-c,d)pyrene	500	BQL
Isophorone	500	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 412-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93911

Lab Project ID: G185-79

Matrix: Soil

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

%Solids: 93.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	500	BQL
2-Methylphenol	500	BQL
3- & 4-Methylphenol	500	BQL
N-Nitrosodi-n-propylamine	500	BQL
N-Nitrosodiphenylamine	500	BQL
Naphthalene	500	BQL
2-Nitroaniline	500	BQL
3-Nitroaniline	500	BQL
4-Nitroaniline	500	BQL
Nitrobenzene	500	BQL
2-Nitrophenol	500	BQL
4-Nitrophenol	2500	BQL
Pentachlorobenzene	500	BQL
Pentachlorophenol	2500	BQL
Phenanthrene	500	BQL
Phenol	500	BQL
Pyrene	500	BQL
1,2,3,4-Tetrachlorobenzene	500	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	500	BQL
1,2,3-Trichlorobenzene	500	BQL
1,2,4-Trichlorobenzene	500	BQL
1,3,5-Trichlorobenzene	500	BQL
2,4,5-Trichlorophenol	500	BQL
2,4,6-Trichlorophenol	500	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
2-Fluorophenol	10	2	20
Nitrobenzene-d5	10	8.1	81
Phenol-d6	10	3.7	37
2,4,6-Tribromophenol	10	5.4	54
4-Terphenyl-d14	10	10.4	105

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 412-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93911

Lab Project ID: G185-79

Matrix: Soil

%SOLIDS 93.9

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			600
2	Unknown			350
3	Unknown			350
4	Unknown			310
5	Unknown			300
6	Unknown			280
7	Unknown			250
8	Unknown			220
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 436-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93912

Lab Project ID: G185-79

Matrix: Soil

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

%Solids: 92.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	490	BQL
Acenaphthylene	490	BQL
Anthracene	490	BQL
Benzo[a]anthracene	490	BQL
Benzo[a]pyrene	490	BQL
Benzo[b]fluoranthene	490	BQL
Benzo[g,h,i]perylene	490	BQL
Benzo[k]fluoranthene	490	BQL
Benzoic Acid	990	BQL
Bis(2-chloroethoxy)methane	490	BQL
Bis(2-chloroethyl)ether	490	BQL
Bis(2-chloroisopropyl)ether	490	BQL
Bis(2-ethylhexyl)phthalate	490	BQL
4-bromophenyl phenyl ether	490	BQL
Butylbenzylphthalate	490	BQL
4-Chloroaniline	490	BQL
4-Chloro-3-methylphenol	490	BQL
2-Chloronaphthalene	490	BQL
2-Chlorophenol	490	BQL
4-Chlorophenyl phenyl ether	490	BQL
Chrysene	490	BQL
Di-n-Butylphthalate	490	BQL
Di-n-octylphthalate	490	BQL
Dibenzo[a,h]anthracene	490	BQL
Dibenzofuran	490	BQL
1,2-Dichlorobenzene	490	BQL
1,3-Dichlorobenzene	490	BQL
1,4-Dichlorobenzene	490	BQL
3,3'-Dichlorobenzidine	990	BQL
2,4-Dichlorophenol	490	BQL
Diethylphthalate	490	BQL
2,4-Dimethylphenol	490	BQL
Dimethylphthalate	490	BQL
4,6-Dinitro-2-methylphenol	2500	BQL
2,4-Dinitrophenol	2500	BQL
2,4-Dinitrotoluene	490	BQL
2,6-Dinitrotoluene	490	BQL
Fluoranthene	490	BQL
Fluorene	490	1000
Hexachlorobenzene	490	BQL
Hexachlorobutadiene	490	BQL
Hexachlorocyclopentadiene	990	BQL
Hexachloroethane	490	BQL
Indeno(1,2,3-c,d)pyrene	490	BQL
Isophorone	490	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 436-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93912  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 92.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	490	BQL
2-Methylphenol	490	BQL
3- & 4-Methylphenol	490	BQL
N-Nitrosodi-n-propylamine	490	BQL
N-Nitrosodiphenylamine	490	BQL
Naphthalene	490	BQL
2-Nitroaniline	490	BQL
3-Nitroaniline	490	BQL
4-Nitroaniline	490	BQL
Nitrobenzene	490	BQL
2-Nitrophenol	490	BQL
4-Nitrophenol	2500	BQL
Pentachlorobenzene	490	BQL
Pentachlorophenol	2500	BQL
Phenanthrene	490	BQL
Phenol	490	BQL
Pyrene	490	670
1,2,3,4-Tetrachlorobenzene	490	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	490	BQL
1,2,3-Trichlorobenzene	490	BQL
1,2,4-Trichlorobenzene	490	BQL
1,3,5-Trichlorobenzene	490	BQL
2,4,5-Trichlorophenol	490	BQL
2,4,6-Trichlorophenol	490	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.5	105
2-Fluorophenol	10	0.43	4.3
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	1.2	12
2,4,6-Tribromophenol	10	2.8	28
4-Terphenyl-d14	10	10.9	109

Comments:

Results are corrected for %solids and dilution where applicable.  
Sample was reanalyzed due to low surrogate recoveries.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 436-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93912

Lab Project ID: G185-79

Matrix: Soil      %SOLIDS      92.7

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1500
2	Alkane, Unknown			1100
3	Unknown			950
4	Unknown			780
5	Unknown			710
6	Unknown			620
7	Aromatic, Unknown			420
8	Aromatic, Unknown			330
9	Unknown			310
10	Unknown			280

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Sample was re-extracted due to low surrogate recoveries.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 436-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93912 (REX)  
Lab Project ID: G185-79  
Matrix: Soil

%Solids: 92.7

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 9/8/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	410	BQL
Acenaphthylene	410	BQL
Anthracene	410	BQL
Benzo[a]anthracene	410	510
Benzo[a]pyrene	410	580
Benzo[b]fluoranthene	410	670
Benzo[g,h,i]perylene	410	BQL
Benzo[k]fluoranthene	410	440
Benzoic Acid	820	BQL
Bis(2-chloroethoxy)methane	410	BQL
Bis(2-chloroethyl)ether	410	BQL
Bis(2-chloroisopropyl)ether	410	BQL
Bis(2-ethylhexyl)phthalate	410	BQL
4-bromophenyl phenyl ether	410	BQL
Butylbenzylphthalate	410	BQL
4-Chloroaniline	410	BQL
4-Chloro-3-methylphenol	410	BQL
2-Chloronaphthalene	410	BQL
2-Chlorophenol	410	BQL
4-Chlorophenyl phenyl ether	410	BQL
Chrysene	410	560
Di-n-Butylphthalate	410	BQL
Di-n-octylphthalate	410	BQL
Dibenzo[a,h]anthracene	410	BQL
Dibenzofuran	410	BQL
1,2-Dichlorobenzene	410	BQL
1,3-Dichlorobenzene	410	BQL
1,4-Dichlorobenzene	410	BQL
3,3'-Dichlorobenzidine	820	BQL
2,4-Dichlorophenol	410	BQL
Diethylphthalate	410	BQL
2,4-Dimethylphenol	410	BQL
Dimethylphthalate	410	BQL
4,6-Dinitro-2-methylphenol	2000	BQL
2,4-Dinitrophenol	2000	BQL
2,4-Dinitrotoluene	410	BQL
2,6-Dinitrotoluene	410	BQL
Fluoranthene	410	BQL
Fluorene	410	1200
Hexachlorobenzene	410	BQL
Hexachlorobutadiene	410	BQL
Hexachlorocyclopentadiene	820	BQL
Hexachloroethane	410	BQL
Indeno(1,2,3-c,d)pyrene	410	BQL
Isophorone	410	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 436-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93912 (REX)  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	410	BQL
2-Methylphenol	410	BQL
3- & 4-Methylphenol	410	BQL
N-Nitrosodi-n-propylamine	410	BQL
N-Nitrosodiphenylamine	410	BQL
Naphthalene	410	BQL
2-Nitroaniline	410	BQL
3-Nitroaniline	410	BQL
4-Nitroaniline	410	BQL
Nitrobenzene	410	BQL
2-Nitrophenol	410	BQL
4-Nitrophenol	2000	BQL
Pentachlorobenzene	410	BQL
Pentachlorophenol	2000	BQL
Phenanthrene	410	BQL
Phenol	410	640
Pyrene	410	BQL
1,2,3,4-Tetrachlorobenzene	410	990
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	410	BQL
1,2,3-Trichlorobenzene	410	BQL
1,2,4-Trichlorobenzene	410	BQL
1,3,5-Trichlorobenzene	410	BQL
2,4,5-Trichlorophenol	410	BQL
2,4,6-Trichlorophenol	410	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.1	111
2-Fluorophenol	10	8.3	83
Nitrobenzene-d5	10	10.8	108
Phenol-d6	10	9.8	98
2,4,6-Tribromophenol	10	9.4	94
4-Terphenyl-d14	10	12.8	128

**Comments:**

Results are corrected for %solids and dilution where applicable.  
 Sample was reextracted outside of the method specified holding time limits.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 436-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93912 (REX)

Lab Project ID: G185-79

Matrix: Soil

%SOLIDS

92.7

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			670
2	Alkane, Unknown			430
3	Aromatic, Unknown			400
4	Unknown			340
5	Unknown			260
6	Unknown			260
7	Unknown			200
8	Unknown			200
9	Unknown			180
10	Unknown			160

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Sample was re-extracted outside the method specified holding time limit.

Reviewed by: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 446-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93913  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 94.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	490	BQL
Acenaphthylene	490	BQL
Anthracene	490	BQL
Benzo[a]anthracene	490	BQL
Benzo[a]pyrene	490	BQL
Benzo[b]fluoranthene	490	BQL
Benzo[g,h,i]perylene	490	BQL
Benzo[k]fluoranthene	490	BQL
Benzoic Acid	970	BQL
Bis(2-chloroethoxy)methane	490	BQL
Bis(2-chloroethyl)ether	490	BQL
Bis(2-chloroisopropyl)ether	490	BQL
Bis(2-ethylhexyl)phthalate	490	BQL
4-bromophenyl phenyl ether	490	BQL
Butylbenzylphthalate	490	BQL
4-Chloroaniline	490	BQL
4-Chloro-3-methylphenol	490	BQL
2-Chloronaphthalene	490	BQL
2-Chlorophenol	490	BQL
4-Chlorophenyl phenyl ether	490	BQL
Chrysene	490	BQL
Di-n-Butylphthalate	490	BQL
Di-n-octylphthalate	490	BQL
Dibenzo[a,h]anthracene	490	BQL
Dibenzofuran	490	BQL
1,2-Dichlorobenzene	490	BQL
1,3-Dichlorobenzene	490	BQL
1,4-Dichlorobenzene	490	BQL
3,3'-Dichlorobenzidine	970	BQL
2,4-Dichlorophenol	490	BQL
Diethylphthalate	490	BQL
2,4-Dimethylphenol	490	BQL
Dimethylphthalate	490	BQL
4,6-Dinitro-2-methylphenol	2400	BQL
2,4-Dinitrophenol	2400	BQL
2,4-Dinitrotoluene	490	BQL
2,6-Dinitrotoluene	490	BQL
Fluoranthene	490	BQL
Fluorene	490	BQL
Hexachlorobenzene	490	BQL
Hexachlorobutadiene	490	BQL
Hexachlorocyclopentadiene	970	BQL
Hexachloroethane	490	BQL
Indeno(1,2,3-c,d)pyrene	490	BQL
Isophorone	490	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 446-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93913

Lab Project ID: G185-79

Matrix: Soil

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

%Solids: 94.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	490	BQL
2-Methylphenol	490	BQL
3- & 4-Methylphenol	490	BQL
N-Nitrosodi-n-propylamine	490	BQL
N-Nitrosodiphenylamine	490	BQL
Naphthalene	490	BQL
2-Nitroaniline	490	BQL
3-Nitroaniline	490	BQL
4-Nitroaniline	490	BQL
Nitrobenzene	490	BQL
2-Nitrophenol	490	BQL
4-Nitrophenol	2400	BQL
Pentachlorobenzene	490	BQL
Pentachlorophenol	2400	BQL
Phenanthrene	490	BQL
Phenol	490	BQL
Pyrene	490	BQL
1,2,3,4-Tetrachlorobenzene	490	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	490	BQL
1,2,3-Trichlorobenzene	490	BQL
1,2,4-Trichlorobenzene	490	BQL
1,3,5-Trichlorobenzene	490	BQL
2,4,5-Trichlorophenol	490	BQL
2,4,6-Trichlorophenol	490	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	105
2-Fluorophenol	10	1.4	14
Nitrobenzene-d5	10	8.8	88
Phenol-d6	10	4.5	45
2,4,6-Tribromophenol	10	3.1	31
4-Terphenyl-d14	10	10.5	105

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 446-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93913

Lab Project ID: G185-79

Matrix: Soil      %SOLIDS      94.5

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			480
2	Unknown			470
3	Unknown			370
4	Unknown			300
5	Unknown			260
6	Unknown			240
7	Unknown			240
8	Unknown			210
9				
10				

**Comment:**

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Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 447-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93914  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 89.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	550	BQL
Acenaphthylene	550	BQL
Anthracene	550	BQL
Benzo[a]anthracene	550	BQL
Benzo[a]pyrene	550	BQL
Benzo[b]fluoranthene	550	590
Benzo[g,h,i]perylene	550	BQL
Benzo[k]fluoranthene	550	BQL
Benzoic Acid	1100	BQL
Bis(2-chloroethoxy)methane	550	BQL
Bis(2-chloroethyl)ether	550	BQL
Bis(2-chloroisopropyl)ether	550	BQL
Bis(2-ethylhexyl)phthalate	550	BQL
4-bromophenyl phenyl ether	550	BQL
Butylbenzylphthalate	550	BQL
4-Chloroaniline	550	BQL
4-Chloro-3-methylphenol	550	BQL
2-Chloronaphthalene	550	BQL
2-Chlorophenol	550	BQL
4-Chlorophenyl phenyl ether	550	BQL
Chrysene	550	BQL
Di-n-Butylphthalate	550	BQL
Di-n-octylphthalate	550	BQL
Dibenzo[a,h]anthracene	550	BQL
Dibenzofuran	550	BQL
1,2-Dichlorobenzene	550	BQL
1,3-Dichlorobenzene	550	BQL
1,4-Dichlorobenzene	550	BQL
3,3'-Dichlorobenzidine	1100	BQL
2,4-Dichlorophenol	550	BQL
Diethylphthalate	550	BQL
2,4-Dimethylphenol	550	BQL
Dimethylphthalate	550	BQL
4,6-Dinitro-2-methylphenol	2800	BQL
2,4-Dinitrophenol	2800	BQL
2,4-Dinitrotoluene	550	BQL
2,6-Dinitrotoluene	550	BQL
Fluoranthene	550	960
Fluorene	550	BQL
Hexachlorobenzene	550	BQL
Hexachlorobutadiene	550	BQL
Hexachlorocyclopentadiene	1100	BQL
Hexachloroethane	550	BQL
Indeno(1,2,3-c,d)pyrene	550	BQL
Isophorone	550	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 447-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93914  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 89.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	550	690
2-Methylphenol	550	BQL
3- & 4-Methylphenol	550	BQL
N-Nitrosodi-n-propylamine	550	BQL
N-Nitrosodiphenylamine	550	BQL
Naphthalene	550	BQL
2-Nitroaniline	550	BQL
3-Nitroaniline	550	BQL
4-Nitroaniline	550	BQL
Nitrobenzene	550	BQL
2-Nitrophenol	550	BQL
4-Nitrophenol	2800	BQL
Pentachlorobenzene	550	BQL
Pentachlorophenol	2800	BQL
Phenanthrene	550	680
Phenol	550	BQL
Pyrene	550	720
1,2,3,4-Tetrachlorobenzene	550	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	550	BQL
1,2,3-Trichlorobenzene	550	BQL
1,2,4-Trichlorobenzene	550	BQL
1,3,5-Trichlorobenzene	550	BQL
2,4,5-Trichlorophenol	550	BQL
2,4,6-Trichlorophenol	550	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	3	30
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	5.9	59
2,4,6-Tribromophenol	10	6.1	61
4-Terphenyl-d14	10	10.8	108

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 447-0.5

Client Project ID: Kuhiman

Lab Sample ID: 93914

Lab Project ID: G185-79

Matrix: Soil      %SOLIDS      89.2

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1000000
2	Alkane, Unknown			660000
3	Alkane, Unknown			660000
4	Alkane, Unknown			550000
5	Unknown			500000
6	Alkane, Unknown			420000
7	Alkane, Unknown			380000
8	Alkane, Unknown			360000
9	Alkane, Unknown			360000
10	Unknown			340000

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 444-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93915  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 91.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	540	BQL
Acenaphthylene	540	BQL
Anthracene	540	BQL
Benzo[a]anthracene	540	BQL
Benzo[a]pyrene	540	BQL
Benzo[b]fluoranthene	540	BQL
Benzo[g,h,i]perylene	540	BQL
Benzo[k]fluoranthene	540	BQL
Benzoic Acid	1100	BQL
Bis(2-chloroethoxy)methane	540	BQL
Bis(2-chloroethyl)ether	540	BQL
Bis(2-chloroisopropyl)ether	540	BQL
Bis(2-ethylhexyl)phthalate	540	BQL
4-bromophenyl phenyl ether	540	BQL
Butylbenzylphthalate	540	BQL
4-Chloroaniline	540	BQL
4-Chloro-3-methylphenol	540	BQL
2-Chloronaphthalene	540	BQL
2-Chlorophenol	540	BQL
4-Chlorophenyl phenyl ether	540	BQL
Chrysene	540	BQL
Di-n-Butylphthalate	540	BQL
Di-n-octylphthalate	540	BQL
Dibenzo[a,h]anthracene	540	BQL
Dibenzofuran	540	BQL
1,2-Dichlorobenzene	540	BQL
1,3-Dichlorobenzene	540	BQL
1,4-Dichlorobenzene	540	BQL
3,3'-Dichlorobenzidine	1100	BQL
2,4-Dichlorophenol	540	BQL
Diethylphthalate	540	BQL
2,4-Dimethylphenol	540	BQL
Dimethylphthalate	540	BQL
4,6-Dinitro-2-methylphenol	2700	BQL
2,4-Dinitrophenol	2700	BQL
2,4-Dinitrotoluene	540	BQL
2,6-Dinitrotoluene	540	BQL
Fluoranthene	540	BQL
Fluorene	540	BQL
Hexachlorobenzene	540	BQL
Hexachlorobutadiene	540	BQL
Hexachlorocyclopentadiene	1100	BQL
Hexachloroethane	540	BQL
Indeno(1,2,3-c,d)pyrene	540	BQL
Isophorone	540	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 444-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93915  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 91.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	540	BQL
2-Methylphenol	540	BQL
3- & 4-Methylphenol	540	BQL
N-Nitrosodi-n-propylamine	540	BQL
N-Nitrosodiphenylamine	540	BQL
Naphthalene	540	BQL
2-Nitroaniline	540	BQL
3-Nitroaniline	540	BQL
4-Nitroaniline	540	BQL
Nitrobenzene	540	BQL
2-Nitrophenol	540	BQL
4-Nitrophenol	2700	BQL
Pentachlorobenzene	540	BQL
Pentachlorophenol	2700	BQL
Phenanthrene	540	BQL
Phenol	540	BQL
Pyrene	540	BQL
1,2,3,4-Tetrachlorobenzene	540	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	540	BQL
1,2,3-Trichlorobenzene	540	BQL
1,2,4-Trichlorobenzene	540	BQL
1,3,5-Trichlorobenzene	540	BQL
2,4,5-Trichlorophenol	540	BQL
2,4,6-Trichlorophenol	540	BQL

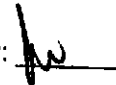
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	0.49	4.9
Nitrobenzene-d5	10	8.6	86
Phenol-d6	10	2.1	21
2,4,6-Tribromophenol	10	2.3	23
4-Terphenyl-d14	10	10.5	105

**Comments:**

Results are corrected for %solids and dilution where applicable.  
 Sample was reanalyzed due to low surrogate recoveries.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.  
Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 444-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93915

Lab Project ID: G185-79

Matrix: Soil

%SOLIDS

91.7

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			280
2	Unknown			260
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Sample was re-extracted due to low surrogate recoveries.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 444-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93915 (REX)

Lab Project ID: G185-79

Matrix: Soil

%Solids: 91.7

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	450	BQL
Acenaphthylene	450	BQL
Anthracene	450	BQL
Benzo[a]anthracene	450	BQL
Benzo[a]pyrene	450	BQL
Benzo[b]fluoranthene	450	BQL
Benzo[g,h,i]perylene	450	BQL
Benzo[k]fluoranthene	450	BQL
Benzoic Acid	900	BQL
Bis(2-chloroethoxy)methane	450	BQL
Bis(2-chloroethyl)ether	450	BQL
Bis(2-chloroisopropyl)ether	450	BQL
Bis(2-ethylhexyl)phthalate	450	520
4-bromophenyl phenyl ether	450	BQL
Butylbenzylphthalate	450	BQL
4-Chloroaniline	450	BQL
4-Chloro-3-methylphenol	450	BQL
2-Chloronaphthalene	450	BQL
2-Chlorophenol	450	BQL
4-Chlorophenyl phenyl ether	450	BQL
Chrysene	450	BQL
Di-n-Butylphthalate	450	BQL
Di-n-octylphthalate	450	BQL
Dibenzo[a,h]anthracene	450	BQL
Dibenzofuran	450	BQL
1,2-Dichlorobenzene	450	BQL
1,3-Dichlorobenzene	450	BQL
1,4-Dichlorobenzene	450	BQL
3,3'-Dichlorobenzidine	900	BQL
2,4-Dichlorophenol	450	BQL
Diethylphthalate	450	BQL
2,4-Dimethylphenol	450	BQL
Dimethylphthalate	450	BQL
4,6-Dinitro-2-methylphenol	2300	BQL
2,4-Dinitrophenol	2300	BQL
2,4-Dinitrotoluene	450	BQL
2,6-Dinitrotoluene	450	BQL
Fluoranthene	450	BQL
Fluorene	450	BQL
Hexachlorobenzene	450	BQL
Hexachlorobutadiene	450	BQL
Hexachlorocyclopentadiene	900	BQL
Hexachloroethane	450	BQL
Indeno(1,2,3-c,d)pyrene	450	BQL
Isophorone	450	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 444-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93915 (REX)  
 Lab Project ID: G185-79  
 Matrix: Soil

%Solids: 91.7

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	450	BQL
2-Methylphenol	450	BQL
3- & 4-Methylphenol	450	BQL
N-Nitrosodi-n-propylamine	450	BQL
N-Nitrosodiphenylamine	450	BQL
Naphthalene	450	BQL
2-Nitroaniline	450	BQL
3-Nitroaniline	450	BQL
4-Nitroaniline	450	BQL
Nitrobenzene	450	BQL
2-Nitrophenol	450	BQL
4-Nitrophenol	2300	BQL
Pentachlorobenzene	450	BQL
Pentachlorophenol	2300	BQL
Phenanthrene	450	BQL
Phenol	450	BQL
Pyrene	450	BQL
1,2,3,4-Tetrachlorobenzene	450	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	450	BQL
1,2,3-Trichlorobenzene	450	BQL
1,2,4-Trichlorobenzene	450	BQL
1,3,5-Trichlorobenzene	450	BQL
2,4,5-Trichlorophenol	450	BQL
2,4,6-Trichlorophenol	450	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.8	98
2-Fluorophenol	10	8.5	85
Nitrobenzene-d5	10	9.7	97
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	8.7	87
4-Terphenyl-d14	10	12.3	123

**Comments:**

Results are corrected for %solids and dilution where applicable.  
 Sample was reextracted outside of the method specified holding time limits.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 444-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93915 (REX)

Lab Project ID: G185-79

Matrix: Soil      %SOLIDS      91.7

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			230
2	Unknown			190
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Sample was re-extracted outside the method specified holding time limit.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 441-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93916  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	420	BQL
Acenaphthylene	420	BQL
Anthracene	420	BQL
Benzo[a]anthracene	420	BQL
Benzo[a]pyrene	420	BQL
Benzo[b]fluoranthene	420	BQL
Benzo[g,h,i]perylene	420	BQL
Benzo[k]fluoranthene	420	BQL
Benzoic Acid	840	BQL
Bis(2-chloroethoxy)methane	420	BQL
Bis(2-chloroethyl)ether	420	BQL
Bis(2-chloroisopropyl)ether	420	BQL
Bis(2-ethylhexyl)phthalate	420	BQL
4-bromophenyl phenyl ether	420	BQL
Butylbenzylphthalate	420	BQL
4-Chloroaniline	420	BQL
4-Chloro-3-methylphenol	420	BQL
2-Chloronaphthalene	420	BQL
2-Chlorophenol	420	BQL
4-Chlorophenyl phenyl ether	420	BQL
Chrysene	420	BQL
Di-n-Butylphthalate	420	BQL
Di-n-octylphthalate	420	BQL
Dibenzo[a,h]anthracene	420	BQL
Dibenzofuran	420	BQL
1,2-Dichlorobenzene	420	BQL
1,3-Dichlorobenzene	420	BQL
1,4-Dichlorobenzene	420	BQL
3,3'-Dichlorobenzidine	840	BQL
2,4-Dichlorophenol	420	BQL
Diethylphthalate	420	BQL
2,4-Dimethylphenol	420	BQL
Dimethylphthalate	420	BQL
4,6-Dinitro-2-methylphenol	2100	BQL
2,4-Dinitrophenol	2100	BQL
2,4-Dinitrotoluene	420	BQL
2,6-Dinitrotoluene	420	BQL
Fluoranthene	420	BQL
Fluorene	420	BQL
Hexachlorobenzene	420	BQL
Hexachlorobutadiene	420	BQL
Hexachlorocyclopentadiene	840	BQL
Hexachloroethane	420	BQL
Indeno(1,2,3-c,d)pyrene	420	BQL
Isophorone	420	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 441-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93916  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	420	BQL
2-Methylphenol	420	BQL
3- & 4-Methylphenol	420	BQL
N-Nitrosodi-n-propylamine	420	BQL
N-Nitrosodlphenylamine	420	BQL
Naphthalene	420	BQL
2-Nitroaniline	420	BQL
3-Nitroaniline	420	BQL
4-Nitroaniline	420	BQL
Nitrobenzene	420	BQL
2-Nitrophenol	420	BQL
4-Nitrophenol	2100	BQL
Pentachlorobenzene	420	BQL
Pentachlorophenol	2100	BQL
Phenanthrene	420	BQL
Phenol	420	BQL
Pyrene	420	BQL
1,2,3,4-Tetrachlorobenzene	420	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	420	BQL
1,2,3-Trichlorobenzene	420	BQL
1,2,4-Trichlorobenzene	420	BQL
1,3,5-Trichlorobenzene	420	BQL
2,4,5-Trichlorophenol	420	BQL
2,4,6-Trichlorophenol	420	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.4	114
2-Fluorophenol	10	10.1	101
Nitrobenzene-d5	10	10.7	107
Phenol-d6	10	10.7	107
2,4,6-Tribromophenol	10	11.7	117
4-Terphenyl-d14	10	11.9	119

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 441-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93916

Lab Project ID: G185-79

Matrix: Soil %SOLIDS 92.1

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			180000
2	Aromatic, Unknown			110000
3	Aromatic, Unknown			100000
4	Unknown			88000
5	Unknown			75000
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: HA-9-0.5  
Client Project ID: Kuhlman  
Lab Sample ID: 93917  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: 8/22/00  
Date Received: 8/23/00  
Date Analyzed: 8/31/00  
Analyzed By: MRC  
Dilution: 1

%Solids: 92.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	320	BQL
Acenaphthylene	320	BQL
Anthracene	320	BQL
Benzo[a]anthracene	320	BQL
Benzo[a]pyrene	320	BQL
Benzo[b]fluoranthene	320	BQL
Benzo[g,h,i]perylene	320	BQL
Benzo[k]fluoranthene	320	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	320	BQL
Bis(2-chloroethyl)ether	320	BQL
Bis(2-chloroisopropyl)ether	320	BQL
Bis(2-ethylhexyl)phthalate	320	BQL
4-bromophenyl phenyl ether	320	BQL
Butylbenzylphthalate	320	BQL
4-Chloroaniline	320	BQL
4-Chloro-3-methylphenol	320	BQL
2-Chloronaphthalene	320	BQL
2-Chlorophenol	320	BQL
4-Chlorophenyl phenyl ether	320	BQL
Chrysene	320	BQL
Di-n-Butylphthalate	320	BQL
Di-n-octylphthalate	320	BQL
Dibenzo[a,h]anthracene	320	BQL
Dibenzofuran	320	BQL
1,2-Dichlorobenzene	320	BQL
1,3-Dichlorobenzene	320	BQL
1,4-Dichlorobenzene	320	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	320	BQL
Diethylphthalate	320	BQL
2,4-Dimethylphenol	320	BQL
Dimethylphthalate	320	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	320	BQL
2,6-Dinitrotoluene	320	BQL
Fluoranthene	320	BQL
Fluorene	320	BQL
Hexachlorobenzene	320	BQL
Hexachlorobutadiene	320	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	320	BQL
Indeno(1,2,3-c,d)pyrene	320	BQL
Isophorone	320	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: HA-9-0.5  
 Client Project ID: Kuhlman  
 Lab Sample ID: 93917  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 8/22/00  
 Date Received: 8/23/00  
 Date Analyzed: 8/31/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	320	BQL
2-Methylphenol	320	BQL
3- & 4-Methylphenol	320	BQL
N-Nitrosodi-n-propylamine	320	BQL
N-Nitrosodiphenylamine	320	BQL
Naphthalene	320	BQL
2-Nitroaniline	320	BQL
3-Nitroaniline	320	BQL
4-Nitroaniline	320	BQL
Nitrobenzene	320	BQL
2-Nitrophenol	320	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	320	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	320	BQL
Phenol	320	BQL
Pyrene	320	BQL
1,2,3,4-Tetrachlorobenzene	320	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	320	BQL
1,2,3-Trichlorobenzene	320	BQL
1,2,4-Trichlorobenzene	320	BQL
1,3,5-Trichlorobenzene	320	BQL
2,4,5-Trichlorophenol	320	BQL
2,4,6-Trichlorophenol	320	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	8.2	82
Nitrobenzene-d5	10	10.3	103
Phenol-d6	10	9.5	95
2,4,6-Tribromophenol	10	9.4	94
4-Terphenyl-d14	10	10.7	107

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: HA-9-0.5

Client Project ID: Kuhlman

Lab Sample ID: 93917

Lab Project ID: G185-79

Matrix: Soil

%SOLIDS 92.0

Date Collected: 8/22/00

Date Received: 8/23/00

Date Analyzed: 8/31/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			50000
2	Unknown			47000
3	Unknown			44000
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman  
 Lab Sample ID: SBLK-082400-A  
 Lab Project ID: G185-79  
 Matrix: Soil

%Solids: 100.0

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: Method Blank  
Client Project ID: Kuhlman  
Lab Sample ID: SBLK-082400-A  
Lab Project ID: G185-79  
Matrix: Soil

%Solids: 100.0

Date Collected: NA  
Date Received: NA  
Date Analyzed: 8/30/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.3	93
2-Fluorophenol	10	8	80
Nitrobenzene-d5	10	8.6	86
Phenol-d6	10	8.9	89
2,4,6-Tribromophenol	10	7.8	78
4-Terphenyl-d14	10	10.5	105

Comments:

Results are corrected for %solids and dilution where applicable.

Flags:

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: Method Blank  
Client Project ID: Kuhlman  
Lab Sample ID: SBLK-082500-A  
Lab Project ID: G185-79  
Matrix: Soil

%Solids: 100.0

Date Collected: NA  
Date Received: NA  
Date Analyzed: 8/30/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman  
 Lab Sample ID: SBLK-082500-A  
 Lab Project ID: G185-79  
 Matrix: Soil

%Solids: 100.0

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.5	105
2-Fluorophenol	10	9.5	95
Nitrobenzene-d5	10	9.7	97
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	8.8	88
4-Terphenyl-d14	10	11.1	111

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: Method Blank  
Client Project ID: Kuhlman  
Lab Sample ID: SBLK-082800-A  
Lab Project ID: G185-79  
Matrix: Soil

%Solids: 100.0

Date Collected: NA  
Date Received: NA  
Date Analyzed: 8/30/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman  
 Lab Sample ID: SBLK-082800-A  
 Lab Project ID: G185-79  
 Matrix: Soil

%Solids: 100.0

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 8/30/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.4	114
2-Fluorophenol	10	10.2	102
Nitrobenzene-d5	10	10.4	104
Phenol-d6	10	11.1	110
2,4,6-Tribromophenol	10	10.2	102
4-Terphenyl-d14	10	12.2	122

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: Method Blank  
Client Project ID: Kuhlman  
Lab Sample ID: ASE-090700-A  
Lab Project ID: G185-79  
Matrix: Soil

%Solids: 100.0

Date Collected: NA  
Date Received: NA  
Date Analyzed: 9/8/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman  
 Lab Sample ID: ASE-090700-A  
 Lab Project ID: G185-79  
 Matrix: Soil

%Solids: 100.0

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	310	BQL
Pentachlorobenzene	1600	BQL
Pentachlorophenol	310	BQL
Phenanthrene	1600	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

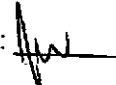
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.6	116
2-Fluorophenol	10	11	110
Nitrobenzene-d5	10	11.3	113
Phenol-d6	10	11.8	118
2,4,6-Tribromophenol	10	11.6	116
4-Terphenyl-d14	10	13.2	132

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman  
 Lab Sample ID: ASE-MS.MSD-161  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 08/22/00  
 Date Received: 08/22/00  
 Date Analyzed: 08/30/00  
 Analyzed By: MRC  
 Solids: 84.9

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit Max. %
					Lower %	Upper %		
Acenaphthene	BQL	10	88	84	55	138	4.8	30
Acenaphthylene	BQL	10	94	89	51	158	4.9	30
Anthracene	BQL	10	88	86	53	142	2.8	30
Benzo[a]anthracene	BQL	10	84	82	55	122	2.8	30
Benzo[a]pyrene	BQL	10	90	92	58	133	1.6	30
Benzo[b]fluoranthene	BQL	10	86	87	62	134	1.2	30
Benzo[g,h,i]perylene	BQL	10	79	79	55	124	0.8	30
Benzo[k]fluoranthene	BQL	10	87	90	51	147	3.2	30
Bis(2-chloroethoxy)methane	BQL	10	66	65	25	166	1.1	30
Bis(2-chloroethyl)ether	BQL	10	74	63	11	187	16.5	30
Bis(2-chloroisopropyl)ether	BQL	10	68	64	10	219	5.5	30
Bis(2-ethylhexyl)phthalate	BQL	10	97	89	62	128	7.9	30
4-Bromophenyl phenyl ether	BQL	10	72	68	18	178	5.3	30
Butylbenzylphthalate	BQL	10	91	87	61	123	4.7	30
4-Chloro-3-methylphenol	BQL	10	92	91	60	129	0.9	30
2-Chloronaphthalene	BQL	10	86	81	59	137	6.1	30
2-Chlorophenol	BQL	10	86	82	62	122	4.9	30
4-Chlorophenyl phenyl ether	BQL	10	69	67	25	177	2.7	30
Chrysene	BQL	10	76	74	51	120	2.8	30
Di-n-Butylphthalate	BQL	10	93	89	63	136	5.1	30
Di-n-octylphthalate	BQL	10	92	91	54	152	1.1	30
Dibenzo[a,h]anthracene	BQL	10	95	94	63	134	0.8	30
Dibenzofuran	BQL	10	83	79	59	137	4.4	30
1,2-Dichlorobenzene	BQL	10	82	77	57	134	5.5	30
1,3-Dichlorobenzene	BQL	10	79	76	62	125	4.0	30
1,4-Dichlorobenzene	BQL	10	79	75	61	124	4.9	30
2,4-Dichlorophenol	BQL	10	90	87	62	129	2.5	30
Diethylphthalate	BQL	10	89	88	59	142	1.3	30
2,4-Dimethylphenol	BQL	10	114	111	10	151	1.9	30
Dimethylphthalate	BQL	10	82	80	52	126	2.6	30
4,6-Dinitro-2-methylphenol	BQL	10	88	86	31	163	2.1	30
2,4-Dinitrophenol	BQL	10	81	81	10	159	0.4	30
2,4-Dinitrotoluene	BQL	10	85	83	58	136	2.2	30
2,6-Dinitrotoluene	BQL	10	88	83	54	145	5.6	30

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman  
 Lab Sample ID: ASE-MS.MSD-161  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: 08/22/00  
 Date Received: 08/22/00  
 Date Analyzed: 08/30/00  
 Analyzed By: MRC  
 Solids: 84.9

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit Max. %
					Lower %	Upper %		
Fluoranthene	BQL	10	83	82	54	139	1.4	30
Fluorene	BQL	10	90	86	58	145	4.1	30
Hexachlorobenzene	BQL	10	89	84	58	140	6.1	30
Hexachlorobutadiene	BQL	10	83	81	64	130	2.1	30
Hexachloroethane	BQL	10	82	77	51	138	7.2	30
Indeno(1,2,3-c,d)pyrene	BQL	10	78	76	53	118	2.8	30
Isophorone	BQL	10	87	84	67	126	3.1	30
2-Methylnaphthalene	BQL	10	80	78	63	127	2.8	30
2-Methylphenol	BQL	10	88	84	41	127	5.2	30
3- & 4-Methylphenol	BQL	20	99	106	45	125	6.4	30
N-Nitrosodi-n-propylamine	BQL	10	79	75	43	128	4.3	30
N-Nitrosodiphenylamine	BQL	10	84	88	10	296	4.1	30
Naphthalene	BQL	10	87	86	67	131	1.9	30
Nitrobenzene	BQL	10	83	82	63	133	1.3	30
2-Nitrophenol	BQL	10	86	84	60	133	3.0	30
4-Nitrophenol	BQL	10	77	77	40	156	1.1	30
Pentachlorobenzene	BQL	10	62	64	NA	NA	4.1	30
Pentachlorophenol	BQL	10	77	74	40	160	5.2	30
Phenanthrene	BQL	10	87	86	57	135	1.5	30
Phenol	BQL	10	85	84	52	128	1.3	30
Pyrene	BQL	10	86	84	57	129	2.8	30
1,2,3,4-Tetrachlorobenzene	BQL	10	80	84	NA	NA	4.1	30
1,2,3,5-Tetrachlorobenzene*	BQL	20	118	121	NA	NA	2.3	30
1,2,3-Trichlorobenzene	BQL	10	80	81	NA	NA	1.1	30
1,2,4-Trichlorobenzene	BQL	10	82	80	62	129	2.2	30
1,3,5-Trichlorobenzene	BQL	10	78	80	NA	NA	3.2	30
2,4,5-Trichlorophenol	BQL	10	94	90	63	144	4.0	30
2,4,6-Trichlorophenol	BQL	10	92	86	57	136	7.5	30

**Comments:**

Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory Limits not established.

BQL = Below quantitation limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman  
Lab Sample ID: ASE-LCS-161  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 08/28/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Acenaphthene	10	8.12	81	74	122
Acenaphthylene	10	8.90	89	67	150
Anthracene	10	8.58	86	73	127
Benzo[a]anthracene	10	8.08	81	72	108
Benzo[a]pyrene	10	8.81	88	78	120
Benzo[b]fluoranthene	10	9.16	92	74	129
Benzo[g,h,i]perylene	10	6.45	65	61	116
Benzo[k]fluoranthene	10	9.27	93	75	133
Bis(2-chloroethoxy)methane	10	8.82	88	21	166
Bis(2-chloroethyl)ether	10	8.56	86	14	171
Bis(2-chloroisopropyl)ether	10	8.78	88	10	197
Bis(2-ethylhexyl)phthalate	10	8.99	90	74	115
4-Bromophenyl phenyl ether	10	8.76	88	24	163
Butylbenzylphthalate	10	8.54	85	71	117
4-Chloro-3-methylphenol	10	8.56	86	74	127
2-Chloronaphthalene	10	8.30	83	77	119
2-Chlorophenol	10	8.21	82	76	115
4-Chlorophenyl phenyl ether	10	8.78	88	28	165
Chrysene	10	7.47	75	68	107
Di-n-Butylphthalate	10	8.72	87	77	126
Di-n-octylphthalate	10	11.26	113	74	136
Dibenzo[a,h]anthracene	10	6.85	68	64	134
Dibenzofuran	10	8.16	82	72	124
1,2-Dichlorobenzene	10	7.86	79	71	121
1,3-Dichlorobenzene	10	7.61	76	72	115
1,4-Dichlorobenzene	10	7.76	78	71	114
2,4-Dichlorophenol	10	8.68	87	78	121
Diethylphthalate	10	8.83	88	73	134
2,4-Dimethylphenol	10	9.47	95	64	123
Dimethylphthalate	10	8.32	83	77	109
4,6-Dinitro-2-methylphenol	10	8.41	84	61	144
2,4-Dinitrophenol	10	7.47	75	46	135
2,4-Dinitrotoluene	10	8.65	87	75	125
2,6-Dinitrotoluene	10	8.48	85	78	122
Fluoranthene	10	8.16	82	72	124

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270**

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman  
 Lab Sample ID: ASE-LCS-161  
 Lab Project ID: G185-79  
 Matrix: Soil

Date Collected: N/A  
 Date Received: N/A  
 Date Analyzed: 08/28/00  
 Analyzed By: MRC  
 Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Fluorene	10	8.41	84	73	133
Hexachlorobenzene	10	8.44	84	78	120
Hexachlorobutadiene	10	7.86	79	74	119
Hexachloroethane	10	7.58	76	70	122
Indeno(1,2,3-c,d)pyrene	10	6.08	61	54	118
Isophorone	10	8.59	86	81	117
2-Methylnaphthalene	10	7.68	77	70	119
2-Methylphenol	10	8.52	85	76	114
3- & 4-Methylphenol	20	21.91	110	61	141
N-Nitrosodi-n-propylamine	10	7.53	75	60	111
N-Nitrosodiphenylamine	10	9.56	96	10	366
Naphthalene	10	8.15	81	74	123
Nitrobenzene	10	8.47	85	76	122
2-Nitrophenol	10	8.10	81	72	117
4-Nitrophenol	10	4.88	49	20	149
Pentachlorobenzene	10	6.92	69	NA	NA
Pentachlorophenol	10	7.92	79	40	155
Phenanthrene	10	8.33	83	74	123
Phenol	10	8.29	83	73	128
Pyrene	10	8.21	82	64	123
1,2,3,4-Tetrachlorobenzene	10	9.12	91	NA	NA
1,2,3,5-Tetrachlorobenzene*	20	26.46	132	NA	NA
1,2,3-Trichlorobenzene	10	9.19	92	NA	NA
1,2,4-Trichlorobenzene	10	7.95	79	77	114
1,3,5-Trichlorobenzene	10	8.94	89	NA	NA
2,4,5-Trichlorophenol	10	8.72	87	77	131
2,4,6-Trichlorophenol	10	8.67	87	79	119

**Comments:**

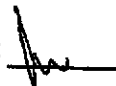
Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established

Reviewed By: 

Results for Laboratory Control Spike (LCS)  
PARADIGM ANALYTICAL LABORATORIES, INC.  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhiman  
Lab Sample ID: SLCS 12  
Lab Project ID: G185-79  
Matrix: Soil

Date Analyzed: 8/24/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Spiked (ug/KG)	Result (ug/KG)	Limits	
			Lower	Upper
Arochlor 1260	313	321	219	406

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
MS/MSD Results for PCBs  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman  
Lab Sample ID: SQC 12  
Lab Project ID: G185-79  
Matrix: Soil

Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Sample	MS	%Rec	MSD	%Rec	RPD
Aroclor-1260	BQL	727	73%	832	83%	13.5

**Comments:**

BQL = Below Quantitation Limit

Results reported are on-column amounts in ug/L.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: Method Blank  
Client Project ID: Kuhlman  
Lab Sample ID: SBik 8/24/00  
Lab Project ID: G185-79  
Matrix: Soil

Date Collected:  
Date Received:  
Date Analyzed: 8/30/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 100.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	31	BQL
Arochlor-1221	31	BQL
Arochlor-1232	31	BQL
Arochlor-1242	31	BQL
Arochlor-1248	31	BQL
Arochlor-1254	31	BQL
Arochlor-1260	31	BQL
Arochlor-1262	31	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	95	95

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



Environmental Chemistry  
Consulting Services, Inc.

2625 Advance Road,  
Madison, WI 53716  
Phone 608-221-8700 FAX 608-221-4888

CHAIN OF CUSTODY

No. 002671 \*

Page 1 of 1  
Turn Around (circle one) Normal Rush

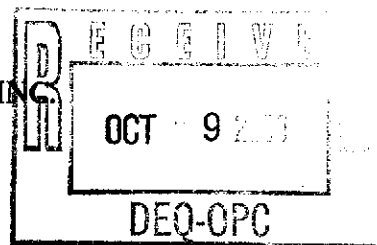
Project Number: \_\_\_\_\_  
 Project Name: Kuhlman  
 Project Location: Crystal Springs MS  
 Sampled By (Print): Tim Fitzpatrick  
 Mail Report To: Tim Fitzpatrick  
 Company: Ogden  
 Address: PO Box 3142  
Hundersville NC 28070

Sample Description	Collection		Matrix	Total Bottles	Preserv'	Analysis Requested	Comments	Laboratory Number
	Date	Time						
DP453-0.5	8/21/00	1006	S	1	None	PB by 8022, 8220 extended		
DP456-0.5	"	1200	S	1		(Ser Bottick)		
DP449-0.5	"	0824	S	1		+TICS		
DP462-0.5	"	1600	S	1				
DP432-0.5	8/22/00	0935	S	1				
DP412-0.5	8/22/00	1435	S	1				
DP436-0.5	8/22/00	1142	S	1				
DP446-0.5	8/22/00	1517	S	1				
DP447-0.5	8/22/00	1524	S	1				
DP444-0.5	8/22/00	1510	S	1				
DP441-0.5	8/22/00	1434	S	1				
HA-a-0.5	8/22/00	1114	S	1				

Relinquished By: Tim Fitzpatrick Date/Time: 8/22/00 17:00  
 Received By: [Signature] Date/Time: 8/22/00 09:45  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Receipt Temp: 2.3C  
 Temp Blank Y N

WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER/SUBMITTER

PARADIGM ANALYTICAL LABORATORIES, INC.  
2627 Northchase Parkway S.E.  
Wilmington, North Carolina 28405  
(910) 350-1903  
Fax (910) 350-1557



Mr. Tim Fitzpatrick  
Ogden Environmental & Engineering  
P.O. Box 3142  
Huntersville NC 28070

September 19, 2000

**FILE COPY**

Report Number: G185-81

Dear Mr. Fitzpatrick,

Enclosed are the results of the analytical services performed under the referenced project. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call for assistance. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,

Paradigm Analytical Laboratories, Inc.

A handwritten signature in black ink, appearing to read "Mark Randall", written over a horizontal line.

Laboratory Director  
Mark Randall

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs  
by EPA 8082**

Client Sample ID: DP 582-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94436  
 Lab Project ID: G185-81  
 Matrix: Soil

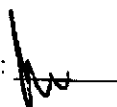
%SOLIDS: 93.5

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/13/00  
 Analyzed By: CLP  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	260	BQL
Arochlor-1221	260	BQL
Arochlor-1232	260	BQL
Arochlor-1242	260	BQL
Arochlor-1248	260	BQL
Arochlor-1254	260	BQL
Arochlor-1260	260	BQL
Arochlor-1262	260	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	52	52

**Comments:**  
 BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 321-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94425  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 66.4

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	320	BQL
Arochlor-1221	320	BQL
Arochlor-1232	320	BQL
Arochlor-1242	320	BQL
Arochlor-1248	320	BQL
Arochlor-1254	320	BQL
Arochlor-1260	320	BQL
Arochlor-1262	320	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	62	62

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 322-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94426  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 78.5

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1


Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	270	BQL
Arochlor-1221	270	BQL
Arochlor-1232	270	BQL
Arochlor-1242	270	BQL
Arochlor-1248	270	BQL
Arochlor-1254	270	BQL
Arochlor-1260	270	BQL
Arochlor-1262	270	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	61	61

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 323-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94427  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 80.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	54	54

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 324-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94428  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 82.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	300	BQL
Arochlor-1221	300	BQL
Arochlor-1232	300	BQL
Arochlor-1242	300	BQL
Arochlor-1248	300	BQL
Arochlor-1254	300	BQL
Arochlor-1260	300	420
Arochlor-1262	300	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	95	95

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 370-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94429  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 71.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	430	BQL
Arochlor-1221	430	BQL
Arochlor-1232	430	BQL
Arochlor-1242	430	BQL
Arochlor-1248	430	BQL
Arochlor-1254	430	BQL
Arochlor-1260	430	BQL
Arochlor-1262	430	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	91	91

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 371-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94430  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 78.2

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	290	BQL
Arochlor-1221	290	BQL
Arochlor-1232	290	BQL
Arochlor-1242	290	BQL
Arochlor-1248	290	BQL
Arochlor-1254	290	BQL
Arochlor-1260	290	BQL
Arochlor-1262	290	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	82	82

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs**

by EPA 8082

Client Sample ID: DP 372-0.1  
 Client Project ID: Kuhiman Electric  
 Lab Sample ID: 94431  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: CLP  
 Dilution: 1

%SOLIDS: 68.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	360	BQL
Arochlor-1221	360	BQL
Arochlor-1232	360	BQL
Arochlor-1242	360	BQL
Arochlor-1248	360	BQL
Arochlor-1254	360	BQL
Arochlor-1260	360	BQL
Arochlor-1262	360	420 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	73	73

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: RB 7804  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94432  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 88.8

Date Collected: 8/30/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 100

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	18000	BQL
Arochlor-1221	18000	BQL
Arochlor-1232	18000	BQL
Arochlor-1242	18000	BQL
Arochlor-1248	18000	BQL
Arochlor-1254	18000	BQL
Arochlor-1260	18000	52000
Arochlor-1262	18000	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: RB 7805  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94433  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 88.3

Date Collected: 8/30/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 100

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	3500	BQL
Arochlor-1221	3500	BQL
Arochlor-1232	3500	BQL
Arochlor-1242	3500	BQL
Arochlor-1248	3500	BQL
Arochlor-1254	3500	BQL
Arochlor-1260	3500	6500
Arochlor-1262	3500	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 573-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94434  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/28/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 85.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	220	BQL
Arochlor-1221	220	BQL
Arochlor-1232	220	BQL
Arochlor-1242	220	BQL
Arochlor-1248	220	BQL
Arochlor-1254	220	BQL
Arochlor-1260	220	BQL
Arochlor-1262	220	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	65	65

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: ATK-3  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94435  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 100

%SOLIDS: 92.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	16000	BQL
Arochlor-1221	16000	BQL
Arochlor-1232	16000	BQL
Arochlor-1242	16000	BQL
Arochlor-1248	16000	BQL
Arochlor-1254	16000	BQL
Arochlor-1260	16000	BQL
Arochlor-1262	16000	62000 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 555-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94437  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 91.0

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	270	BQL
Arochlor-1221	270	BQL
Arochlor-1232	270	BQL
Arochlor-1242	270	BQL
Arochlor-1248	270	BQL
Arochlor-1254	270	BQL
Arochlor-1260	270	BQL
Arochlor-1262	270	370 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	66	66

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 581-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94438  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 92.5

Date Collected: 8/29/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	260	BQL
Arochlor-1221	260	BQL
Arochlor-1232	260	BQL
Arochlor-1242	260	BQL
Arochlor-1248	260	BQL
Arochlor-1254	260	BQL
Arochlor-1260	260	BQL
Arochlor-1262	260	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	56	56

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 579-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94439  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 90.5

Date Collected: 8/29/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	520	BQL
Arochlor-1221	520	BQL
Arochlor-1232	520	BQL
Arochlor-1242	520	BQL
Arochlor-1248	520	BQL
Arochlor-1254	520	BQL
Arochlor-1260	520	BQL
Arochlor-1262	520	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	57	57

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 545-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94440  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 76.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	290	BQL
Arochlor-1221	290	BQL
Arochlor-1232	290	BQL
Arochlor-1242	290	BQL
Arochlor-1248	290	BQL
Arochlor-1254	290	BQL
Arochlor-1260	290	BQL
Arochlor-1262	290	760 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	65	65

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 549-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94441  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 83.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	260	BQL
Arochlor-1221	260	BQL
Arochlor-1232	260	BQL
Arochlor-1242	260	BQL
Arochlor-1248	260	BQL
Arochlor-1254	260	BQL
Arochlor-1260	260	BQL
Arochlor-1262	260	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	86	86

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 542-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94442  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 90.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	250	BQL
Arochlor-1221	250	BQL
Arochlor-1232	250	BQL
Arochlor-1242	250	BQL
Arochlor-1248	250	BQL
Arochlor-1254	250	BQL
Arochlor-1260	250	730
Arochlor-1262	250	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	69	69

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs

by EPA 8082

Client Sample ID: ATK-2  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94443  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 1000

%SOLIDS: 95.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	150000	BQL
Arochlor-1221	150000	BQL
Arochlor-1232	150000	BQL
Arochlor-1242	150000	BQL
Arochlor-1248	150000	BQL
Arochlor-1254	150000	BQL
Arochlor-1260	150000	430000
Arochlor-1262	150000	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: ATK-1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94444  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 94.0

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	760
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	93	93

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs  
by EPA 8082**

Client Sample ID: HA 593-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94445  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/13/00  
 Analyzed By: CLP  
 Dilution: 10

%SOLIDS: 99.3

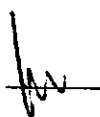
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	1500	BQL
Arochlor-1221	1500	BQL
Arochlor-1232	1500	BQL
Arochlor-1242	1500	BQL
Arochlor-1248	1500	BQL
Arochlor-1254	1500	BQL
Arochlor-1260	1500	3800
Arochlor-1262	1500	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 534-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94446  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 88.2

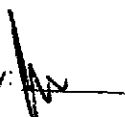
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	44	44

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 536-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94447  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 94.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	460
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	41	41

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 541-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94448  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 83.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	180	BQL
Arochlor-1221	180	BQL
Arochlor-1232	180	BQL
Arochlor-1242	180	BQL
Arochlor-1248	180	BQL
Arochlor-1254	180	BQL
Arochlor-1260	180	BQL
Arochlor-1262	180	570 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	48	48

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 520-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94449  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	480	BQL
Arochlor-1221	480	BQL
Arochlor-1232	480	BQL
Arochlor-1242	480	BQL
Arochlor-1248	480	BQL
Arochlor-1254	480	BQL
Arochlor-1260	480	BQL
Arochlor-1262	480	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	50	50

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 518-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94450  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 93.4

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	48	48

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 523-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94451  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 86.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	220	BQL
Arochlor-1221	220	BQL
Arochlor-1232	220	BQL
Arochlor-1242	220	BQL
Arochlor-1248	220	BQL
Arochlor-1254	220	BQL
Arochlor-1260	220	BQL
Arochlor-1262	220	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	64	64

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 538-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94452  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 88.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	200	BQL
Arochlor-1221	200	BQL
Arochlor-1232	200	BQL
Arochlor-1242	200	BQL
Arochlor-1248	200	BQL
Arochlor-1254	200	BQL
Arochlor-1260	200	BQL
Arochlor-1262	200	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	63	63

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 523-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94453  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	71	71

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 490-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94454  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/24/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	64	64

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 464-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94455  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 25

%SOLIDS: 95.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	3900	BQL
Arochlor-1221	3900	BQL
Arochlor-1232	3900	BQL
Arochlor-1242	3900	BQL
Arochlor-1248	3900	BQL
Arochlor-1254	3900	BQL
Arochlor-1260	3900	10000
Arochlor-1262	3900	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 464-4  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94456  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 90.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	74	74

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 465-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94457  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 81.8

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 20

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	5400	BQL
Arochlor-1221	5400	BQL
Arochlor-1232	5400	BQL
Arochlor-1242	5400	BQL
Arochlor-1248	5400	BQL
Arochlor-1254	5400	BQL
Arochlor-1260	5400	BQL
Arochlor-1262	5400	22000 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 465-4  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94458  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 90.2

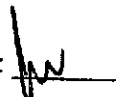
Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	41	41

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 484-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94459  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/24/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.2

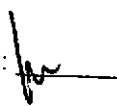
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	240 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	68	68

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 529-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94460  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 90.0

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	250	BQL
Arochlor-1221	250	BQL
Arochlor-1232	250	BQL
Arochlor-1242	250	BQL
Arochlor-1248	250	BQL
Arochlor-1254	250	BQL
Arochlor-1260	250	BQL
Arochlor-1262	250	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	43	43

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 321-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94425

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

%Solids: 66.4

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	580	BQL
Acenaphthylene	580	BQL
Anthracene	580	BQL
Benzo[a]anthracene	580	BQL
Benzo[a]pyrene	580	BQL
Benzo[b]fluoranthene	580	BQL
Benzo[g,h,i]perylene	580	BQL
Benzo[k]fluoranthene	580	BQL
Benzoic Acid	1200	BQL
Bis(2-chloroethoxy)methane	580	BQL
Bis(2-chloroethyl)ether	580	BQL
Bis(2-chloroisopropyl)ether	580	BQL
Bis(2-ethylhexyl)phthalate	580	BQL
4-bromophenyl phenyl ether	580	BQL
Butylbenzylphthalate	580	BQL
4-Chloroaniline	580	BQL
4-Chloro-3-methylphenol	580	BQL
2-Chloronaphthalene	580	BQL
2-Chlorophenol	580	BQL
4-Chlorophenyl phenyl ether	580	BQL
Chrysene	580	BQL
Di-n-Butylphthalate	580	BQL
Di-n-octylphthalate	580	BQL
Dibenzo[a,h]anthracene	580	BQL
Dibenzofuran	580	BQL
1,2-Dichlorobenzene	580	BQL
1,3-Dichlorobenzene	580	BQL
1,4-Dichlorobenzene	580	BQL
3,3'-Dichlorobenzidine	1200	BQL
2,4-Dichlorophenol	580	BQL
Diethylphthalate	580	BQL
2,4-Dimethylphenol	580	BQL
Dimethylphthalate	580	BQL
4,6-Dinitro-2-methylphenol	2900	BQL
2,4-Dinitrophenol	2900	BQL
2,4-Dinitrotoluene	580	BQL
2,6-Dinitrotoluene	580	BQL
Fluoranthene	580	BQL
Fluorene	580	BQL
Hexachlorobenzene	580	BQL
Hexachlorobutadiene	580	BQL
Hexachlorocyclopentadiene	1200	BQL
Hexachloroethane	580	BQL
Indeno(1,2,3-c,d)pyrene	580	BQL
Isophorone	580	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 321-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94425  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 66.4

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	580	BQL
2-Methylphenol	580	BQL
3- & 4-Methylphenol	580	BQL
N-Nitrosodi-n-propylamine	580	BQL
N-Nitrosodiphenylamine	580	BQL
Naphthalene	580	BQL
2-Nitroaniline	580	BQL
3-Nitroaniline	580	BQL
4-Nitroaniline	580	BQL
Nitrobenzene	580	BQL
2-Nitrophenol	580	BQL
4-Nitrophenol	2900	BQL
Pentachlorobenzene	580	BQL
Pentachlorophenol	2900	BQL
Phenanthrene	580	BQL
Phenol	580	BQL
Pyrene	580	BQL
1,2,3,4-Tetrachlorobenzene	580	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	580	BQL
1,2,3-Trichlorobenzene	580	BQL
1,2,4-Trichlorobenzene	580	BQL
1,3,5-Trichlorobenzene	580	BQL
2,4,5-Trichlorophenol	580	BQL
2,4,6-Trichlorophenol	580	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.8	98
2-Fluorophenol	10	9.1	91
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	9.9	99
4-Terphenyl-d14	10	11.7	117

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 371-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94430  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 78.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	290	BQL
Arochlor-1221	290	BQL
Arochlor-1232	290	BQL
Arochlor-1242	290	BQL
Arochlor-1248	290	BQL
Arochlor-1254	290	BQL
Arochlor-1260	290	BQL
Arochlor-1262	290	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	82	82

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 372-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94431  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 68.5

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	360	BQL
Arochlor-1221	360	BQL
Arochlor-1232	360	BQL
Arochlor-1242	360	BQL
Arochlor-1248	360	BQL
Arochlor-1254	360	BQL
Arochlor-1260	360	420
Arochlor-1262	360	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	73	73

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: RB 7804  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94432  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 88.8

Date Collected: 8/30/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 100

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	18000	BQL
Arochlor-1221	18000	BQL
Arochlor-1232	18000	BQL
Arochlor-1242	18000	BQL
Arochlor-1248	18000	BQL
Arochlor-1254	18000	BQL
Arochlor-1260	18000	52000
Arochlor-1262	18000	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: RB 7805  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94433  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/30/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 100

%SOLIDS: 88.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	3500	BQL
Arochlor-1221	3500	BQL
Arochlor-1232	3500	BQL
Arochlor-1242	3500	BQL
Arochlor-1248	3500	BQL
Arochlor-1254	3500	BQL
Arochlor-1260	3500	6500
Arochlor-1262	3500	BQL

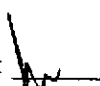
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 573-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94434  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 85.0

Date Collected: 8/28/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	220	BQL
Arochlor-1221	220	BQL
Arochlor-1232	220	BQL
Arochlor-1242	220	BQL
Arochlor-1248	220	BQL
Arochlor-1254	220	BQL
Arochlor-1260	220	BQL
Arochlor-1262	220	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	65	65

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: ATK-3  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94435  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 92.3

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 100

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	16000	BQL
Arochlor-1221	16000	BQL
Arochlor-1232	16000	BQL
Arochlor-1242	16000	BQL
Arochlor-1248	16000	BQL
Arochlor-1254	16000	BQL
Arochlor-1260	16000	62000
Arochlor-1262	16000	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 555-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94437  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 91.0

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	270	BQL
Arochlor-1221	270	BQL
Arochlor-1232	270	BQL
Arochlor-1242	270	BQL
Arochlor-1248	270	BQL
Arochlor-1254	270	BQL
Arochlor-1260	270	BQL
Arochlor-1262	270	370 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	66	66

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 581-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94438  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/29/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 92.5

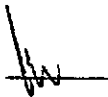
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	260	BQL
Arochlor-1221	260	BQL
Arochlor-1232	260	BQL
Arochlor-1242	260	BQL
Arochlor-1248	260	BQL
Arochlor-1254	260	BQL
Arochlor-1260	260	BQL
Arochlor-1262	260	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	56	56

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 579-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94439  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 90.5

Date Collected: 8/29/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	520	BQL
Arochlor-1221	520	BQL
Arochlor-1232	520	BQL
Arochlor-1242	520	BQL
Arochlor-1248	520	BQL
Arochlor-1254	520	BQL
Arochlor-1260	520	BQL
Arochlor-1262	520	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	57	57

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 545-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94440  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 76.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	290	BQL
Arochlor-1221	290	BQL
Arochlor-1232	290	BQL
Arochlor-1242	290	BQL
Arochlor-1248	290	BQL
Arochlor-1254	290	BQL
Arochlor-1260	290	760
Arochlor-1262	290	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	65	65

\*Sample was quantitated as Arochlor 1260, but appears to contain a mixture of Arochlor 1260 and Arochlor 1262.

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By. 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 549-0.5  
Client Project ID: Kuhiman Electric  
Lab Sample ID: 94441  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 83.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	260	BQL
Arochlor-1221	260	BQL
Arochlor-1232	260	BQL
Arochlor-1242	260	BQL
Arochlor-1248	260	BQL
Arochlor-1254	260	BQL
Arochlor-1260	260	BQL
Arochlor-1262	260	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	86	86

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 542-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94442  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 90.4

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	250	BQL
Arochlor-1221	250	BQL
Arochlor-1232	250	BQL
Arochlor-1242	250	BQL
Arochlor-1248	250	BQL
Arochlor-1254	250	BQL
Arochlor-1260	250	BQL
Arochlor-1262	250	730 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	69	69

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: ATK-2  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94443  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 95.3

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/15/00  
Analyzed By: CLP  
Dilution: 1000


Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	150000	BQL
Arochlor-1221	150000	BQL
Arochlor-1232	150000	BQL
Arochlor-1242	150000	BQL
Arochlor-1248	150000	BQL
Arochlor-1254	150000	BQL
Arochlor-1260	150000	BQL
Arochlor-1262	150000	430000 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: ATK-1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94444  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 94.0

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	760 BQL


Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	93	93

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: HA 593-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94445  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/29/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 10

%SOLIDS: 99.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	1500	BQL
Arochlor-1221	1500	BQL
Arochlor-1232	1500	BQL
Arochlor-1242	1500	BQL
Arochlor-1248	1500	BQL
Arochlor-1254	1500	BQL
Arochlor-1260	1500	BQL
Arochlor-1262	1500	3800 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 534-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94446  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 88.2

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	44	44

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for PCBs  
by EPA 8082**

Client Sample ID: DP 536-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94447  
 Lab Project ID: G185-81  
 Matrix: Soil

%SOLIDS: 94.9

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/7/00  
 Analyzed By: CLP  
 Dilution: 1

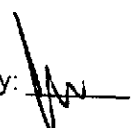
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	460 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	41	41

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

**Comments:**

BQL = Below Quantitation Limit  
 NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 541-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94448  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 83.8

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	180	BQL
Arochlor-1221	180	BQL
Arochlor-1232	180	BQL
Arochlor-1242	180	BQL
Arochlor-1248	180	BQL
Arochlor-1254	180	BQL
Arochlor-1260	180	BQL
Arochlor-1262	180	570 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	48	48

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 520-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94449  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 92.1

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	480	BQL
Arochlor-1221	480	BQL
Arochlor-1232	480	BQL
Arochlor-1242	480	BQL
Arochlor-1248	480	BQL
Arochlor-1254	480	BQL
Arochlor-1260	480	BQL
Arochlor-1262	480	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	50	50

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 518-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94450  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 93.4

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL
Arochlor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	48	48

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 523-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94451  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 86.9

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

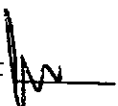
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	220	BQL
Arochlor-1221	220	BQL
Arochlor-1232	220	BQL
Arochlor-1242	220	BQL
Arochlor-1248	220	BQL
Arochlor-1254	220	BQL
Arochlor-1260	220	BQL
Arochlor-1262	220	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	64	64

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 538-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94452  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 88.8

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	200	BQL
Arochlor-1221	200	BQL
Arochlor-1232	200	BQL
Arochlor-1242	200	BQL
Arochlor-1248	200	BQL
Arochlor-1254	200	BQL
Arochlor-1260	200	BQL
Arochlor-1262	200	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	63	63

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 523-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94453  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 92.3

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

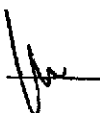
Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	71	71

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 490-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94454  
Lab Project ID: G185-81

Date Collected: 8/24/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Matrix: Soil                      %SOLIDS: 92.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	190	BQL
Arochlor-1221	190	BQL
Arochlor-1232	190	BQL
Arochlor-1242	190	BQL
Arochlor-1248	190	BQL
Arochlor-1254	190	BQL
Arochlor-1260	190	BQL
Arochlor-1262	190	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	64	64

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 464-0.5  
Client Project ID: Kuhiman Electric  
Lab Sample ID: 94455  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 25

%SOLIDS: 95.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	3900	BQL
Arochlor-1221	3900	BQL
Arochlor-1232	3900	BQL
Arochlor-1242	3900	BQL
Arochlor-1248	3900	BQL
Arochlor-1254	3900	BQL
Arochlor-1260	3900	BQL
Arochlor-1262	3900	10000 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	NA	NA

\*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 464-4  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94456  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 90.0

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	74	74

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 465-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94457  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 20

%SOLIDS: 81.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	5400	BQL
Arochlor-1221	5400	BQL
Arochlor-1232	5400	BQL
Arochlor-1242	5400	BQL
Arochlor-1248	5400	BQL
Arochlor-1254	5400	BQL
Arochlor-1260	5400	BQL
Arochlor-1262	5400	22000 BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	NA	NA

\*Sample was quantitated as Arochlor 1260, but appears to contain a mixture of Arochlor 1260 and Arochlor 1262.

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 465-4  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94458  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

%SOLIDS: 90.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	41	41

Comments:

BQL = Below Quantitation Limit  
NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 484-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94459  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 92.2

Date Collected: 8/24/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	170	BQL
Arochlor-1221	170	BQL
Arochlor-1232	170	BQL
Arochlor-1242	170	BQL
Arochlor-1248	170	BQL
Arochlor-1254	170	BQL
Arochlor-1260	170	BQL
Arochlor-1262	170	240 BQL

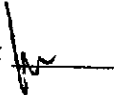
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	68	68

\*Sample was quantitated as Arochlor 1260, but appears to contain a mixture of Arochlor 1260 and Arochlor 1262.

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: DP 529-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94460  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 90.0

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/7/00  
Analyzed By: CLP  
Dilution: 1


Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	250	BQL
Arochlor-1221	250	BQL
Arochlor-1232	250	BQL
Arochlor-1242	250	BQL
Arochlor-1248	250	BQL
Arochlor-1254	250	BQL
Arochlor-1260	250	BQL
Arochlor-1262	250	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	43	43

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 321-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94425

Lab Project ID: G185-81

Matrix: Soil

%Solids: 66.4

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	580	BQL
Acenaphthylene	580	BQL
Anthracene	580	BQL
Benzo[a]anthracene	580	BQL
Benzo[a]pyrene	580	BQL
Benzo[b]fluoranthene	580	BQL
Benzo[g,h,i]perylene	580	BQL
Benzo[k]fluoranthene	580	BQL
Benzoic Acid	580	BQL
Bis(2-chloroethoxy)methane	1200	BQL
Bis(2-chloroethyl)ether	580	BQL
Bis(2-chloroisopropyl)ether	580	BQL
Bis(2-ethylhexyl)phthalate	580	BQL
4-bromophenyl phenyl ether	580	BQL
Butylbenzylphthalate	580	BQL
4-Chloroaniline	580	BQL
4-Chloro-3-methylphenol	580	BQL
2-Chloronaphthalene	580	BQL
2-Chlorophenol	580	BQL
4-Chlorophenyl phenyl ether	580	BQL
Chrysene	580	BQL
Di-n-Butylphthalate	580	BQL
Di-n-octylphthalate	580	BQL
Dibenzo[a,h]anthracene	580	BQL
Dibenzofuran	580	BQL
1,2-Dichlorobenzene	580	BQL
1,3-Dichlorobenzene	580	BQL
1,4-Dichlorobenzene	580	BQL
3,3'-Dichlorobenzidine	580	BQL
2,4-Dichlorophenol	1200	BQL
Diethylphthalate	580	BQL
2,4-Dimethylphenol	580	BQL
Dimethylphthalate	580	BQL
4,6-Dinitro-2-methylphenol	580	BQL
2,4-Dinitrophenol	2900	BQL
2,4-Dinitrotoluene	2900	BQL
2,6-Dinitrotoluene	580	BQL
Fluoranthene	580	BQL
Fluorene	580	BQL
Hexachlorobenzene	580	BQL
Hexachlorobutadiene	580	BQL
Hexachlorocyclopentadiene	580	BQL
Hexachloroethane	1200	BQL
Indeno(1,2,3-c,d)pyrene	580	BQL
Isophorone	580	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 321-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94425  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 66.4

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	580	BQL
2-Methylphenol	580	BQL
3- & 4-Methylphenol	580	BQL
N-Nitrosodi-n-propylamine	580	BQL
N-Nitrosodiphenylamine	580	BQL
Naphthalene	580	BQL
2-Nitroaniline	580	BQL
3-Nitroaniline	580	BQL
4-Nitroaniline	580	BQL
Nitrobenzene	580	BQL
2-Nitrophenol	580	BQL
4-Nitrophenol	2900	BQL
Pentachlorobenzene	580	BQL
Pentachlorophenol	2900	BQL
Phenanthrene	580	BQL
Phenol	580	BQL
Pyrene	580	BQL
1,2,3,4-Tetrachlorobenzene	580	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	580	BQL
1,2,3-Trichlorobenzene	580	BQL
1,2,4-Trichlorobenzene	580	BQL
1,3,5-Trichlorobenzene	580	BQL
2,4,5-Trichlorophenol	580	BQL
2,4,6-Trichlorophenol	580	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.8	98
2-Fluorophenol	10	9.1	91
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	9.9	99
4-Terphenyl-d14	10	11.7	117

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 321-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94425  
Lab Project ID: G185-81

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/8/00  
Analyzed By: MRC  
Dilution: 1


Matrix: Soil %SOLIDS 66.4

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			9900
2	Alkane, Unknown			8800
3	Unknown			8300
4	Alkane, Unknown			3200
5	Unknown			2900
6	Unknown			2700
7	Unknown			1300
8	Unknown			1100
9	Unknown			1100
10	Unknown			790

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 322-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94426

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

%Solids: 78.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	610	BQL
Acenaphthylene	610	BQL
Anthracene	610	BQL
Benzo[a]anthracene	610	BQL
Benzo[a]pyrene	610	BQL
Benzo[b]fluoranthene	610	BQL
Benzo[g,h,i]perylene	610	BQL
Benzo[k]fluoranthene	610	BQL
Benzoic Acid	1200	BQL
Bis(2-chloroethoxy)methane	610	BQL
Bis(2-chloroethyl)ether	610	BQL
Bis(2-chloroisopropyl)ether	610	BQL
Bis(2-ethylhexyl)phthalate	610	BQL
4-bromophenyl phenyl ether	610	BQL
Butylbenzylphthalate	610	BQL
4-Chloroaniline	610	BQL
4-Chloro-3-methylphenol	610	BQL
2-Chloronaphthalene	610	BQL
2-Chlorophenol	610	BQL
4-Chlorophenyl phenyl ether	610	BQL
Chrysene	610	BQL
Di-n-Butylphthalate	610	BQL
Di-n-octylphthalate	610	BQL
Dibenzo[a,h]anthracene	610	BQL
Dibenzofuran	610	BQL
1,2-Dichlorobenzene	610	BQL
1,3-Dichlorobenzene	610	BQL
1,4-Dichlorobenzene	610	BQL
3,3'-Dichlorobenzidine	1200	BQL
2,4-Dichlorophenol	610	BQL
Diethylphthalate	610	BQL
2,4-Dimethylphenol	610	BQL
Dimethylphthalate	610	BQL
4,6-Dinitro-2-methylphenol	3100	BQL
2,4-Dinitrophenol	3100	BQL
2,4-Dinitrotoluene	610	BQL
2,6-Dinitrotoluene	610	BQL
Fluoranthene	610	BQL
Fluorene	610	BQL
Hexachlorobenzene	610	BQL
Hexachlorobutadiene	610	BQL
Hexachlorocyclopentadiene	1200	BQL
Hexachloroethane	610	BQL
Indeno(1,2,3-c,d)pyrene	610	BQL
Isophorone	610	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 322-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94426  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 78.5

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
2-Methylnaphthalene	610	BQL
2-Methylphenol	610	BQL
3- & 4-Methylphenol	610	BQL
N-Nitrosodi-n-propylamine	610	BQL
N-Nitrosodiphenylamine	610	BQL
Naphthalene	610	BQL
2-Nitroaniline	610	BQL
3-Nitroaniline	610	BQL
4-Nitroaniline	610	BQL
Nitrobenzene	610	BQL
2-Nitrophenol	610	BQL
4-Nitrophenol	3100	BQL
Pentachlorobenzene	610	BQL
Pentachlorophenol	3100	BQL
Phenanthrene	610	BQL
Phenol	610	BQL
Pyrene	610	BQL
1,2,3,4-Tetrachlorobenzene	610	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	610	BQL
1,2,3-Trichlorobenzene	610	BQL
1,2,4-Trichlorobenzene	610	BQL
1,3,5-Trichlorobenzene	610	BQL
2,4,5-Trichlorophenol	610	BQL
2,4,6-Trichlorophenol	610	BQL

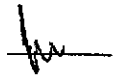
<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
2-Fluorobiphenyl	10	5.9	59
2-Fluorophenol	10	6.4	64
Nitrobenzene-d5	10	6.3	63
Phenol-d6	10	7	70
2,4,6-Tribromophenol	10	6.1	61
4-Terphenyl-d14	10	6.8	68

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 322-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94426  
Lab Project ID: G185-81  
Matrix: Soil

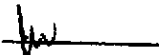
Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/8/00  
Analyzed By: MRC  
Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			9000
2	Alkane, Unknown			8300
3	Unknown			7000
4	Alkane, Unknown			3600
5	Unknown			1500
6	Unknown			970
7	Unknown			790
8	Unknown			690
9	Unknown			580
10	Unknown			520

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 323-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94427

Lab Project ID: G185-81

Matrix: Soil

%Solids: 80.4

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	510	BQL
Acenaphthylene	510	BQL
Anthracene	510	BQL
Benzo[a]anthracene	510	BQL
Benzo[a]pyrene	510	BQL
Benzo[b]fluoranthene	510	BQL
Benzo[g,h,i]perylene	510	790
Benzo[k]fluoranthene	510	BQL
Benzoic Acid	1000	600
Bis(2-chloroethoxy)methane	510	BQL
Bis(2-chloroethyl)ether	510	BQL
Bis(2-chloroisopropyl)ether	510	BQL
Bis(2-ethylhexyl)phthalate	510	BQL
4-bromophenyl phenyl ether	510	BQL
Butylbenzylphthalate	510	BQL
4-Chloroaniline	510	BQL
4-Chloro-3-methylphenol	510	BQL
2-Chloronaphthalene	510	BQL
2-Chlorophenol	510	BQL
4-Chlorophenyl phenyl ether	510	BQL
Chrysene	510	BQL
Di-n-Butylphthalate	510	BQL
Di-n-octylphthalate	510	BQL
Dibenzo[a,h]anthracene	510	BQL
Dibenzofuran	510	BQL
1,2-Dichlorobenzene	510	BQL
1,3-Dichlorobenzene	510	BQL
1,4-Dichlorobenzene	510	BQL
3,3'-Dichlorobenzidine	1000	BQL
2,4-Dichlorophenol	510	BQL
Diethylphthalate	510	BQL
2,4-Dimethylphenol	510	BQL
Dimethylphthalate	510	BQL
4,6-Dinitro-2-methylphenol	2600	BQL
2,4-Dinitrophenol	2600	BQL
2,4-Dinitrotoluene	510	BQL
2,6-Dinitrotoluene	510	BQL
Fluoranthene	510	BQL
Fluorene	510	BQL
Hexachlorobenzene	510	BQL
Hexachlorobutadiene	510	BQL
Hexachlorocyclopentadiene	1000	BQL
Hexachloroethane	510	BQL
Indeno(1,2,3-c,d)pyrene	510	BQL
Isophorone	510	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 323-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94427  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 80.4

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	510	BQL
2-Methylphenol	510	BQL
3- & 4-Methylphenol	510	BQL
N-Nitrosodi-n-propylamine	510	BQL
N-Nitrosodiphenylamine	510	BQL
Naphthalene	510	BQL
2-Nitroaniline	510	BQL
3-Nitroaniline	510	BQL
4-Nitroaniline	510	BQL
Nitrobenzene	510	BQL
2-Nitrophenol	510	BQL
4-Nitrophenol	2600	BQL
Pentachlorobenzene	510	BQL
Pentachlorophenol	2600	BQL
Phenanthrene	510	BQL
Phenol	510	BQL
Pyrene	510	BQL
1,2,3,4-Tetrachlorobenzene	510	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	510	BQL
1,2,3-Trichlorobenzene	510	BQL
1,2,4-Trichlorobenzene	510	BQL
1,3,5-Trichlorobenzene	510	BQL
2,4,5-Trichlorophenol	510	BQL
2,4,6-Trichlorophenol	510	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	10.2	102
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	7.3	73
4-Terphenyl-d14	10	12.2	122

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 323-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94427  
Lab Project ID: G185-81

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/8/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      80.4

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			5400
2	Alkane, Unknown			4500
3	Alkane, Unknown			2100
4	Alkane, Unknown			1200
5	Unknown			1000
6	Unknown			730
7	Unknown			610
8	Aromatic, Unknown			570
9	Unknown			540
10	Unknown			460

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 324-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94428

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

%Solids: 82.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	360	BQL
Acenaphthylene	360	BQL
Anthracene	360	BQL
Benzo[a]anthracene	360	BQL
Benzo[a]pyrene	360	BQL
Benzo[b]fluoranthene	360	BQL
Benzo[g,h,i]perylene	360	BQL
Benzo[k]fluoranthene	360	BQL
Benzoic Acid	720	BQL
Bis(2-chloroethoxy)methane	360	BQL
Bis(2-chloroethyl)ether	360	BQL
Bis(2-chloroisopropyl)ether	360	BQL
Bis(2-ethylhexyl)phthalate	360	BQL
4-bromophenyl phenyl ether	360	BQL
Butylbenzylphthalate	360	BQL
4-Chloroaniline	360	BQL
4-Chloro-3-methylphenol	360	BQL
2-Chloronaphthalene	360	BQL
2-Chlorophenol	360	BQL
4-Chlorophenyl phenyl ether	360	BQL
Chrysene	360	BQL
Di-n-Butylphthalate	360	BQL
Di-n-octylphthalate	360	BQL
Dibenzo[a,h]anthracene	360	BQL
Dibenzofuran	360	BQL
1,2-Dichlorobenzene	360	BQL
1,3-Dichlorobenzene	360	BQL
1,4-Dichlorobenzene	360	BQL
3,3'-Dichlorobenzidine	720	BQL
2,4-Dichlorophenol	360	BQL
Diethylphthalate	360	BQL
2,4-Dimethylphenol	360	BQL
Dimethylphthalate	360	BQL
4,6-Dinitro-2-methylphenol	1800	BQL
2,4-Dinitrophenol	1800	BQL
2,4-Dinitrotoluene	360	BQL
2,6-Dinitrotoluene	360	BQL
Fluoranthene	360	BQL
Fluorene	360	BQL
Hexachlorobenzene	360	BQL
Hexachlorobutadiene	360	BQL
Hexachlorocyclopentadiene	720	BQL
Hexachloroethane	360	BQL
Indeno(1,2,3-c,d)pyrene	360	BQL
Isophorone	360	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 324-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94428  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 82.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	360	BQL
2-Methylphenol	360	BQL
3- & 4-Methylphenol	360	BQL
N-Nitrosodi-n-propylamine	360	BQL
N-Nitrosodiphenylamine	360	BQL
Naphthalene	360	BQL
2-Nitroaniline	360	BQL
3-Nitroaniline	360	BQL
4-Nitroaniline	360	BQL
Nitrobenzene	360	BQL
2-Nitrophenol	360	BQL
4-Nitrophenol	1800	BQL
Pentachlorobenzene	360	BQL
Pentachlorophenol	1800	BQL
Phenanthrene	360	BQL
Phenol	360	BQL
Pyrene	360	BQL
1,2,3,4-Tetrachlorobenzene	360	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	360	BQL
1,2,3-Trichlorobenzene	360	BQL
1,2,4-Trichlorobenzene	360	BQL
1,3,5-Trichlorobenzene	360	BQL
2,4,5-Trichlorophenol	360	BQL
2,4,6-Trichlorophenol	360	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	9.4	95
Nitrobenzene-d5	10	10.4	104
Phenol-d6	10	10.4	104
2,4,6-Tribromophenol	10	9.8	98
4-Terphenyl-d14	10	12.6	126

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 324-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94428  
Lab Project ID: G185-81

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/8/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS: 82.1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			4200
2	Alkane, Unknown			3900
3	Alkane, Unknown			1500
4	Alkane, Unknown			890
5	Unknown			750
6	Unknown			680
7	Unknown			660
8	Unknown			590
9	Unknown			430
10	Unknown			380

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 370-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94429

Lab Project ID: G185-81

Matrix: Soil

%Solids: 71.8

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	1300	BQL
Acenaphthylene	1300	BQL
Anthracene	1300	BQL
Benzo[a]anthracene	1300	BQL
Benzo[a]pyrene	1300	BQL
Benzo[b]fluoranthene	1300	BQL
Benzo[g,h,i]perylene	1300	BQL
Benzo[k]fluoranthene	1300	BQL
Benzoic Acid	2700	BQL
Bis(2-chloroethoxy)methane	1300	BQL
Bis(2-chloroethyl)ether	1300	BQL
Bis(2-chloroisopropyl)ether	1300	BQL
Bis(2-ethylhexyl)phthalate	1300	BQL
4-bromophenyl phenyl ether	1300	BQL
Butylbenzylphthalate	1300	BQL
4-Chloroaniline	1300	BQL
4-Chloro-3-methylphenol	1300	BQL
2-Chloronaphthalene	1300	BQL
2-Chlorophenol	1300	BQL
4-Chlorophenyl phenyl ether	1300	BQL
Chrysene	1300	BQL
Di-n-Butylphthalate	1300	BQL
Di-n-octylphthalate	1300	BQL
Dibenzo[a,h]anthracene	1300	BQL
Dibenzofuran	1300	BQL
1,2-Dichlorobenzene	1300	BQL
1,3-Dichlorobenzene	1300	BQL
1,4-Dichlorobenzene	1300	BQL
3,3'-Dichlorobenzidine	2700	BQL
2,4-Dichlorophenol	1300	BQL
Diethylphthalate	1300	BQL
2,4-Dimethylphenol	1300	BQL
Dimethylphthalate	1300	BQL
4,6-Dinitro-2-methylphenol	6700	BQL
2,4-Dinitrophenol	6700	BQL
2,4-Dinitrotoluene	1300	BQL
2,6-Dinitrotoluene	1300	BQL
Fluoranthene	1300	BQL
Fluorene	1300	BQL
Hexachlorobenzene	1300	BQL
Hexachlorobutadiene	1300	BQL
Hexachlorocyclopentadiene	2700	BQL
Hexachloroethane	1300	BQL
Indeno(1,2,3-c,d)pyrene	1300	BQL
Isophorone	1300	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 370-0.1

Client Project ID: Kuhiman Electric

Lab Sample ID: 94429

Lab Project ID: G185-81

Matrix: Soil

%Solids: 71.8

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: .1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	1300	BQL
2-Methylphenol	1300	BQL
3- & 4-Methylphenol	1300	BQL
N-Nitrosodi-n-propylamine	1300	BQL
N-Nitrosodiphenylamine	1300	BQL
Naphthalene	1300	BQL
2-Nitroaniline	1300	BQL
3-Nitroaniline	1300	BQL
4-Nitroaniline	1300	BQL
Nitrobenzene	1300	BQL
2-Nitrophenol	1300	BQL
4-Nitrophenol	6700	BQL
Pentachlorobenzene	1300	BQL
Pentachlorophenol	6700	BQL
Phenanthrene	1300	BQL
Phenol	1300	BQL
Pyrene	1300	BQL
1,2,3,4-Tetrachlorobenzene	1300	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	1300	BQL
1,2,3-Trichlorobenzene	1300	BQL
1,2,4-Trichlorobenzene	1300	BQL
1,3,5-Trichlorobenzene	1300	BQL
2,4,5-Trichlorophenol	1300	BQL
2,4,6-Trichlorophenol	1300	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.4	94
2-Fluorophenol	10	8.8	88
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	9.7	97
2,4,6-Tribromophenol	10	9.4	94
4-Terphenyl-d14	10	10.2	102

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 370-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94429  
 Lab Project ID: G185-81

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Matrix: Soil      %SOLIDS      71.8

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			33000
2	Alkane, Unknown			27000
3	Alkane, Unknown			18000
4	Unknown			14000
5	Unknown			7700
6	Unknown			6000
7	Unknown			5600
8	Unknown			5100
9	Unknown			4400
10	Unknown			4200

**Comment:**

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Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 371-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94430

Lab Project ID: G185-81

Matrix: Soil

%Solids: 78.2

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	620	BQL
Acenaphthylene	620	BQL
Anthracene	620	BQL
Benzo[a]anthracene	620	BQL
Benzo[a]pyrene	620	BQL
Benzo[b]fluoranthene	620	BQL
Benzo[g,h,i]perylene	620	BQL
Benzo[k]fluoranthene	620	BQL
Benzoic Acid	1200	BQL
Bis(2-chloroethoxy)methane	620	BQL
Bis(2-chloroethyl)ether	620	BQL
Bis(2-chloroisopropyl)ether	620	BQL
Bis(2-ethylhexyl)phthalate	620	BQL
4-bromophenyl phenyl ether	620	BQL
Butylbenzylphthalate	620	BQL
4-Chloroaniline	620	BQL
4-Chloro-3-methylphenol	620	BQL
2-Chloronaphthalene	620	BQL
2-Chlorophenol	620	BQL
4-Chlorophenyl phenyl ether	620	BQL
Chrysene	620	BQL
Di-n-Butylphthalate	620	BQL
Di-n-octylphthalate	620	BQL
Dibenzo[a,h]anthracene	620	BQL
Dibenzofuran	620	BQL
1,2-Dichlorobenzene	620	BQL
1,3-Dichlorobenzene	620	BQL
1,4-Dichlorobenzene	620	BQL
3,3'-Dichlorobenzidine	1200	BQL
2,4-Dichlorophenol	620	BQL
Diethylphthalate	620	BQL
2,4-Dimethylphenol	620	BQL
Dimethylphthalate	620	BQL
4,6-Dinitro-2-methylphenol	3100	BQL
2,4-Dinitrophenol	3100	BQL
2,4-Dinitrotoluene	620	BQL
2,6-Dinitrotoluene	620	BQL
Fluoranthene	620	BQL
Fluorene	620	BQL
Hexachlorobenzene	620	BQL
Hexachlorobutadiene	620	BQL
Hexachlorocyclopentadiene	1200	BQL
Hexachloroethane	620	BQL
Indeno(1,2,3-c,d)pyrene	620	BQL
Isophorone	620	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 371-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94430  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 78.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	620	BQL
2-Methylphenol	620	BQL
3- & 4-Methylphenol	620	BQL
N-Nitrosodi-n-propylamine	620	BQL
N-Nitrosodiphenylamine	620	BQL
Naphthalene	620	BQL
2-Nitroaniline	620	BQL
3-Nitroaniline	620	BQL
4-Nitroaniline	620	BQL
Nitrobenzene	620	BQL
2-Nitrophenol	620	BQL
4-Nitrophenol	3100	BQL
Pentachlorobenzene	620	BQL
Pentachlorophenol	3100	BQL
Phenanthrene	620	BQL
Phenol	620	BQL
Pyrene	620	BQL
1,2,3,4-Tetrachlorobenzene	620	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	620	BQL
1,2,3-Trichlorobenzene	620	BQL
1,2,4-Trichlorobenzene	620	BQL
1,3,5-Trichlorobenzene	620	BQL
2,4,5-Trichlorophenol	620	BQL
2,4,6-Trichlorophenol	620	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	100
2-Fluorophenol	10	7.5	75
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	9.2	92
2,4,6-Tribromophenol	10	5	50
4-Terphenyl-d14	10	12.7	127

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 371-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94430  
 Lab Project ID: G185-81

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Matrix: Soil      %SOLIDS      78.2

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			2900
2	Unknown			2400
3	Unknown			1700
4	Unknown			960
5	Unknown			760
6	Unknown			660
7	Unknown			570
8	Unknown			540
9	Unknown			530
10	Vanillin	000121-33-5	90	480

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:         *lw*

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 372-0.1

Client Project ID: Kuhlman Electric

Lab Sample ID: 94431

Lab Project ID: G185-81

Matrix: Soil

%Solids: 68.5

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	720	BQL
Acenaphthylene	720	BQL
Anthracene	720	BQL
Benzo[a]anthracene	720	BQL
Benzo[a]pyrene	720	770
Benzo[b]fluoranthene	720	1500
Benzo[g,h,i]perylene	720	BQL
Benzo[k]fluoranthene	720	1000
Benzoic Acid	1400	BQL
Bis(2-chloroethoxy)methane	720	BQL
Bis(2-chloroethyl)ether	720	BQL
Bis(2-chloroisopropyl)ether	720	BQL
Bis(2-ethylhexyl)phthalate	720	BQL
4-bromophenyl phenyl ether	720	BQL
Butylbenzylphthalate	720	BQL
4-Chloroaniline	720	BQL
4-Chloro-3-methylphenol	720	BQL
2-Chloronaphthalene	720	BQL
2-Chlorophenol	720	BQL
4-Chlorophenyl phenyl ether	720	BQL
Chrysene	720	940
Di-n-Butylphthalate	720	BQL
Di-n-octylphthalate	720	BQL
Dibenzo[a,h]anthracene	720	BQL
Dibenzofuran	720	BQL
1,2-Dichlorobenzene	720	BQL
1,3-Dichlorobenzene	720	BQL
1,4-Dichlorobenzene	720	BQL
3,3'-Dichlorobenzidine	1400	BQL
2,4-Dichlorophenol	720	BQL
Diethylphthalate	720	BQL
2,4-Dimethylphenol	720	BQL
Dimethylphthalate	720	BQL
4,6-Dinitro-2-methylphenol	3600	BQL
2,4-Dinitrophenol	3600	BQL
2,4-Dinitrotoluene	720	BQL
2,6-Dinitrotoluene	720	BQL
Fluoranthene	720	1100
Fluorene	720	BQL
Hexachlorobenzene	720	BQL
Hexachlorobutadiene	720	BQL
Hexachlorocyclopentadiene	1400	BQL
Hexachloroethane	720	BQL
Indeno(1,2,3-c,d)pyrene	720	BQL
Isophorone	720	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 372-0.1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94431  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 68.5

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	720	BQL
2-Methylphenol	720	BQL
3- & 4-Methylphenol	720	BQL
N-Nitrosodi-n-propylamine	720	BQL
N-Nitrosodiphenylamine	720	BQL
Naphthalene	720	BQL
2-Nitroaniline	720	BQL
3-Nitroaniline	720	BQL
4-Nitroaniline	720	BQL
Nitrobenzene	720	BQL
2-Nitrophenol	720	BQL
4-Nitrophenol	3600	BQL
Pentachlorobenzene	720	BQL
Pentachlorophenol	3600	BQL
Phenanthrene	720	BQL
Phenol	720	BQL
Pyrene	720	BQL
1,2,3,4-Tetrachlorobenzene	720	1400
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	720	BQL
1,2,3-Trichlorobenzene	720	BQL
1,2,4-Trichlorobenzene	720	BQL
1,3,5-Trichlorobenzene	720	BQL
2,4,5-Trichlorophenol	720	BQL
2,4,6-Trichlorophenol	720	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	7.1	71
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	8.6	86
2,4,6-Tribromophenol	10	6	60
4-Terphenyl-d14	10	12.1	121

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 372-0.1  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94431  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/8/00  
Analyzed By: MRC  
Dilution: 1

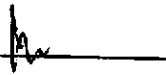
%SOLIDS 68.5

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			11000
2	Alkane, Unknown			6700
3	Alkane, Unknown			4800
4	Unknown			3700
5	Unknown			3500
6	Unknown			1800
7	Unknown			1400
8	Unknown			1300
9	Unknown			1200
10	Unknown			980

**Comment:**

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Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: RB 7804

Client Project ID: Kuhlman Electric

Lab Sample ID: 94432

Lab Project ID: G185-81

Matrix: Soil

%Solids: 88.8

Date Collected: 8/30/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	350	BQL
Acenaphthylene	350	BQL
Anthracene	350	BQL
Benzo[a]anthracene	350	BQL
Benzo[a]pyrene	350	BQL
Benzo[b]fluoranthene	350	BQL
Benzo[g,h,i]perylene	350	BQL
Benzo[k]fluoranthene	350	BQL
Benzoic Acid	700	BQL
Bis(2-chloroethoxy)methane	350	BQL
Bis(2-chloroethyl)ether	350	BQL
Bis(2-chloroisopropyl)ether	350	BQL
Bis(2-ethylhexyl)phthalate	350	BQL
4-bromophenyl phenyl ether	350	BQL
Butylbenzylphthalate	350	BQL
4-Chloroaniline	350	BQL
4-Chloro-3-methylphenol	350	BQL
2-Chloronaphthalene	350	BQL
2-Chlorophenol	350	BQL
4-Chlorophenyl phenyl ether	350	BQL
Chrysene	350	BQL
Di-n-Butylphthalate	350	BQL
Di-n-octylphthalate	350	830
Dibenzo[a,h]anthracene	350	BQL
Dibenzofuran	350	BQL
1,2-Dichlorobenzene	350	BQL
1,3-Dichlorobenzene	350	BQL
1,4-Dichlorobenzene	350	BQL
3,3'-Dichlorobenzidine	700	BQL
2,4-Dichlorophenol	350	BQL
Diethylphthalate	350	BQL
2,4-Dimethylphenol	350	BQL
Dimethylphthalate	350	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	350	BQL
2,6-Dinitrotoluene	350	BQL
Fluoranthene	350	BQL
Fluorene	350	BQL
Hexachlorobenzene	350	BQL
Hexachlorobutadiene	350	BQL
Hexachlorocyclopentadiene	700	BQL
Hexachloroethane	350	BQL
Indeno(1,2,3-c,d)pyrene	350	BQL
Isophorone	350	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: RB 7804  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94432  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 88.8

Date Collected: 8/30/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	350	BQL
2-Methylphenol	350	BQL
3- & 4-Methylphenol	350	BQL
N-Nitrosodi-n-propylamine	350	BQL
N-Nitrosodiphenylamine	350	BQL
Naphthalene	350	BQL
2-Nitroaniline	350	BQL
3-Nitroaniline	350	BQL
4-Nitroaniline	350	BQL
Nitrobenzene	350	BQL
2-Nitrophenol	350	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	350	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	350	BQL
Phenol	350	BQL
Pyrene	350	BQL
1,2,3,4-Tetrachlorobenzene	350	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	350	BQL
1,2,3-Trichlorobenzene	350	BQL
1,2,4-Trichlorobenzene	350	BQL
1,3,5-Trichlorobenzene	350	BQL
2,4,5-Trichlorophenol	350	BQL
2,4,6-Trichlorophenol	350	BQL

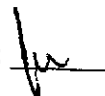
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	9.4	94
Nitrobenzene-d5	10	10.2	102
Phenol-d6	10	10.1	101
2,4,6-Tribromophenol	10	10.2	102
4-Terphenyl-d14	10	12.1	121

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: RB 7804  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94432  
 Lab Project ID: G185-81

Date Collected: 8/30/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

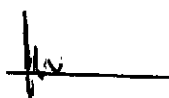
Matrix: Soil      %SOLIDS      88.8

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Hexachlorobiphenyl, Isomer of			5500
2	Hexachlorobiphenyl, Isomer of			5400
3	Hexachlorobiphenyl, Isomer of			5200
4	Pentachlorobiphenyl, Isomer of			4000
5	Pentachlorobiphenyl, Isomer of			3700
6	Pentachlorobiphenyl, Isomer of			3400
7	Pentachlorobiphenyl, Isomer of			3300
8	Pentachlorobiphenyl, Isomer of			3100
9	Tetrachlorobiphenyl, Isomer of			2400
10	Pentachlorobiphenyl, Isomer of			2300

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: RB 7805

Client Project ID: Kuhlman Electric

Lab Sample ID: 94433

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/30/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

%Solids: 88.3

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	350
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	680	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	340	BQL
2,4-Dichlorophenol	680	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	340	BQL
Hexachloroethane	680	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: RB 7805

Client Project ID: Kuhlman Electric

Lab Sample ID: 94433

Lab Project ID: G185-81

Matrix: Soil

%Solids: 88.3

Date Collected: 8/30/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	830
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	640
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

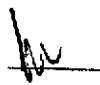
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	96
2-Fluorophenol	10	8	80
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	8.6	86
2,4,6-Tribromophenol	10	8.4	84
4-Terphenyl-d14	10	11.7	117

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: RB 7805	Date Collected: 8/30/00
Client Project ID: Kuhlman Electric	Date Received: 9/1/00
Lab Sample ID: 94433	Date Analyzed: 9/8/00
Lab Project ID: G185-81	Analyzed By: MRC
Matrix: Soil      %SOLIDS      88.3	Dilution: 1

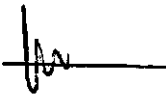
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Trimethylbenzene, Isomer of			1100
2	Dimethylbenzene, Isomer of			1100
3	Ethylmethylbenzene, Isomer of			890
4	Unknown			710
5	Alkane, Unknown			690
6	Dimethylbenzene, Isomer of			390
7	Unknown			380
8	Naphthalene, 1-methyl-	000090-12-0	90	370
9	Hexachlorobiphenyl, Isomer of			340
10	Ethylmethylbenzene, Isomer of			300

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 573-2.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94434

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/28/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

%Solids: 85.0

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	360	BQL
Acenaphthylene	360	BQL
Anthracene	360	BQL
Benzo[a]anthracene	360	BQL
Benzo[a]pyrene	360	BQL
Benzo[b]fluoranthene	360	BQL
Benzo[g,h,i]perylene	360	BQL
Benzo[k]fluoranthene	360	BQL
Benzoic Acid	720	BQL
Bis(2-chloroethoxy)methane	360	BQL
Bis(2-chloroethyl)ether	360	BQL
Bis(2-chloroisopropyl)ether	360	BQL
Bis(2-ethylhexyl)phthalate	360	BQL
4-bromophenyl phenyl ether	360	BQL
Butylbenzylphthalate	360	BQL
4-Chloroaniline	360	BQL
4-Chloro-3-methylphenol	360	BQL
2-Chloronaphthalene	360	BQL
2-Chlorophenol	360	BQL
4-Chlorophenyl phenyl ether	360	BQL
Chrysene	360	BQL
Di-n-Butylphthalate	360	BQL
Di-n-octylphthalate	360	BQL
Dibenzo[a,h]anthracene	360	BQL
Dibenzofuran	360	BQL
1,2-Dichlorobenzene	360	BQL
1,3-Dichlorobenzene	360	BQL
1,4-Dichlorobenzene	360	BQL
3,3'-Dichlorobenzidine	720	BQL
2,4-Dichlorophenol	360	BQL
Diethylphthalate	360	BQL
2,4-Dimethylphenol	360	BQL
Dimethylphthalate	360	BQL
4,6-Dinitro-2-methylphenol	1800	BQL
2,4-Dinitrophenol	1800	BQL
2,4-Dinitrotoluene	360	BQL
2,6-Dinitrotoluene	360	BQL
Fluoranthene	360	BQL
Fluorene	360	BQL
Hexachlorobenzene	360	BQL
Hexachlorobutadiene	360	BQL
Hexachlorocyclopentadiene	720	BQL
Hexachloroethane	360	BQL
Indeno(1,2,3-c,d)pyrene	360	BQL
Isophorone	360	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 573-2.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94434  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 85.0

Date Collected: 8/28/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	360	BQL
2-Methylphenol	360	BQL
3- & 4-Methylphenol	360	BQL
N-Nitrosodi-n-propylamine	360	BQL
N-Nitrosodiphenylamine	360	BQL
Naphthalene	360	BQL
2-Nitroaniline	360	BQL
3-Nitroaniline	360	BQL
4-Nitroaniline	360	BQL
Nitrobenzene	360	BQL
2-Nitrophenol	360	BQL
4-Nitrophenol	1800	BQL
Pentachlorobenzene	360	BQL
Pentachlorophenol	1800	BQL
Phenanthrene	360	BQL
Phenol	360	BQL
Pyrene	360	BQL
1,2,3,4-Tetrachlorobenzene	360	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	360	BQL
1,2,3-Trichlorobenzene	360	BQL
1,2,4-Trichlorobenzene	360	BQL
1,3,5-Trichlorobenzene	360	BQL
2,4,5-Trichlorophenol	360	BQL
2,4,6-Trichlorophenol	360	BQL

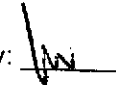
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	8.8	88
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	10.2	102
2,4,6-Tribromophenol	10	8.7	87
4-Terphenyl-d14	10	12.2	122

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
by GCMS

Client Sample ID: DP 573-2.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94434

Lab Project ID: G185-81

Matrix: Soil      %SOLIDS      85.0

Date Collected: 8/28/00

Date Received: 9/1/00

Date Analyzed: 9/8/00

Analyzed By: MRC

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:         *W*

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: ATK-3  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94435  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	620	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	620	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	620	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: ATK-3

Client Project ID: Kuhlman Electric

Lab Sample ID: 94435

Lab Project ID: G185-81

Matrix: Soil

%Solids: 92.3

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/11/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

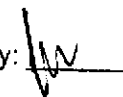
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.7	107
2-Fluorophenol	10	9.2	92
Nitrobenzene-d5	10	10.5	105
Phenol-d6	10	10.4	104
2,4,6-Tribromophenol	10	8.4	84
4-Terphenyl-d14	10	12.9	130

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: ATK-3	Date Collected: 8/31/00
Client Project ID: Kuhlman Electric	Date Received: 9/1/00
Lab Sample ID: 94435	Date Analyzed: 9/11/00
Lab Project ID: G185-81	Analyzed By: MRC
Matrix: Soil	Dilution: 1
%SOLIDS	92.3

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Hexachlorobiphenyl, Isomer of			6100
2	Hexachlorobiphenyl, Isomer of			6100
3	Hexachlorobiphenyl, Isomer of			5100
4	Pentachlorobiphenyl, Isomer of			4400
5	Pentachlorobiphenyl, Isomer of			4100
6	Pentachlorobiphenyl, Isomer of			3700
7	Pentachlorobiphenyl, Isomer of			3600
8	Pentachlorobiphenyl, Isomer of			3100
9	Pentachlorobiphenyl, Isomer of			2600
10	Unknown			2000

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 582-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94436  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 93.5

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	680	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	680	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	680	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 582-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94436  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 93.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	570
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	410
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	370
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.8	108
2-Fluorophenol	10	5.3	53
Nitrobenzene-d5	10	10.4	104
Phenol-d6	10	7.5	75
2,4,6-Tribromophenol	10	5.4	54
4-Terphenyl-d14	10	13.7	137

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 582-0.5	Date Collected: 8/29/00
Client Project ID: Kuhlman Electric	Date Received: 9/1/00
Lab Sample ID: 94436	Date Analyzed: 9/11/00
Lab Project ID: G185-81	Analyzed By: MRC
Matrix: Soil      %SOLIDS      93.5	Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			850
2	Alkane, Unknown			790
3	Unknown			750
4	Unknown			590
5	Unknown			570
6	Alkane, Unknown			420
7	Naphthalene, 1-methyl-	000090-12-0	90	370
8	Dimethylnaphthalene, Isomer of			310
9	Unknown			300
10	Alkane, Unknown			300

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 555-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94437

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/26/00

Date Received: 9/1/00

Date Analyzed: 9/11/00

Analyzed By: MRC

Dilution: 1

%Solids: 91.0

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	490	BQL
Acenaphthylene	490	BQL
Anthracene	490	BQL
Benzo[a]anthracene	490	BQL
Benzo[a]pyrene	490	BQL
Benzo[b]fluoranthene	490	BQL
Benzo[g,h,i]perylene	490	BQL
Benzo[k]fluoranthene	490	BQL
Benzoic Acid	990	BQL
Bis(2-chloroethoxy)methane	490	BQL
Bis(2-chloroethyl)ether	490	BQL
Bis(2-chloroisopropyl)ether	490	BQL
Bis(2-ethylhexyl)phthalate	490	BQL
4-bromophenyl phenyl ether	490	BQL
Butylbenzylphthalate	490	BQL
4-Chloroaniline	490	BQL
4-Chloro-3-methylphenol	490	BQL
2-Chloronaphthalene	490	BQL
2-Chlorophenol	490	BQL
4-Chlorophenyl phenyl ether	490	BQL
Chrysene	490	BQL
Di-n-Butylphthalate	490	BQL
Di-n-octylphthalate	490	BQL
Dibenzo[a,h]anthracene	490	BQL
Dibenzofuran	490	BQL
1,2-Dichlorobenzene	490	BQL
1,3-Dichlorobenzene	490	BQL
1,4-Dichlorobenzene	490	BQL
3,3'-Dichlorobenzidine	990	BQL
2,4-Dichlorophenol	490	BQL
Diethylphthalate	490	BQL
2,4-Dimethylphenol	490	BQL
Dimethylphthalate	490	BQL
4,6-Dinitro-2-methylphenol	2500	BQL
2,4-Dinitrophenol	2500	BQL
2,4-Dinitrotoluene	490	BQL
2,6-Dinitrotoluene	490	BQL
Fluoranthene	490	BQL
Fluorene	490	BQL
Hexachlorobenzene	490	BQL
Hexachlorobutadiene	490	BQL
Hexachlorocyclopentadiene	990	BQL
Hexachloroethane	490	BQL
Indeno(1,2,3-c,d)pyrene	490	BQL
Isophorone	490	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 555-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94437  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 91.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	490	BQL
2-Methylphenol	490	BQL
3- & 4-Methylphenol	490	BQL
N-Nitrosodi-n-propylamine	490	BQL
N-Nitrosodiphenylamine	490	BQL
Naphthalene	490	BQL
2-Nitroaniline	490	BQL
3-Nitroaniline	490	BQL
4-Nitroaniline	490	BQL
Nitrobenzene	490	BQL
2-Nitrophenol	490	BQL
4-Nitrophenol	2500	BQL
Pentachlorobenzene	490	BQL
Pentachlorophenol	2500	BQL
Phenanthrene	490	BQL
Phenol	490	BQL
Pyrene	490	BQL
1,2,3,4-Tetrachlorobenzene	490	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	490	BQL
1,2,3-Trichlorobenzene	490	BQL
1,2,4-Trichlorobenzene	490	BQL
1,3,5-Trichlorobenzene	490	BQL
2,4,5-Trichlorophenol	490	BQL
2,4,6-Trichlorophenol	490	BQL

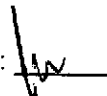
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	8.4	84
Nitrobenzene-d5	10	9.4	94
Phenol-d6	10	9.1	91
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	11.2	112

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 555-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94437  
Lab Project ID: G185-81

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      91.0

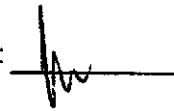
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Aromatic, Unknown			17000
2	Cedrol	000077-53-2	93	11000
3	Decahydromethanoazulene, Isomer of			9200
4	Unknown			7200
5	Alkane, Unknown			4300
6	Copaene	003856-25-5	86	3300
7	Unknown			3100
8	Alcohol, Unknown			2300
9	Alkane, Unknown			2000
10	Alkane, Unknown			1600

**Comment:**

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Reviewed by: \_\_\_\_\_



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 581-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94438  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.5

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	380	BQL
Acenaphthylene	380	BQL
Anthracene	380	BQL
Benzo[a]anthracene	380	BQL
Benzo[a]pyrene	380	BQL
Benzo[b]fluoranthene	380	BQL
Benzo[g,h,i]perylene	380	BQL
Benzo[k]fluoranthene	380	BQL
Benzoic Acid	760	BQL
Bis(2-chloroethoxy)methane	380	BQL
Bis(2-chloroethyl)ether	380	BQL
Bis(2-chloroisopropyl)ether	380	BQL
Bis(2-ethylhexyl)phthalate	380	BQL
4-bromophenyl phenyl ether	380	BQL
Butylbenzylphthalate	380	BQL
4-Chloroaniline	380	BQL
4-Chloro-3-methylphenol	380	BQL
2-Chloronaphthalene	380	BQL
2-Chlorophenol	380	BQL
4-Chlorophenyl phenyl ether	380	BQL
Chrysene	380	BQL
Di-n-Butylphthalate	380	BQL
Di-n-octylphthalate	380	BQL
Dibenzo[a,h]anthracene	380	BQL
Dibenzofuran	380	BQL
1,2-Dichlorobenzene	380	BQL
1,3-Dichlorobenzene	380	BQL
1,4-Dichlorobenzene	380	BQL
3,3'-Dichlorobenzidine	760	BQL
2,4-Dichlorophenol	380	BQL
Diethylphthalate	380	BQL
2,4-Dimethylphenol	380	BQL
Dimethylphthalate	380	BQL
4,6-Dinitro-2-methylphenol	1900	BQL
2,4-Dinitrophenol	1900	BQL
2,4-Dinitrotoluene	380	BQL
2,6-Dinitrotoluene	380	BQL
Fluoranthene	380	380
Fluorene	380	BQL
Hexachlorobenzene	380	BQL
Hexachlorobutadiene	380	BQL
Hexachlorocyclopentadiene	760	BQL
Hexachloroethane	380	BQL
Indeno(1,2,3-c,d)pyrene	380	BQL
Isophorone	380	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 581-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94438  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.5

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	380	BQL
2-Methylphenol	380	BQL
3- & 4-Methylphenol	380	BQL
N-Nitrosodi-n-propylamine	380	BQL
N-Nitrosodiphenylamine	380	BQL
Naphthalene	380	BQL
2-Nitroaniline	380	BQL
3-Nitroaniline	380	BQL
4-Nitroaniline	380	BQL
Nitrobenzene	380	BQL
2-Nitrophenol	380	BQL
4-Nitrophenol	1900	BQL
Pentachlorobenzene	380	BQL
Pentachlorophenol	1900	BQL
Phenanthrene	380	430
Phenol	380	BQL
Pyrene	380	BQL
1,2,3,4-Tetrachlorobenzene	380	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	380	BQL
1,2,3-Trichlorobenzene	380	BQL
1,2,4-Trichlorobenzene	380	BQL
1,3,5-Trichlorobenzene	380	BQL
2,4,5-Trichlorophenol	380	BQL
2,4,6-Trichlorophenol	380	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	4.5	45
Nitrobenzene-d5	10	8.8	88
Phenol-d6	10	6.2	62
2,4,6-Tribromophenol	10	4.5	45
4-Terphenyl-d14	10	10	100

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 581-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94438  
 Lab Project ID: G185-81

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

Matrix: Soil            %SOLIDS            92.5

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			3400
2	Alkane, Unknown			1500
3	Alkane, Unknown			1400
4	Unknown			1100
5	Alkane, Unknown			590
6	Alkane, Unknown			560
7	Unknown			470
8	Unknown			420
9	Alcohol, Unknown			400
10	Aromatic, Unknown			360

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:   W

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 579-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94439  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	450	BQL
Acenaphthylene	450	BQL
Anthracene	450	BQL
Benzo[a]anthracene	450	BQL
Benzo[a]pyrene	450	BQL
Benzo[b]fluoranthene	450	BQL
Benzo[g,h,i]perylene	450	BQL
Benzo[k]fluoranthene	450	BQL
Benzoic Acid	900	BQL
Bis(2-chloroethoxy)methane	450	BQL
Bis(2-chloroethyl)ether	450	BQL
Bis(2-chloroisopropyl)ether	450	BQL
Bis(2-ethylhexyl)phthalate	450	BQL
4-bromophenyl phenyl ether	450	BQL
Butylbenzylphthalate	450	BQL
4-Chloroaniline	450	BQL
4-Chloro-3-methylphenol	450	BQL
2-Chloronaphthalene	450	BQL
2-Chlorophenol	450	BQL
4-Chlorophenyl phenyl ether	450	BQL
Chrysene	450	BQL
Di-n-Butylphthalate	450	BQL
Di-n-octylphthalate	450	BQL
Dibenzo[a,h]anthracene	450	BQL
Dibenzofuran	450	BQL
1,2-Dichlorobenzene	450	BQL
1,3-Dichlorobenzene	450	BQL
1,4-Dichlorobenzene	450	BQL
3,3'-Dichlorobenzidine	900	BQL
2,4-Dichlorophenol	450	BQL
Diethylphthalate	450	BQL
2,4-Dimethylphenol	450	BQL
Dimethylphthalate	450	BQL
4,6-Dinitro-2-methylphenol	2300	BQL
2,4-Dinitrophenol	2300	BQL
2,4-Dinitrotoluene	450	BQL
2,6-Dinitrotoluene	450	BQL
Fluoranthene	450	BQL
Fluorene	450	BQL
Hexachlorobenzene	450	BQL
Hexachlorobutadiene	450	BQL
Hexachlorocyclopentadiene	900	BQL
Hexachloroethane	450	BQL
Indeno(1,2,3-c,d)pyrene	450	BQL
Isophorone	450	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 579-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94439  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/29/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	450	BQL
2-Methylphenol	450	BQL
3- & 4-Methylphenol	450	BQL
N-Nitrosodi-n-propylamine	450	BQL
N-Nitrosodiphenylamine	450	BQL
Naphthalene	450	BQL
2-Nitroaniline	450	BQL
3-Nitroaniline	450	BQL
4-Nitroaniline	450	BQL
Nitrobenzene	450	BQL
2-Nitrophenol	450	BQL
4-Nitrophenol	2300	BQL
Pentachlorobenzene	450	BQL
Pentachlorophenol	2300	BQL
Phenanthrene	450	BQL
Phenol	450	BQL
Pyrene	450	BQL
1,2,3,4-Tetrachlorobenzene	450	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	450	BQL
1,2,3-Trichlorobenzene	450	BQL
1,2,4-Trichlorobenzene	450	BQL
1,3,5-Trichlorobenzene	450	BQL
2,4,5-Trichlorophenol	450	BQL
2,4,6-Trichlorophenol	450	BQL

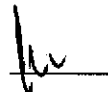
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.8	108
2-Fluorophenol	10	8.5	85
Nitrobenzene-d5	10	10.5	105
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	9.3	93
4-Terphenyl-d14	10	12.7	127

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 579-0.5	Date Collected: 8/29/00
Client Project ID: Kuhlman Electric	Date Received: 9/1/00
Lab Sample ID: 94439	Date Analyzed: 9/11/00
Lab Project ID: G185-81	Analyzed By: MRC
Matrix: Soil	%SOLIDS 90.5
	Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			2100
2	Alkane, Unknown			1500
3	Unknown			1400
4	Unknown			1300
5	Unknown			1200
6	Unknown			1000
7	Unknown			950
8	Unknown			910
9	Unknown			810
10	Unknown			770

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by:

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 545-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94440  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 76.8

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	400	BQL
Acenaphthylene	400	BQL
Anthracene	400	BQL
Benzo[a]anthracene	400	480
Benzo[a]pyrene	400	650
Benzo[b]fluoranthene	400	840
Benzo[g,h,i]perylene	400	450
Benzo[k]fluoranthene	400	600
Benzoic Acid	800	BQL
Bis(2-chloroethoxy)methane	400	BQL
Bis(2-chloroethyl)ether	400	BQL
Bis(2-chloroisopropyl)ether	400	BQL
Bis(2-ethylhexyl)phthalate	400	540
4-bromophenyl phenyl ether	400	BQL
Butylbenzylphthalate	400	BQL
4-Chloroaniline	400	BQL
4-Chloro-3-methylphenol	400	BQL
2-Chloronaphthalene	400	BQL
2-Chlorophenol	400	BQL
4-Chlorophenyl phenyl ether	400	BQL
Chrysene	400	640
Di-n-Butylphthalate	400	BQL
Di-n-octylphthalate	400	BQL
Dibenzo[a,h]anthracene	400	BQL
Dibenzofuran	400	BQL
1,2-Dichlorobenzene	400	BQL
1,3-Dichlorobenzene	400	BQL
1,4-Dichlorobenzene	400	BQL
3,3'-Dichlorobenzidine	800	BQL
2,4-Dichlorophenol	400	BQL
Diethylphthalate	400	BQL
2,4-Dimethylphenol	400	BQL
Dimethylphthalate	400	BQL
4,6-Dinitro-2-methylphenol	2000	BQL
2,4-Dinitrophenol	2000	BQL
2,4-Dinitrotoluene	400	BQL
2,6-Dinitrotoluene	400	BQL
Fluoranthene	400	1000
Fluorene	400	BQL
Hexachlorobenzene	400	BQL
Hexachlorobutadiene	400	BQL
Hexachlorocyclopentadiene	800	BQL
Hexachloroethane	400	BQL
Indeno(1,2,3-c,d)pyrene	400	480
Isophorone	400	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 545-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94440  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 76.8

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
2-Methylnaphthalene	400	BQL
2-Methylphenol	400	BQL
3- & 4-Methylphenol	400	BQL
N-Nitrosodi-n-propylamine	400	BQL
N-Nitrosodiphenylamine	400	BQL
Naphthalene	400	BQL
2-Nitroaniline	400	BQL
3-Nitroaniline	400	BQL
4-Nitroaniline	400	BQL
Nitrobenzene	400	BQL
2-Nitrophenol	400	BQL
4-Nitrophenol	2000	BQL
Pentachlorobenzene	400	BQL
Pentachlorophenol	2000	BQL
Phenanthrene	400	BQL
Phenol	400	BQL
Pyrene	400	900
1,2,3,4-Tetrachlorobenzene	400	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	400	BQL
1,2,3-Trichlorobenzene	400	BQL
1,2,4-Trichlorobenzene	400	BQL
1,3,5-Trichlorobenzene	400	BQL
2,4,5-Trichlorophenol	400	BQL
2,4,6-Trichlorophenol	400	BQL

<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
2-Fluorobiphenyl	10	10.1	101
2-Fluorophenol	10	7.7	77
Nitrobenzene-d5	10	10.4	104
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	7.5	75
4-Terphenyl-d14	10	12.3	123

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 545-0.5	Date Collected: 8/26/00
Client Project ID: Kuhlman Electric	Date Received: 9/1/00
Lab Sample ID: 94440	Date Analyzed: 9/11/00
Lab Project ID: G185-81	Analyzed By: MRC
Matrix: Soil	%SOLIDS 76.8
	Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			1700
2	Alkane, Unknown			930
3	Unknown			880
4	Unknown			790
5	Carboxylic Acid, Unknown			780
6	Alkane, Unknown			750
7	Vanillin	000121-33-5	95	620
8	Unknown			620
9	Aromatic, Unknown			460
10	Alkane, Unknown			380

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 549-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94441  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	390	BQL
Acenaphthylene	390	BQL
Anthracene	390	BQL
Benzo[a]anthracene	390	BQL
Benzo[a]pyrene	390	BQL
Benzo[b]fluoranthene	390	BQL
Benzo[g,h,i]perylene	390	BQL
Benzo[k]fluoranthene	390	BQL
Benzoic Acid	790	BQL
Bis(2-chloroethoxy)methane	390	BQL
Bis(2-chloroethyl)ether	390	BQL
Bis(2-chloroisopropyl)ether	390	BQL
Bis(2-ethylhexyl)phthalate	390	BQL
4-bromophenyl phenyl ether	390	BQL
Butylbenzylphthalate	390	BQL
4-Chloroaniline	390	BQL
4-Chloro-3-methylphenol	390	BQL
2-Chloronaphthalene	390	BQL
2-Chlorophenol	390	BQL
4-Chlorophenyl phenyl ether	390	BQL
Chrysene	390	BQL
Di-n-Butylphthalate	390	BQL
Di-n-octylphthalate	390	BQL
Dibenzo[a,h]anthracene	390	BQL
Dibenzofuran	390	BQL
1,2-Dichlorobenzene	390	BQL
1,3-Dichlorobenzene	390	BQL
1,4-Dichlorobenzene	390	BQL
3,3'-Dichlorobenzidine	790	BQL
2,4-Dichlorophenol	390	BQL
Diethylphthalate	390	BQL
2,4-Dimethylphenol	390	BQL
Dimethylphthalate	390	BQL
4,6-Dinitro-2-methylphenol	2000	BQL
2,4-Dinitrophenol	2000	BQL
2,4-Dinitrotoluene	390	BQL
2,6-Dinitrotoluene	390	BQL
Fluoranthene	390	BQL
Fluorene	390	BQL
Hexachlorobenzene	390	BQL
Hexachlorobutadiene	390	BQL
Hexachlorocyclopentadiene	790	BQL
Hexachloroethane	390	BQL
Indeno(1,2,3-c,d)pyrene	390	BQL
Isophorone	390	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 549-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94441

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/26/00

Date Received: 9/1/00

Date Analyzed: 9/11/00

Analyzed By: MRC

Dilution: 1

%Solids: 83.7

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	390	BQL
2-Methylphenol	390	BQL
3- & 4-Methylphenol	390	BQL
N-Nitrosodi-n-propylamine	390	BQL
N-Nitrosodiphenylamine	390	BQL
Naphthalene	390	BQL
2-Nitroaniline	390	BQL
3-Nitroaniline	390	BQL
4-Nitroaniline	390	BQL
Nitrobenzene	390	BQL
2-Nitrophenol	390	BQL
4-Nitrophenol	2000	BQL
Pentachlorobenzene	390	BQL
Pentachlorophenol	2000	BQL
Phenanthrene	390	BQL
Phenol	390	BQL
Pyrene	390	BQL
1,2,3,4-Tetrachlorobenzene	390	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	390	BQL
1,2,3-Trichlorobenzene	390	BQL
1,2,4-Trichlorobenzene	390	BQL
1,3,5-Trichlorobenzene	390	BQL
2,4,5-Trichlorophenol	390	BQL
2,4,6-Trichlorophenol	390	BQL

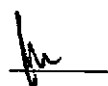
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.5	95
2-Fluorophenol	10	8.1	81
Nitrobenzene-d5	10	9.3	93
Phenol-d6	10	9.2	92
2,4,6-Tribromophenol	10	9.1	91
4-Terphenyl-d14	10	11.9	119

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 549-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94441  
Lab Project ID: G185-81

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      83.7

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			3400
2	Alkane, Unknown			2800
3	Alkane, Unknown			2000
4	Alkane, Unknown			1800
5	Unknown			890
6	Unknown			650
7	Unknown			610
8	Unknown			580
9	Alkane, Unknown			450
10	Aromatic, Unknown			420

**Comment:**

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Reviewed by: \_\_\_\_\_

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 542-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94442  
Lab Project ID: G185-81  
Matrix: Soil

%Solids: 90.4

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: MRC  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	380	BQL
Acenaphthylene	380	BQL
Anthracene	380	BQL
Benzo[a]anthracene	380	BQL
Benzo[a]pyrene	380	BQL
Benzo[b]fluoranthene	380	BQL
Benzo[g,h,i]perylene	380	BQL
Benzo[k]fluoranthene	380	BQL
Benzoic Acid	750	BQL
Bis(2-chloroethoxy)methane	380	BQL
Bis(2-chloroethyl)ether	380	BQL
Bis(2-chloroisopropyl)ether	380	BQL
Bis(2-ethylhexyl)phthalate	380	BQL
4-bromophenyl phenyl ether	380	BQL
Butylbenzylphthalate	380	BQL
4-Chloroaniline	380	BQL
4-Chloro-3-methylphenol	380	BQL
2-Chloronaphthalene	380	BQL
2-Chlorophenol	380	BQL
4-Chlorophenyl phenyl ether	380	BQL
Chrysene	380	BQL
Di-n-Butylphthalate	380	BQL
Di-n-octylphthalate	380	BQL
Dibenzo[a,h]anthracene	380	BQL
Dibenzofuran	380	BQL
1,2-Dichlorobenzene	380	BQL
1,3-Dichlorobenzene	380	BQL
1,4-Dichlorobenzene	380	BQL
3,3'-Dichlorobenzidine	750	BQL
2,4-Dichlorophenol	380	BQL
Diethylphthalate	380	BQL
2,4-Dimethylphenol	380	BQL
Dimethylphthalate	380	BQL
4,6-Dinitro-2-methylphenol	1900	BQL
2,4-Dinitrophenol	1900	BQL
2,4-Dinitrotoluene	380	BQL
2,6-Dinitrotoluene	380	BQL
Fluoranthene	380	BQL
Fluorene	380	BQL
Hexachlorobenzene	380	BQL
Hexachlorobutadiene	380	BQL
Hexachlorocyclopentadiene	750	BQL
Hexachloroethane	380	BQL
Indeno(1,2,3-c,d)pyrene	380	BQL
Isophorone	380	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 542-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94442

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/26/00

Date Received: 9/1/00

Date Analyzed: 9/11/00

Analyzed By: MRC

Dilution: 1

%Solids: 90.4

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
2-Methylnaphthalene	380	BQL
2-Methylphenol	380	BQL
3- & 4-Methylphenol	380	BQL
N-Nitrosodi-n-propylamine	380	BQL
N-Nitrosodiphenylamine	380	BQL
Naphthalene	380	BQL
2-Nitroaniline	380	BQL
3-Nitroaniline	380	BQL
4-Nitroaniline	380	BQL
Nitrobenzene	380	BQL
2-Nitrophenol	380	BQL
4-Nitrophenol	1900	BQL
Pentachlorobenzene	380	BQL
Pentachlorophenol	1900	BQL
Phenanthrene	380	BQL
Phenol	380	BQL
Pyrene	380	BQL
1,2,3,4-Tetrachlorobenzene	380	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	380	BQL
1,2,3-Trichlorobenzene	380	BQL
1,2,4-Trichlorobenzene	380	BQL
1,3,5-Trichlorobenzene	380	BQL
2,4,5-Trichlorophenol	380	BQL
2,4,6-Trichlorophenol	380	BQL


<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
2-Fluorobiphenyl	10	9.9	98
2-Fluorophenol	10	6.7	67
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	8.1	81
2,4,6-Tribromophenol	10	6.5	65
4-Terphenyl-d14	10	13	130

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 542-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94442  
Lab Project ID: G185-81

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      90.4

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			360
2	Unknown			350
3	Unknown			230
4	Unknown			200
5	Unknown			180
6	Unknown			180
7	Unknown			150
8				
9				
10				

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: ATK-2

Client Project ID: Kuhlman Electric

Lab Sample ID: 94443

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/31/00

Date Received: 9/1/00

Date Analyzed: 9/11/00

Analyzed By: MRC

Dilution: 1

%Solids: 95.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	320	BQL
Acenaphthylene	320	BQL
Anthracene	320	BQL
Benzo[a]anthracene	320	BQL
Benzo[a]pyrene	320	BQL
Benzo[b]fluoranthene	320	BQL
Benzo[g,h,i]perylene	320	BQL
Benzo[k]fluoranthene	320	BQL
Benzoic Acid	650	BQL
Bis(2-chloroethoxy)methane	320	BQL
Bis(2-chloroethyl)ether	320	BQL
Bis(2-chloroisopropyl)ether	320	BQL
Bis(2-ethylhexyl)phthalate	320	BQL
4-bromophenyl phenyl ether	320	BQL
Butylbenzylphthalate	320	BQL
4-Chloroaniline	320	BQL
4-Chloro-3-methylphenol	320	BQL
2-Chloronaphthalene	320	BQL
2-Chlorophenol	320	BQL
4-Chlorophenyl phenyl ether	320	BQL
Chrysene	320	BQL
Di-n-Butylphthalate	320	BQL
Di-n-octylphthalate	320	BQL
Dibenzo[a,h]anthracene	320	BQL
Dibenzofuran	320	BQL
1,2-Dichlorobenzene	320	BQL
1,3-Dichlorobenzene	320	BQL
1,4-Dichlorobenzene	320	BQL
3,3'-Dichlorobenzidine	650	BQL
2,4-Dichlorophenol	320	BQL
Diethylphthalate	320	BQL
2,4-Dimethylphenol	320	BQL
Dimethylphthalate	320	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	320	BQL
2,6-Dinitrotoluene	320	BQL
Fluoranthene	320	BQL
Fluorene	320	BQL
Hexachlorobenzene	320	BQL
Hexachlorobutadiene	320	BQL
Hexachlorocyclopentadiene	650	BQL
Hexachloroethane	320	BQL
Indeno(1,2,3-c,d)pyrene	320	BQL
Isophorone	320	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: ATK-2  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94443  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 95.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	320	BQL
2-Methylphenol	320	BQL
3- & 4-Methylphenol	320	BQL
N-Nitrosodi-n-propylamine	320	BQL
N-Nitrosodiphenylamine	320	BQL
Naphthalene	320	BQL
2-Nitroaniline	320	BQL
3-Nitroaniline	320	BQL
4-Nitroaniline	320	BQL
Nitrobenzene	320	BQL
2-Nitrophenol	320	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	320	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	320	BQL
Phenol	320	BQL
Pyrene	320	BQL
1,2,3,4-Tetrachlorobenzene	320	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	320	BQL
1,2,3-Trichlorobenzene	320	BQL
1,2,4-Trichlorobenzene	320	BQL
1,3,5-Trichlorobenzene	320	BQL
2,4,5-Trichlorophenol	320	BQL
2,4,6-Trichlorophenol	320	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.6	106
2-Fluorophenol	10	9.7	98
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	10.6	106
2,4,6-Tribromophenol	10	10.2	102
4-Terphenyl-d14	10	10.6	106

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results of Library Search for Semivolatile Compounds**

*by GCMS*

Client Sample ID: ATK-2  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94443  
Lab Project ID: G185-81

Date Collected: 8/31/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      95.3

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Carboxylic Acid, Unknown			5200
2	Unknown			1500
3	Unknown			1200
4	Unknown			400
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

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Reviewed by: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: ATK-1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94444  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 94.0

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	BQL
Benzo[a]pyrene	330	BQL
Benzo[b]fluoranthene	330	BQL
Benzo[g,h,i]perylene	330	BQL
Benzo[k]fluoranthene	330	BQL
Benzoic Acid	650	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	BQL
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	BQL
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	BQL
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	650	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	BQL
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	650	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	BQL
Isophorone	330	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: ATK-1  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94444  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/31/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/11/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 94.0

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
2-Methylnaphthalene	330	BQL
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	BQL
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	330	BQL
Phenol	330	BQL
Pyrene	330	BQL
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL

<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
2-Fluorobiphenyl	10	10.5	105
2-Fluorophenol	10	10.1	101
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	10	100
2,4,6-Tribromophenol	10	10.8	109
4-Terphenyl-d14	10	11.9	119

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: ATK-1	Date Collected: 8/31/00
Client Project ID: Kuhlman Electric	Date Received: 9/1/00
Lab Sample ID: 94444	Date Analyzed: 9/11/00
Lab Project ID: G185-81	Analyzed By: MRC
Matrix: Soil	%SOLIDS 94.0
	Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: HA 593-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94445

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/29/00

Date Received: 9/1/00

Date Analyzed: 9/11/00

Analyzed By: MRC

Dilution: 1

%Solids: 99.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	320	BQL
Acenaphthylene	320	BQL
Anthracene	320	BQL
Benzo[a]anthracene	320	BQL
Benzo[a]pyrene	320	BQL
Benzo[b]fluoranthene	320	BQL
Benzo[g,h,i]perylene	320	BQL
Benzo[k]fluoranthene	320	BQL
Benzoic Acid	640	BQL
Bis(2-chloroethoxy)methane	320	BQL
Bis(2-chloroethyl)ether	320	BQL
Bis(2-chloroisopropyl)ether	320	BQL
Bis(2-ethylhexyl)phthalate	320	BQL
4-bromophenyl phenyl ether	320	BQL
Butylbenzylphthalate	320	BQL
4-Chloroaniline	320	BQL
4-Chloro-3-methylphenol	320	BQL
2-Chloronaphthalene	320	BQL
2-Chlorophenol	320	BQL
4-Chlorophenyl phenyl ether	320	BQL
Chrysene	320	BQL
Di-n-Butylphthalate	320	BQL
Di-n-octylphthalate	320	BQL
Dibenzo[a,h]anthracene	320	BQL
Dibenzofuran	320	BQL
1,2-Dichlorobenzene	320	BQL
1,3-Dichlorobenzene	320	BQL
1,4-Dichlorobenzene	320	BQL
3,3'-Dichlorobenzidine	640	BQL
2,4-Dichlorophenol	320	BQL
Diethylphthalate	320	BQL
2,4-Dimethylphenol	320	BQL
Dimethylphthalate	320	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	320	BQL
2,6-Dinitrotoluene	320	BQL
Fluoranthene	320	BQL
Fluorene	320	BQL
Hexachlorobenzene	320	BQL
Hexachlorobutadiene	320	BQL
Hexachlorocyclopentadiene	640	BQL
Hexachloroethane	320	BQL
Indeno(1,2,3-c,d)pyrene	320	BQL
Isophorone	320	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: HA 593-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94445

Lab Project ID: G185-81

Matrix: Soil

%Solids: 99.3

Date Collected: 8/29/00

Date Received: 9/1/00

Date Analyzed: 9/11/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	320	BQL
2-Methylphenol	320	BQL
3- & 4-Methylphenol	320	BQL
N-Nitrosodi-n-propylamine	320	BQL
N-Nitrosodiphenylamine	320	BQL
Naphthalene	320	BQL
2-Nitroaniline	320	BQL
3-Nitroaniline	320	BQL
4-Nitroaniline	320	BQL
Nitrobenzene	320	BQL
2-Nitrophenol	320	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	320	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	320	BQL
Phenol	320	BQL
Pyrene	320	BQL
1,2,3,4-Tetrachlorobenzene	320	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	320	BQL
1,2,3-Trichlorobenzene	320	BQL
1,2,4-Trichlorobenzene	320	BQL
1,3,5-Trichlorobenzene	320	BQL
2,4,5-Trichlorophenol	320	BQL
2,4,6-Trichlorophenol	320	BQL

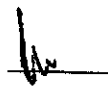
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	8.8	88
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	8.9	89
2,4,6-Tribromophenol	10	9.6	96
4-Terphenyl-d14	10	11.4	114

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: HA 593-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94445  
Lab Project ID: G185-81

Date Collected: 8/29/00  
Date Received: 9/1/00  
Date Analyzed: 9/11/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      99.3

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			410
2	Unknown			400
3	Unknown			260
4	Unknown			210
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 534-2.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94446

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/26/00

Date Received: 9/1/00

Date Analyzed: 9/12/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	690	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	690	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	690	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 534-2.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94446  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 88.2

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

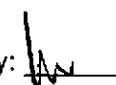
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	7.6	76
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	8.5	85
2,4,6-Tribromophenol	10	7.7	77
4-Terphenyl-d14	10	11.3	114

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 534-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94446  
Lab Project ID: G185-81

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      88.2

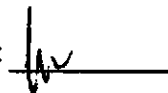
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 536-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94447  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 94.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	1100
Benzo[a]pyrene	330	1600
Benzo[b]fluoranthene	330	1900
Benzo[g,h,i]perylene	330	940
Benzo[k]fluoranthene	330	1300
Benzoic Acid	650	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	BQL
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	1500
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	360
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	650	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	2800
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	650	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	1100
Isophorone	330	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 536-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94447  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 94.9

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	330	BQL
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	BQL
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	330	980
Phenol	330	BQL
Pyrene	330	2100
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.7	107
2-Fluorophenol	10	8.9	89
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	9.4	94
2,4,6-Tribromophenol	10	10.2	102
4-Terphenyl-d14	10	11.9	119

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 536-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94447  
Lab Project ID: G185-81

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      94.9

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Aromatic, Unknown			1400
2	Alkane, Unknown			1200
3	Alkane, Unknown			1100
4	Alkane, Unknown			630
5	Unknown			520
6	Aromatic, Unknown			370
7	Aromatic, Unknown			330
8	Unknown			320
9	Unknown			300
10	Alcohol, Unknown			300

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 541-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94448  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	550	BQL
Acenaphthylene	550	BQL
Anthracene	550	1300
Benzo[a]anthracene	550	11000
Benzo[a]pyrene	550	15000
Benzo[b]fluoranthene	550	24000
Benzo[g,h,i]perylene	550	10000
Benzo[k]fluoranthene	550	10000
Benzoic Acid	1100	BQL
Bis(2-chloroethoxy)methane	550	BQL
Bis(2-chloroethyl)ether	550	BQL
Bis(2-chloroisopropyl)ether	550	BQL
Bis(2-ethylhexyl)phthalate	550	1800
4-bromophenyl phenyl ether	550	BQL
Butylbenzylphthalate	550	1000
4-Chloroaniline	550	BQL
4-Chloro-3-methylphenol	550	BQL
2-Chloronaphthalene	550	BQL
2-Chlorophenol	550	BQL
4-Chlorophenyl phenyl ether	550	BQL
Chrysene	550	14000
Di-n-Butylphthalate	550	BQL
Di-n-octylphthalate	550	BQL
Dibenzo[a,h]anthracene	550	4900
Dibenzofuran	550	BQL
1,2-Dichlorobenzene	550	BQL
1,3-Dichlorobenzene	550	BQL
1,4-Dichlorobenzene	550	BQL
3,3'-Dichlorobenzidine	1100	BQL
2,4-Dichlorophenol	550	BQL
Diethylphthalate	550	BQL
2,4-Dimethylphenol	550	BQL
Dimethylphthalate	550	BQL
4,6-Dinitro-2-methylphenol	2800	BQL
2,4-Dinitrophenol	2800	BQL
2,4-Dinitrotoluene	550	BQL
2,6-Dinitrotoluene	550	BQL
Fluoranthene	550	22000
Fluorene	550	BQL
Hexachlorobenzene	550	BQL
Hexachlorobutadiene	550	BQL
Hexachlorocyclopentadiene	1100	BQL
Hexachloroethane	550	BQL
Indeno(1,2,3-c,d)pyrene	550	12000
Isophorone	550	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 541-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94448  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 83.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	550	BQL
2-Methylphenol	550	BQL
3- & 4-Methylphenol	550	BQL
N-Nitrosodi-n-propylamine	550	BQL
N-Nitrosodiphenylamine	550	BQL
Naphthalene	550	BQL
2-Nitroaniline	550	BQL
3-Nitroaniline	550	BQL
4-Nitroaniline	550	BQL
Nitrobenzene	550	BQL
2-Nitrophenol	550	BQL
4-Nitrophenol	2800	BQL
Pentachlorobenzene	550	BQL
Pentachlorophenol	2800	BQL
Phenanthrene	550	7800
Phenol	550	BQL
Pyrene	550	18000
1,2,3,4-Tetrachlorobenzene	550	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	550	BQL
1,2,3-Trichlorobenzene	550	BQL
1,2,4-Trichlorobenzene	550	BQL
1,3,5-Trichlorobenzene	550	BQL
2,4,5-Trichlorophenol	550	BQL
2,4,6-Trichlorophenol	550	BQL


Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.1	91
2-Fluorophenol	10	6.5	65
Nitrobenzene-d5	10	8.7	87
Phenol-d6	10	7.9	79
2,4,6-Tribromophenol	10	8.8	88
4-Terphenyl-d14	10	11.6	116

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 541-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94448  
Lab Project ID: G185-81

Date Collected: 8/26/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      83.8

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			3600
2	Aromatic, Unknown			3200
3	Unknown			2000
4	Aromatic, Unknown			1800
5	Aromatic, Unknown			1700
6	Unknown			1600
7	Aromatic, Unknown			1600
8	Carboxylic Acid, Unknown			1500
9	Aromatic, Unknown			1300
10	Carboxylic Acid, Unknown			1100

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 520-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94449  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	BQL
Benzo[a]pyrene	330	BQL
Benzo[b]fluoranthene	330	BQL
Benzo[g,h,i]perylene	330	BQL
Benzo[k]fluoranthene	330	BQL
Benzoic Acid	670	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	BQL
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	BQL
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	BQL
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	670	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	BQL
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	670	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	BQL
Isophorone	330	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 520-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94449

Lab Project ID: G185-81

Matrix: Soil

%Solids: 92.1

Date Collected: 8/25/00

Date Received: 9/1/00

Date Analyzed: 9/12/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	330	770
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	530
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	330	370
Phenol	330	BQL
Pyrene	330	BQL
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL

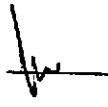
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	101
2-Fluorophenol	10	6.5	65
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	6.9	69
2,4,6-Tribromophenol	10	7.3	73
4-Terphenyl-d14	10	11	110

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 520-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94449  
Lab Project ID: G185-81

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      92.1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			910
2	Alkane, Unknown			860
3	Unknown			760
4	Alkane, Unknown			600
5	Aromatic, Unknown			580
6	Aromatic, Unknown			480
7	Dimethylbenzene, Isomer of			460
8	Unknown			440
9	Alkane, Unknown			440
10	Unknown			390

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: hw

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 518-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94450  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 93.4

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	BQL
Benzo[a]pyrene	330	BQL
Benzo[b]fluoranthene	330	BQL
Benzo[g,h,i]perylene	330	BQL
Benzo[k]fluoranthene	330	BQL
Benzoic Acid	660	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	350
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	BQL
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	BQL
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	660	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	BQL
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	660	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	BQL
Isophorone	330	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 518-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94450  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 93.4

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	330	BQL
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	BQL
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	330	BQL
Phenol	330	BQL
Pyrene	330	BQL
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	8.9	89
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	9.2	92
2,4,6-Tribromophenol	10	10.2	102
4-Terphenyl-d14	10	13.6	136

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 518-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94450  
Lab Project ID: G185-81

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      93.4

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			2500
2	Alkane, Unknown			1400
3	Unknown			1300
4	Unknown			760
5	Unknown			680
6	Unknown			640
7	Unknown			490
8	Unknown			470
9	Unknown			390
10	Unknown			380

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: hw

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 523-2.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94451

Lab Project ID: G185-81

Matrix: Soil

%Solids: 86.9

Date Collected: 8/25/00

Date Received: 9/1/00

Date Analyzed: 9/12/00

Analyzed By: MRC

Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	350	BQL
Acenaphthylene	350	BQL
Anthracene	350	BQL
Benzo[a]anthracene	350	BQL
Benzo[a]pyrene	350	BQL
Benzo[b]fluoranthene	350	BQL
Benzo[g,h,i]perylene	350	BQL
Benzo[k]fluoranthene	350	BQL
Benzoic Acid	710	BQL
Bis(2-chloroethoxy)methane	350	BQL
Bis(2-chloroethyl)ether	350	BQL
Bis(2-chloroisopropyl)ether	350	BQL
Bis(2-ethylhexyl)phthalate	350	BQL
4-bromophenyl phenyl ether	350	BQL
Butylbenzylphthalate	350	BQL
4-Chloroaniline	350	BQL
4-Chloro-3-methylphenol	350	BQL
2-Chloronaphthalene	350	BQL
2-Chlorophenol	350	BQL
4-Chlorophenyl phenyl ether	350	BQL
Chrysene	350	BQL
Di-n-Butylphthalate	350	BQL
Di-n-octylphthalate	350	BQL
Dibenzo[a,h]anthracene	350	BQL
Dibenzofuran	350	BQL
1,2-Dichlorobenzene	350	BQL
1,3-Dichlorobenzene	350	BQL
1,4-Dichlorobenzene	350	BQL
3,3'-Dichlorobenzidine	710	BQL
2,4-Dichlorophenol	350	BQL
Diethylphthalate	350	BQL
2,4-Dimethylphenol	350	BQL
Dimethylphthalate	350	BQL
4,6-Dinitro-2-methylphenol	1800	BQL
2,4-Dinitrophenol	1800	BQL
2,4-Dinitrotoluene	350	BQL
2,6-Dinitrotoluene	350	BQL
Fluoranthene	350	BQL
Fluorene	350	BQL
Hexachlorobenzene	350	BQL
Hexachlorobutadiene	350	BQL
Hexachlorocyclopentadiene	710	BQL
Hexachloroethane	350	BQL
Indeno(1,2,3-c,d)pyrene	350	BQL
Isophorone	350	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 523-2.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94451  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 86.9

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	350	BQL
2-Methylphenol	350	BQL
3- & 4-Methylphenol	350	BQL
N-Nitrosodi-n-propylamine	350	BQL
N-Nitrosodiphenylamine	350	BQL
Naphthalene	350	BQL
2-Nitroaniline	350	BQL
3-Nitroaniline	350	BQL
4-Nitroaniline	350	BQL
Nitrobenzene	350	BQL
2-Nitrophenol	350	BQL
4-Nitrophenol	1800	BQL
Pentachlorobenzene	350	BQL
Pentachlorophenol	1800	BQL
Phenanthrene	350	BQL
Phenol	350	BQL
Pyrene	350	BQL
1,2,3,4-Tetrachlorobenzene	350	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	350	BQL
1,2,3-Trichlorobenzene	350	BQL
1,2,4-Trichlorobenzene	350	BQL
1,3,5-Trichlorobenzene	350	BQL
2,4,5-Trichlorophenol	350	BQL
2,4,6-Trichlorophenol	350	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	7.8	78
Nitrobenzene-d5	10	8.7	87
Phenol-d6	10	8.2	82
2,4,6-Tribromophenol	10	7.9	79
4-Terphenyl-d14	10	12	120

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 523-2.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94451

Lab Project ID: G185-81

Matrix: Soil      %SOLIDS      86.9

Date Collected: 8/25/00

Date Received: 9/1/00

Date Analyzed: 9/12/00

Analyzed By: MRC

Dilution: 1

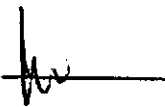
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_





**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 538-2.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94452  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 88.8

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	690	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	690	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	690	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 538-2.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94452  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/26/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 88.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
2-Fluorophenol	10	7.8	78
Nitrobenzene-d5	10	8.3	83
Phenol-d6	10	8.2	82
2,4,6-Tribromophenol	10	8.2	82
4-Terphenyl-d14	10	11.3	113

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 538-2.5

Date Collected: 8/26/00

Client Project ID: Kuhlman Electric

Date Received: 9/1/00

Lab Sample ID: 94452

Date Analyzed: 9/12/00

Lab Project ID: G185-81

Analyzed By: MRC

Matrix: Soil      %SOLIDS      88.8

Dilution: 1

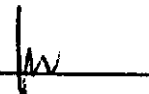
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles  
by GCMS 8270

Client Sample ID: DP 523-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94453  
Lab Project ID: G185-81

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC

Matrix: Soil

%Solids: 92.3

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	BQL
Benzo[a]pyrene	330	390
Benzo[b]fluoranthene	330	530
Benzo[g,h,i]perylene	330	BQL
Benzo[k]fluoranthene	330	490
Benzoic Acid	660	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	950
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	380
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	BQL
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	660	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	460
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	660	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	BQL
Isophorone	330	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 523-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94453  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	330	BQL
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	BQL
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	330	BQL
Phenol	330	BQL
Pyrene	330	530
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.2	102
2-Fluorophenol	10	6.6	66
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	7.6	76
2,4,6-Tribromophenol	10	6.9	69
4-Terphenyl-d14	10	12.8	128

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 523-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94453  
Lab Project ID: G185-81

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      92.3

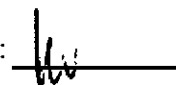
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1300
2	Alkane, Unknown			1300
3	Unknown			920
4	Unknown			540
5	Unknown			400
6	Unknown			390
7	Unknown			340
8	Unknown			340
9	Alkane, Unknown			310
10	Unknown			310

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles

by GCMS 8270

Client Sample ID: DP 490-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94454

Lab Project ID: G185-81

Matrix: Soil

Date Collected: 8/24/00

Date Received: 9/1/00

Date Analyzed: 9/12/00

Analyzed By: MRC

Dilution: 1

%Solids: 92.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	BQL
Benzo[a]pyrene	330	BQL
Benzo[b]fluoranthene	330	BQL
Benzo[g,h,i]perylene	330	BQL
Benzo[k]fluoranthene	330	BQL
Benzoic Acid	660	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	BQL
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	BQL
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	BQL
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	660	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	BQL
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	660	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	BQL
Isophorone	330	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 490-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94454  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/24/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 92.8

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	330	BQL
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	BQL
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	330	BQL
Phenol	330	BQL
Pyrene	330	BQL
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.8	98
2-Fluorophenol	10	6.4	64
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	7.3	73
2,4,6-Tribromophenol	10	5.9	59
4-Terphenyl-d14	10	11.8	118

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 490-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94454  
Lab Project ID: G185-81

Date Collected: 8/24/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      92.8

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Alkane, Unknown			1500
2	Alkane, Unknown			1100
3	Unknown			850
4	Unknown			490
5	Unknown			250
6	Unknown			210
7	Unknown			200
8	Unknown			140
9				
10				

**Comment:**

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Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 464-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94455  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/23/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 95.3

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	320	BQL
Acenaphthylene	320	BQL
Anthracene	320	BQL
Benzo[a]anthracene	320	BQL
Benzo[a]pyrene	320	BQL
Benzo[b]fluoranthene	320	BQL
Benzo[g,h,i]perylene	320	BQL
Benzo[k]fluoranthene	320	BQL
Benzoic Acid	640	BQL
Bis(2-chloroethoxy)methane	320	BQL
Bis(2-chloroethyl)ether	320	BQL
Bis(2-chloroisopropyl)ether	320	BQL
Bis(2-ethylhexyl)phthalate	320	BQL
4-bromophenyl phenyl ether	320	BQL
Butylbenzylphthalate	320	BQL
4-Chloroaniline	320	BQL
4-Chloro-3-methylphenol	320	BQL
2-Chloronaphthalene	320	BQL
2-Chlorophenol	320	BQL
4-Chlorophenyl phenyl ether	320	BQL
Chrysene	320	BQL
Di-n-Butylphthalate	320	BQL
Di-n-octylphthalate	320	BQL
Dibenzo[a,h]anthracene	320	BQL
Dibenzofuran	320	BQL
1,2-Dichlorobenzene	320	BQL
1,3-Dichlorobenzene	320	BQL
1,4-Dichlorobenzene	320	BQL
3,3'-Dichlorobenzidine	640	BQL
2,4-Dichlorophenol	320	BQL
Diethylphthalate	320	BQL
2,4-Dimethylphenol	320	BQL
Dimethylphthalate	320	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	320	BQL
2,6-Dinitrotoluene	320	BQL
Fluoranthene	320	BQL
Fluorene	320	BQL
Hexachlorobenzene	320	BQL
Hexachlorobutadiene	320	BQL
Hexachlorocyclopentadiene	640	BQL
Hexachloroethane	320	BQL
Indeno(1,2,3-c,d)pyrene	320	BQL
Isophorone	320	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 464-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94455  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/23/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 95.3

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	320	BQL
2-Methylphenol	320	BQL
3- & 4-Methylphenol	320	BQL
N-Nitrosodi-n-propylamine	320	BQL
N-Nitrosodiphenylamine	320	BQL
Naphthalene	320	BQL
2-Nitroaniline	320	BQL
3-Nitroaniline	320	BQL
4-Nitroaniline	320	BQL
Nitrobenzene	320	BQL
2-Nitrophenol	320	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	320	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	320	BQL
Phenol	320	BQL
Pyrene	320	BQL
1,2,3,4-Tetrachlorobenzene	320	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	320	BQL
1,2,3-Trichlorobenzene	320	BQL
1,2,4-Trichlorobenzene	320	BQL
1,3,5-Trichlorobenzene	320	BQL
2,4,5-Trichlorophenol	320	BQL
2,4,6-Trichlorophenol	320	BQL

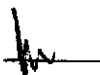
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.5	105
2-Fluorophenol	10	9	90
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	9.6	96
2,4,6-Tribromophenol	10	9.5	95
4-Terphenyl-d14	10	13.4	134

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results of Library Search for Semivolatile Compounds**  
*by GCMS*

Client Sample ID: DP 464-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94455  
Lab Project ID: G185-81

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      95.3

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Unknown			590
2	Hexachlorobiphenyl, Isomer of			520
3	Hexachlorobiphenyl, Isomer of			370
4	Unknown			350
5	Hexachlorobiphenyl, Isomer of			270
6	Unknown			260
7	Unknown			250
8	Unknown			150
9	Unknown			130
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 464-4  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94456  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/23/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	350	BQL
Acenaphthylene	350	BQL
Anthracene	350	BQL
Benzo[a]anthracene	350	BQL
Benzo[a]pyrene	350	BQL
Benzo[b]fluoranthene	350	BQL
Benzo[g,h,i]perylene	350	BQL
Benzo[k]fluoranthene	350	BQL
Benzoic Acid	690	BQL
Bis(2-chloroethoxy)methane	350	BQL
Bis(2-chloroethyl)ether	350	BQL
Bis(2-chloroisopropyl)ether	350	BQL
Bis(2-ethylhexyl)phthalate	350	BQL
4-bromophenyl phenyl ether	350	BQL
Butylbenzylphthalate	350	BQL
4-Chloroaniline	350	BQL
4-Chloro-3-methylphenol	350	BQL
2-Chloronaphthalene	350	BQL
2-Chlorophenol	350	BQL
4-Chlorophenyl phenyl ether	350	BQL
Chrysene	350	BQL
Di-n-Butylphthalate	350	BQL
Di-n-octylphthalate	350	BQL
Dibenzo[a,h]anthracene	350	BQL
Dibenzofuran	350	BQL
1,2-Dichlorobenzene	350	BQL
1,3-Dichlorobenzene	350	BQL
1,4-Dichlorobenzene	350	BQL
3,3'-Dichlorobenzidine	690	BQL
2,4-Dichlorophenol	350	BQL
Diethylphthalate	350	BQL
2,4-Dimethylphenol	350	BQL
Dimethylphthalate	350	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	350	BQL
2,6-Dinitrotoluene	350	BQL
Fluoranthene	350	BQL
Fluorene	350	BQL
Hexachlorobenzene	350	BQL
Hexachlorobutadiene	350	BQL
Hexachlorocyclopentadiene	690	BQL
Hexachloroethane	350	BQL
Indeno(1,2,3-c,d)pyrene	350	BQL
Isophorone	350	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 464-4  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94456  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/23/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 90.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	350	BQL
2-Methylphenol	350	BQL
3- & 4-Methylphenol	350	BQL
N-Nitrosodi-n-propylamine	350	BQL
N-Nitrosodiphenylamine	350	BQL
Naphthalene	350	BQL
2-Nitroaniline	350	BQL
3-Nitroaniline	350	BQL
4-Nitroaniline	350	BQL
Nitrobenzene	350	BQL
2-Nitrophenol	350	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	350	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	350	BQL
Phenol	350	BQL
Pyrene	350	BQL
1,2,3,4-Tetrachlorobenzene	350	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	350	BQL
1,2,3-Trichlorobenzene	350	BQL
1,2,4-Trichlorobenzene	350	BQL
1,3,5-Trichlorobenzene	350	BQL
2,4,5-Trichlorophenol	350	BQL
2,4,6-Trichlorophenol	350	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	8.4	84
Nitrobenzene-d5	10	8.6	86
Phenol-d6	10	8.8	88
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	13.1	131

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 464-4  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94456  
Lab Project ID: G185-81  
Matrix: Soil      %SOLIDS      90.0  
Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

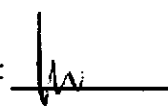
Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 465-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94457  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/23/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 81.8

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	410	BQL
Acenaphthylene	410	BQL
Anthracene	410	BQL
Benzo[a]anthracene	410	910
Benzo[a]pyrene	410	1200
Benzo[b]fluoranthene	410	1300
Benzo[g,h,i]perylene	410	720
Benzo[k]fluoranthene	410	1200
Benzoic Acid	820	BQL
Bis(2-chloroethoxy)methane	410	BQL
Bis(2-chloroethyl)ether	410	BQL
Bis(2-chloroisopropyl)ether	410	BQL
Bis(2-ethylhexyl)phthalate	410	BQL
4-bromophenyl phenyl ether	410	BQL
Butylbenzylphthalate	410	BQL
4-Chloroaniline	410	BQL
4-Chloro-3-methylphenol	410	BQL
2-Chloronaphthalene	410	BQL
2-Chlorophenol	410	BQL
4-Chlorophenyl phenyl ether	410	BQL
Chrysene	410	1100
Di-n-Butylphthalate	410	BQL
Di-n-octylphthalate	410	BQL
Dibenzo[a,h]anthracene	410	BQL
Dibenzofuran	410	BQL
1,2-Dichlorobenzene	410	BQL
1,3-Dichlorobenzene	410	BQL
1,4-Dichlorobenzene	410	BQL
3,3'-Dichlorobenzidine	820	BQL
2,4-Dichlorophenol	410	BQL
Diethylphthalate	410	BQL
2,4-Dimethylphenol	410	BQL
Dimethylphthalate	410	BQL
4,6-Dinitro-2-methylphenol	2100	BQL
2,4-Dinitrophenol	2100	BQL
2,4-Dinitrotoluene	410	BQL
2,6-Dinitrotoluene	410	BQL
Fluoranthene	410	2200
Fluorene	410	BQL
Hexachlorobenzene	410	BQL
Hexachlorobutadiene	410	BQL
Hexachlorocyclopentadiene	820	BQL
Hexachloroethane	410	BQL
Indeno(1,2,3-c,d)pyrene	410	820
Isophorone	410	BQL



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 465-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94457

Lab Project ID: G185-81

Matrix: Soil

%Solids: 81.8

Date Collected: 8/23/00

Date Received: 9/1/00

Date Analyzed: 9/12/00

Analyzed By: MRC

Dilution: 1

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
2-Methylnaphthalene	410	BQL
2-Methylphenol	410	BQL
3- & 4-Methylphenol	410	BQL
N-Nitrosodi-n-propylamine	410	BQL
N-Nitrosodiphenylamine	410	BQL
Naphthalene	410	BQL
2-Nitroaniline	410	BQL
3-Nitroaniline	410	BQL
4-Nitroaniline	410	BQL
Nitrobenzene	410	BQL
2-Nitrophenol	410	BQL
4-Nitrophenol	2100	BQL
Pentachlorobenzene	410	BQL
Pentachlorophenol	2100	BQL
Phenanthrene	410	1000
Phenol	410	BQL
Pyrene	410	1900
1,2,3,4-Tetrachlorobenzene	410	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	410	BQL
1,2,3-Trichlorobenzene	410	BQL
1,2,4-Trichlorobenzene	410	BQL
1,3,5-Trichlorobenzene	410	BQL
2,4,5-Trichlorophenol	410	BQL
2,4,6-Trichlorophenol	410	BQL

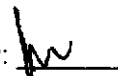
<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	6.7	67
Nitrobenzene-d5	10	8.9	89
Phenol-d6	10	7.9	79
2,4,6-Tribromophenol	10	7.7	77
4-Terphenyl-d14	10	12.5	125

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 465-0.5

Date Collected: 8/23/00

Client Project ID: Kuhlman Electric

Date Received: 9/1/00

Lab Sample ID: 94457

Date Analyzed: 9/12/00

Lab Project ID: G185-81

Analyzed By: MRC

Matrix: Soil %SOLIDS 81.8

Dilution: 1

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Aromatic, Unknown			1300
2	Unknown			1100
3	Unknown			1000
4	Alkane, Unknown			810
5	Unknown			600
6	Hexachlorobiphenyl, Isomer of			570
7	Hexachlorobiphenyl, Isomer of			500
8	Unknown			500
9	Unknown			350
10	Unknown			320

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 465-4  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94458  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/23/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 90.2

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	330	BQL
Acenaphthylene	330	BQL
Anthracene	330	BQL
Benzo[a]anthracene	330	BQL
Benzo[a]pyrene	330	BQL
Benzo[b]fluoranthene	330	BQL
Benzo[g,h,i]perylene	330	BQL
Benzo[k]fluoranthene	330	BQL
Benzoic Acid	660	BQL
Bis(2-chloroethoxy)methane	330	BQL
Bis(2-chloroethyl)ether	330	BQL
Bis(2-chloroisopropyl)ether	330	BQL
Bis(2-ethylhexyl)phthalate	330	BQL
4-bromophenyl phenyl ether	330	BQL
Butylbenzylphthalate	330	BQL
4-Chloroaniline	330	BQL
4-Chloro-3-methylphenol	330	BQL
2-Chloronaphthalene	330	BQL
2-Chlorophenol	330	BQL
4-Chlorophenyl phenyl ether	330	BQL
Chrysene	330	BQL
Di-n-Butylphthalate	330	BQL
Di-n-octylphthalate	330	BQL
Dibenzo[a,h]anthracene	330	BQL
Dibenzofuran	330	BQL
1,2-Dichlorobenzene	330	BQL
1,3-Dichlorobenzene	330	BQL
1,4-Dichlorobenzene	330	BQL
3,3'-Dichlorobenzidine	660	BQL
2,4-Dichlorophenol	330	BQL
Diethylphthalate	330	BQL
2,4-Dimethylphenol	330	BQL
Dimethylphthalate	330	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	330	BQL
2,6-Dinitrotoluene	330	BQL
Fluoranthene	330	BQL
Fluorene	330	BQL
Hexachlorobenzene	330	BQL
Hexachlorobutadiene	330	BQL
Hexachlorocyclopentadiene	660	BQL
Hexachloroethane	330	BQL
Indeno(1,2,3-c,d)pyrene	330	BQL
Isophorone	330	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 465-4  
 Client Project ID: Kuhman Electric  
 Lab Sample ID: 94458  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/23/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 90.2

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
2-Methylnaphthalene	330	BQL
2-Methylphenol	330	BQL
3- & 4-Methylphenol	330	BQL
N-Nitrosodi-n-propylamine	330	BQL
N-Nitrosodiphenylamine	330	BQL
Naphthalene	330	BQL
2-Nitroaniline	330	BQL
3-Nitroaniline	330	BQL
4-Nitroaniline	330	BQL
Nitrobenzene	330	BQL
2-Nitrophenol	330	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	330	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	330	BQL
Phenol	330	BQL
Pyrene	330	BQL
1,2,3,4-Tetrachlorobenzene	330	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	330	BQL
1,2,3-Trichlorobenzene	330	BQL
1,2,4-Trichlorobenzene	330	BQL
1,3,5-Trichlorobenzene	330	BQL
2,4,5-Trichlorophenol	330	BQL
2,4,6-Trichlorophenol	330	BQL

<b>Surrogate Spike Recoveries</b>	<b>Spike Added</b>	<b>Spike Result</b>	<b>Percent Recovered</b>
2-Fluorobiphenyl	10	7	70
2-Fluorophenol	10	6.4	64
Nitrobenzene-d5	10	7.6	76
Phenol-d6	10	7.6	76
2,4,6-Tribromophenol	10	5.7	57
4-Terphenyl-d14	10	11.7	117

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 465-4  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94458  
Lab Project ID: G185-81

Date Collected: 8/23/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil      %SOLIDS      90.2

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: \_\_\_\_\_



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 484-0.5

Client Project ID: Kuhlman Electric

Lab Sample ID: 94459

Lab Project ID: G185-81

Matrix: Soil

%Solids: 92.2

Date Collected: 8/24/00

Date Received: 9/1/00

Date Analyzed: 9/12/00

Analyzed By: MRC

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	340	BQL
Acenaphthylene	340	BQL
Anthracene	340	BQL
Benzo[a]anthracene	340	BQL
Benzo[a]pyrene	340	BQL
Benzo[b]fluoranthene	340	BQL
Benzo[g,h,i]perylene	340	BQL
Benzo[k]fluoranthene	340	BQL
Benzoic Acid	670	BQL
Bis(2-chloroethoxy)methane	340	BQL
Bis(2-chloroethyl)ether	340	BQL
Bis(2-chloroisopropyl)ether	340	BQL
Bis(2-ethylhexyl)phthalate	340	BQL
4-bromophenyl phenyl ether	340	BQL
Butylbenzylphthalate	340	BQL
4-Chloroaniline	340	BQL
4-Chloro-3-methylphenol	340	BQL
2-Chloronaphthalene	340	BQL
2-Chlorophenol	340	BQL
4-Chlorophenyl phenyl ether	340	BQL
Chrysene	340	BQL
Di-n-Butylphthalate	340	BQL
Di-n-octylphthalate	340	BQL
Dibenzo[a,h]anthracene	340	BQL
Dibenzofuran	340	BQL
1,2-Dichlorobenzene	340	BQL
1,3-Dichlorobenzene	340	BQL
1,4-Dichlorobenzene	340	BQL
3,3'-Dichlorobenzidine	670	BQL
2,4-Dichlorophenol	340	BQL
Diethylphthalate	340	BQL
2,4-Dimethylphenol	340	BQL
Dimethylphthalate	340	BQL
4,6-Dinitro-2-methylphenol	1700	BQL
2,4-Dinitrophenol	1700	BQL
2,4-Dinitrotoluene	340	BQL
2,6-Dinitrotoluene	340	BQL
Fluoranthene	340	BQL
Fluorene	340	BQL
Hexachlorobenzene	340	BQL
Hexachlorobutadiene	340	BQL
Hexachlorocyclopentadiene	670	BQL
Hexachloroethane	340	BQL
Indeno(1,2,3-c,d)pyrene	340	BQL
Isophorone	340	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 484-0.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94459  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/24/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	340	BQL
2-Methylphenol	340	BQL
3- & 4-Methylphenol	340	BQL
N-Nitrosodi-n-propylamine	340	BQL
N-Nitrosodiphenylamine	340	BQL
Naphthalene	340	BQL
2-Nitroaniline	340	BQL
3-Nitroaniline	340	BQL
4-Nitroaniline	340	BQL
Nitrobenzene	340	BQL
2-Nitrophenol	340	BQL
4-Nitrophenol	1700	BQL
Pentachlorobenzene	340	BQL
Pentachlorophenol	1700	BQL
Phenanthrene	340	BQL
Phenol	340	BQL
Pyrene	340	BQL
1,2,3,4-Tetrachlorobenzene	340	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	340	BQL
1,2,3-Trichlorobenzene	340	BQL
1,2,4-Trichlorobenzene	340	BQL
1,3,5-Trichlorobenzene	340	BQL
2,4,5-Trichlorophenol	340	BQL
2,4,6-Trichlorophenol	340	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.3	103
2-Fluorophenol	10	7.6	76
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	8.2	82
2,4,6-Tribromophenol	10	7.9	79
4-Terphenyl-d14	10	12.9	129

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds  
by GCMS

Client Sample ID: DP 484-0.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94459  
Lab Project ID: G185-81

Date Collected: 8/24/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1

Matrix: Soil %SOLIDS 92.2

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	Aromatic, Unknown			6900
2	Unknown			3800
3	Unknown			2500
4	Aromatic, Unknown			2100
5	Unknown			1100
6	Unknown			1100
7	Unknown			780
8	Unknown			740
9	Unknown			700
10	Unknown			570

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: DP 529-2.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94460  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 8/25/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 90.0

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	380	BQL
Acenaphthylene	380	BQL
Anthracene	380	BQL
Benzo[a]anthracene	380	BQL
Benzo[a]pyrene	380	BQL
Benzo[b]fluoranthene	380	BQL
Benzo[g,h,i]perylene	380	BQL
Benzo[k]fluoranthene	380	BQL
Benzoic Acid	760	BQL
Bis(2-chloroethoxy)methane	380	BQL
Bis(2-chloroethyl)ether	380	BQL
Bis(2-chloroisopropyl)ether	380	BQL
Bis(2-ethylhexyl)phthalate	380	BQL
4-bromophenyl phenyl ether	380	BQL
Butylbenzylphthalate	380	BQL
4-Chloroaniline	380	BQL
4-Chloro-3-methylphenol	380	BQL
2-Chloronaphthalene	380	BQL
2-Chlorophenol	380	BQL
4-Chlorophenyl phenyl ether	380	BQL
Chrysene	380	BQL
Di-n-Butylphthalate	380	BQL
Di-n-octylphthalate	380	BQL
Dibenzo[a,h]anthracene	380	BQL
Dibenzofuran	380	BQL
1,2-Dichlorobenzene	380	BQL
1,3-Dichlorobenzene	380	BQL
1,4-Dichlorobenzene	380	BQL
3,3'-Dichlorobenzidine	760	BQL
2,4-Dichlorophenol	380	BQL
Diethylphthalate	380	BQL
2,4-Dimethylphenol	380	BQL
Dimethylphthalate	380	BQL
4,6-Dinitro-2-methylphenol	1900	BQL
2,4-Dinitrophenol	1900	BQL
2,4-Dinitrotoluene	380	BQL
2,6-Dinitrotoluene	380	BQL
Fluoranthene	380	BQL
Fluorene	380	BQL
Hexachlorobenzene	380	BQL
Hexachlorobutadiene	380	BQL
Hexachlorocyclopentadiene	760	BQL
Hexachloroethane	380	BQL
Indeno(1,2,3-c,d)pyrene	380	BQL
Isophorone	380	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles  
by GCMS 8270**

Client Sample ID: DP 529-2.5  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: 94460  
 Lab Project ID: G185-81  
 Matrix: Soil

%Solids: 90.0

Date Collected: 8/25/00  
 Date Received: 9/1/00  
 Date Analyzed: 9/12/00  
 Analyzed By: MRC  
 Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	380	BQL
2-Methylphenol	380	BQL
3- & 4-Methylphenol	380	BQL
N-Nitrosodi-n-propylamine	380	BQL
N-Nitrosodiphenylamine	380	BQL
Naphthalene	380	BQL
2-Nitroaniline	380	BQL
3-Nitroaniline	380	BQL
4-Nitroaniline	380	BQL
Nitrobenzene	380	BQL
2-Nitrophenol	380	BQL
4-Nitrophenol	1900	BQL
Pentachlorobenzene	380	BQL
Pentachlorophenol	1900	BQL
Phenanthrene	380	BQL
Phenol	380	BQL
Pyrene	380	BQL
1,2,3,4-Tetrachlorobenzene	380	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	380	BQL
1,2,3-Trichlorobenzene	380	BQL
1,2,4-Trichlorobenzene	380	BQL
1,3,5-Trichlorobenzene	380	BQL
2,4,5-Trichlorophenol	380	BQL
2,4,6-Trichlorophenol	380	BQL

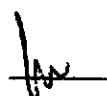
Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.4	104
2-Fluorophenol	10	3.7	37
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	5.1	51
2,4,6-Tribromophenol	10	2.6	26
4-Terphenyl-d14	10	14.1	141

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: DP 529-2.5  
Client Project ID: Kuhlman Electric  
Lab Sample ID: 94460  
Lab Project ID: G185-81

Date Collected: 8/25/00  
Date Received: 9/1/00  
Date Analyzed: 9/12/00  
Analyzed By: MRC  
Dilution: 1


Matrix: Soil      %SOLIDS      90.0

Num.	Compound	CAS#	Match Probability	Result (ug/KG)
1	No library search compounds detected.			
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Comment:**

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak height of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak height is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 

Results for Laboratory Control Spike (LCS)  
PARADIGM ANALYTICAL LABORATORIES, INC.  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SLCS 14  
Lab Project ID: G185-81  
Matrix: Soil

Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Spiked (ug/KG)	Result (ug/KG)	Limits	
			Lower	Upper
Arochlor 1260	313	332	219	406

Reviewed By: 

Results for Laboratory Control Spike (LCS)  
PARADIGM ANALYTICAL LABORATORIES, INC.  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SLCS 15  
Lab Project ID: G185-81  
Matrix: Soil

Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Spiked (ug/KG)	Result (ug/KG)	Limits	
			Lower	Upper
Arochlor 1260	313	334	219	406

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
MS/MSD Results for PCBs  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SQC 14  
Lab Project ID: G185-81  
Matrix: Soil

Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Sample	MS	%Rec	MSD	%Rec	RPD
Aroclor-1260	BQL	796	80%	1053	105%	27.8

**Comments:**

BQL = Below Quantitation Limit

Results reported are on-column amounts in ug/L.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.  
MS/MSD Results for PCBs  
by GC 8082

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SQC 15  
Lab Project ID: G185-81  
Matrix: Soil

Date Analyzed: 9/13/00  
Analyzed By: CLP  
Dilution: 1.0

Compound	Sample	MS	%Rec	MSD	%Rec	RPD
Aroclor-1260	BQL	855	86%	901	90%	5.2

**Comments:**

BQL = Below Quantitation Limit

Results reported are on-column amounts in ug/L.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SBLK 090500  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 100.0

Date Collected:  
Date Received:  
Date Analyzed: 9/8/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	61	61

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 



PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SBLK 090600  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 100.0

Date Collected:  
Date Received:  
Date Analyzed: 9/8/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	68	68

Comments:

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs  
by EPA 8082

Client Sample ID: Method Blank  
Client Project ID: Kuhlman Electric  
Lab Sample ID: SBLK 090700  
Lab Project ID: G185-81  
Matrix: Soil

%SOLIDS: 100.0

Date Collected:  
Date Received:  
Date Analyzed: 9/8/00  
Analyzed By: CLP  
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Arochlor-1016	160	BQL
Arochlor-1221	160	BQL
Arochlor-1232	160	BQL
Arochlor-1242	160	BQL
Arochlor-1248	160	BQL
Arochlor-1254	160	BQL
Arochlor-1260	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	86	86

**Comments:**

BQL = Below Quantitation Limit

NA = Not applicable, surrogate diluted out.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhiman Electric  
 Lab Sample ID: ASE-090500-A  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 100.0

<b>Compound</b>	<b>Quantitation Limit (ug/KG)</b>	<b>Result (ug/KG)</b>
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-090500-A  
 Lab Project ID: G185-81

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC

Matrix: Soil

%Solids: 100.0

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL


Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.7	87
2-Fluorophenol	10	7.7	77
Nitrobenzene-d5	10	8	80
Phenol-d6	10	8.5	85
2,4,6-Tribromophenol	10	7.8	78
4-Terphenyl-d14	10	11.5	115

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-090600-A  
 Lab Project ID: G185-81

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC

Matrix: Soil

%Solids: 100.0

Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Acenaphthene	310	BQL
Acenaphthylene	310	BQL
Anthracene	310	BQL
Benzo[a]anthracene	310	BQL
Benzo[a]pyrene	310	BQL
Benzo[b]fluoranthene	310	BQL
Benzo[g,h,i]perylene	310	BQL
Benzo[k]fluoranthene	310	BQL
Benzoic Acid	630	BQL
Bis(2-chloroethoxy)methane	310	BQL
Bis(2-chloroethyl)ether	310	BQL
Bis(2-chloroisopropyl)ether	310	BQL
Bis(2-ethylhexyl)phthalate	310	BQL
4-bromophenyl phenyl ether	310	BQL
Butylbenzylphthalate	310	BQL
4-Chloroaniline	310	BQL
4-Chloro-3-methylphenol	310	BQL
2-Chloronaphthalene	310	BQL
2-Chlorophenol	310	BQL
4-Chlorophenyl phenyl ether	310	BQL
Chrysene	310	BQL
Di-n-Butylphthalate	310	BQL
Di-n-octylphthalate	310	BQL
Dibenzo[a,h]anthracene	310	BQL
Dibenzofuran	310	BQL
1,2-Dichlorobenzene	310	BQL
1,3-Dichlorobenzene	310	BQL
1,4-Dichlorobenzene	310	BQL
3,3'-Dichlorobenzidine	630	BQL
2,4-Dichlorophenol	310	BQL
Diethylphthalate	310	BQL
2,4-Dimethylphenol	310	BQL
Dimethylphthalate	310	BQL
4,6-Dinitro-2-methylphenol	1600	BQL
2,4-Dinitrophenol	1600	BQL
2,4-Dinitrotoluene	310	BQL
2,6-Dinitrotoluene	310	BQL
Fluoranthene	310	BQL
Fluorene	310	BQL
Hexachlorobenzene	310	BQL
Hexachlorobutadiene	310	BQL
Hexachlorocyclopentadiene	630	BQL
Hexachloroethane	310	BQL
Indeno(1,2,3-c,d)pyrene	310	BQL
Isophorone	310	BQL

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results for Semivolatiles**

by GCMS 8270

Client Sample ID: Method Blank  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-090600-A  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: NA  
 Date Received: NA  
 Date Analyzed: 9/8/00  
 Analyzed By: MRC  
 Dilution: 1

%Solids: 100.0

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
2-Methylnaphthalene	310	BQL
2-Methylphenol	310	BQL
3- & 4-Methylphenol	310	BQL
N-Nitrosodi-n-propylamine	310	BQL
N-Nitrosodiphenylamine	310	BQL
Naphthalene	310	BQL
2-Nitroaniline	310	BQL
3-Nitroaniline	310	BQL
4-Nitroaniline	310	BQL
Nitrobenzene	310	BQL
2-Nitrophenol	310	BQL
4-Nitrophenol	1600	BQL
Pentachlorobenzene	310	BQL
Pentachlorophenol	1600	BQL
Phenanthrene	310	BQL
Phenol	310	BQL
Pyrene	310	BQL
1,2,3,4-Tetrachlorobenzene	310	BQL
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	310	BQL
1,2,3-Trichlorobenzene	310	BQL
1,2,4-Trichlorobenzene	310	BQL
1,3,5-Trichlorobenzene	310	BQL
2,4,5-Trichlorophenol	310	BQL
2,4,6-Trichlorophenol	310	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.3	113
2-Fluorophenol	10	10.4	104
Nitrobenzene-d5	10	10.6	106
Phenol-d6	10	10.9	109
2,4,6-Tribromophenol	10	10	100
4-Terphenyl-d14	10	11.1	111

**Comments:**

Results are corrected for %solids and dilution where applicable.

**Flags:**

BQL = Below Quantitation Limit.

Reviewed By:

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-164  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 08/23/00  
 Date Received: 09/01/00  
 Date Analyzed: 09/12/00  
 Analyzed By: MRC  
 Solids: 90.2

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit
					Lower	Upper		Max.
					%	%		%
Acenaphthene	BQL	10	103	103	55	138	0.1	30
Acenaphthylene	BQL	10	109	109	51	158	0.8	30
Anthracene	BQL	10	108	107	53	142	0.9	30
Benzo[a]anthracene	BQL	10	100	101	55	122	0.5	30
Benzo[a]pyrene	BQL	10	108	107	58	133	1.1	30
Benzo[b]fluoranthene	BQL	10	104	115	62	134	9.3	30
Benzo[g,h,i]perylene	BQL	10	98	89	55	124	9.9	30
Benzo[k]fluoranthene	BQL	10	108	104	51	147	3.9	30
Bis(2-chloroethoxy)methane	BQL	10	81	80	25	166	1.0	30
Bis(2-chloroethyl)ether	BQL	10	78	77	11	187	2.1	30
Bis(2-chloroisopropyl)ether	BQL	10	80	80	10	219	0.3	30
Bis(2-ethylhexyl)phthalate	BQL	10	113	112	62	128	0.4	30
4-Bromophenyl phenyl ether	BQL	10	84	80	18	178	3.9	30
Butylbenzylphthalate	BQL	10	106	108	61	123	1.5	30
4-Chloro-3-methylphenol	BQL	10	110	110	60	129	0.1	30
2-Chloronaphthalene	BQL	10	101	100	59	137	1.8	30
2-Chlorophenol	BQL	10	101	103	62	122	1.6	30
4-Chlorophenyl phenyl ether	BQL	10	82	81	25	177	0.9	30
Chrysene	BQL	10	92	93	51	120	0.8	30
Di-n-Butylphthalate	BQL	10	110	107	63	136	2.6	30
Di-n-octylphthalate	BQL	10	117	127	54	152	8.1	30
Dibenzo[a,h]anthracene	BQL	10	107	99	63	134	8.6	30
Dibenzofuran	BQL	10	97	97	59	137	0.0	30
1,2-Dichlorobenzene	BQL	10	95	96	57	134	1.0	30
1,3-Dichlorobenzene	BQL	10	93	93	62	125	0.4	30
1,4-Dichlorobenzene	BQL	10	94	96	61	124	2.0	30
2,4-Dichlorophenol	BQL	10	106	107	62	129	1.5	30
Diethylphthalate	BQL	10	108	106	59	142	2.3	30
2,4-Dimethylphenol	BQL	10	136	136	10	151	0.1	30
Dimethylphthalate	BQL	10	99	98	52	126	1.3	30
4,6-Dinitro-2-methylphenol	BQL	10	106	108	31	163	2.1	30
2,4-Dinitrophenol	BQL	10	97	104	10	159	6.1	30
2,4-Dinitrotoluene	BQL	10	103	104	58	136	1.7	30
2,6-Dinitrotoluene	BQL	10	105	103	54	145	2.2	30

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-164  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 08/23/00  
 Date Received: 09/01/00  
 Date Analyzed: 09/12/00  
 Analyzed By: MRC  
 Solids: 90.2

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit
					Lower %	Upper %		Max. %
Fluoranthene	BQL	10	102	107	54	139	5.5	30
Fluorene	BQL	10	104	103	58	145	0.3	30
Hexachlorobenzene	BQL	10	103	104	58	140	1.4	30
Hexachlorobutadiene	BQL	10	92	92	64	130	0.6	30
Hexachloroethane	BQL	10	91	92	51	138	1.3	30
Indeno(1,2,3-c,d)pyrene	BQL	10	91	85	53	118	7.2	30
Isophorone	BQL	10	102	103	67	126	1.3	30
2-Methylnaphthalene	BQL	10	94	94	63	127	0.1	30
2-Methylphenol	BQL	10	103	104	41	127	0.8	30
3- & 4-Methylphenol	BQL	20	104	101	45	125	2.8	30
N-Nitrosodi-n-propylamine	BQL	10	91	93	43	128	2.3	30
N-Nitrosodiphenylamine	BQL	10	106	103	10	296	2.5	30
Naphthalene	BQL	10	104	103	67	131	0.9	30
Nitrobenzene	BQL	10	100	100	63	133	0.2	30
2-Nitrophenol	BQL	10	98	98	60	133	0.4	30
4-Nitrophenol	BQL	10	92	98	40	156	6.2	30
Pentachlorobenzene	BQL	10	95	92	NA	NA	3.2	30
Pentachlorophenol	BQL	10	85	90	40	160	6.1	30
Phenanthrene	BQL	10	104	106	57	135	1.8	30
Phenol	BQL	10	107	108	52	128	1.2	30
Pyrene	BQL	10	101	104	57	129	2.8	30
1,2,3,4-Tetrachlorobenzene	BQL	10	83	81	NA	NA	3.0	30
1,2,3,5-Tetrachlorobenzene*	BQL	20	137	133	NA	NA	2.8	30
1,2,3-Trichlorobenzene	BQL	10	80	83	NA	NA	4.2	30
1,2,4-Trichlorobenzene	BQL	10	94	95	62	129	0.3	30
1,3,5-Trichlorobenzene	BQL	10	76	80	NA	NA	4.9	30
2,4,5-Trichlorophenol	BQL	10	108	110	63	144	1.5	30
2,4,6-Trichlorophenol	BQL	10	107	105	57	136	1.4	30

**Comments:**

Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established.

Reviewed By: 



**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-165  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 08/23/00  
 Date Received: 09/01/00  
 Date Analyzed: 09/08/00  
 Analyzed By: MRC  
 Solids: 85.0

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit
					Lower %	Upper %		Max. %
Acenaphthene	BQL	10	91	90	55	138	1.0	30
Acenaphthylene	BQL	10	94	93	51	158	1.6	30
Anthracene	BQL	10	97	95	53	142	2.5	30
Benzo[a]anthracene	BQL	10	93	90	55	122	2.8	30
Benzo[a]pyrene	BQL	10	100	99	58	133	1.1	30
Benzo[b]fluoranthene	BQL	10	106	107	62	134	1.2	30
Benzo[g,h,i]perylene	BQL	10	89	85	55	124	3.7	30
Benzo[k]fluoranthene	BQL	10	101	96	51	147	5.6	30
Bis(2-chloroethoxy)methane	BQL	10	86	87	25	166	1.2	30
Bis(2-chloroethyl)ether	BQL	10	88	91	11	187	2.9	30
Bis(2-chloroisopropyl)ether	BQL	10	86	87	10	219	0.5	30
Bis(2-ethylhexyl)phthalate	BQL	10	93	94	62	128	1.0	30
4-Bromophenyl phenyl ether	BQL	10	85	88	18	178	2.5	30
Butylbenzylphthalate	BQL	10	94	94	61	123	0.4	30
4-Chloro-3-methylphenol	BQL	10	102	102	60	129	0.3	30
2-Chloronaphthalene	BQL	10	94	94	59	137	0.0	30
2-Chlorophenol	BQL	10	98	98	62	122	0.2	30
4-Chlorophenyl phenyl ether	BQL	10	85	83	25	177	1.9	30
Chrysene	BQL	10	82	80	51	120	2.6	30
Di-n-Butylphthalate	BQL	10	93	92	63	136	0.1	30
Di-n-octylphthalate	BQL	10	122	119	54	152	2.2	30
Dibenzo[a,h]anthracene	BQL	10	106	105	63	134	1.5	30
Dibenzofuran	BQL	10	94	91	59	137	2.9	30
1,2-Dichlorobenzene	BQL	10	93	94	57	134	0.9	30
1,3-Dichlorobenzene	BQL	10	88	90	62	125	2.3	30
1,4-Dichlorobenzene	BQL	10	91	91	61	124	0.4	30
2,4-Dichlorophenol	BQL	10	103	105	62	129	1.4	30
Diethylphthalate	BQL	10	98	97	59	142	0.4	30
2,4-Dimethylphenol	BQL	10	91	97	10	151	6.5	30
Dimethylphthalate	BQL	10	87	86	52	126	1.0	30
4,6-Dinitro-2-methylphenol	BQL	10	80	78	31	163	2.8	30
2,4-Dinitrophenol	BQL	10	76	69	10	159	9.5	30
2,4-Dinitrotoluene	BQL	10	97	93	58	136	4.1	30
2,6-Dinitrotoluene	BQL	10	95	93	54	145	2.2	30

**PARADIGM ANALYTICAL LABORATORIES, INC.**  
**Results For Soil Matrix Spike / Matrix Spike Duplicate (MS/MSD)**  
 by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-MS.MSD-165  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: 08/23/00  
 Date Received: 09/01/00  
 Date Analyzed: 09/08/00  
 Analyzed By: MRC  
 Solids: 85.0

	Sample ng	Spiked ng	MS %	MSD %	Limits		RPD %	Limit
					Lower %	Upper %		Max. %
Fluoranthene	BQL	10	100	94	54	139	6.2	30
Fluorene	BQL	10	96	94	58	145	2.0	30
Hexachlorobenzene	BQL	10	95	95	58	140	0.7	30
Hexachlorobutadiene	BQL	10	92	95	64	130	2.5	30
Hexachloroethane	BQL	10	86	90	51	138	3.9	30
Indeno(1,2,3-c,d)pyrene	BQL	10	91	90	53	118	1.7	30
Isophorone	BQL	10	95	97	67	126	2.2	30
2-Methylnaphthalene	BQL	10	90	90	63	127	0.3	30
2-Methylphenol	BQL	10	98	99	41	127	0.3	30
3- & 4-Methylphenol	BQL	20	91	82	45	125	11.1	30
N-Nitrosodi-n-propylamine	BQL	10	90	90	43	128	0.6	30
N-Nitrosodiphenylamine	BQL	10	98	96	10	296	2.0	30
Naphthalene	BQL	10	94	96	67	131	1.8	30
Nitrobenzene	BQL	10	94	96	63	133	2.0	30
2-Nitrophenol	BQL	10	93	94	60	133	1.4	30
4-Nitrophenol	BQL	10	89	75	40	156	16.0	30
Pentachlorobenzene	BQL	10	99	95	NA	NA	3.4	30
Pentachlorophenol	BQL	10	99	88	40	160	12.4	30
Phenanthrene	BQL	10	96	95	57	135	1.5	30
Phenol	BQL	10	98	99	52	128	0.9	30
Pyrene	BQL	10	94	93	57	129	1.3	30
1,2,3,4-Tetrachlorobenzene	BQL	10	87	83	NA	NA	4.8	30
1,2,3,5-Tetrachlorobenzene*	BQL	20	141	137	NA	NA	2.7	30
1,2,3-Trichlorobenzene	BQL	10	85	82	NA	NA	3.8	30
1,2,4-Trichlorobenzene	BQL	10	91	92	62	129	1.1	30
1,3,5-Trichlorobenzene	BQL	10	80	75	NA	NA	5.4	30
2,4,5-Trichlorophenol	BQL	10	101	98	63	144	2.7	30
2,4,6-Trichlorophenol	BQL	10	99	97	57	136	1.9	30

**Comments:**

Concentrations are on column amounts.

**Flags:**

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established.

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: ASE-LCS-164  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 09/08/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Acenaphthene	10	9.38	94	74	122
Acenaphthylene	10	9.95	100	67	150
Anthracene	10	9.67	97	73	127
Benzo[a]anthracene	10	8.97	90	72	108
Benzo[a]pyrene	10	9.69	97	78	120
Benzo[b]fluoranthene	10	9.88	99	74	129
Benzo[g,h,i]perylene	10	8.44	84	61	116
Benzo[k]fluoranthene	10	9.26	93	75	133
Bis(2-chloroethoxy)methane	10	7.49	75	21	166
Bis(2-chloroethyl)ether	10	7.04	70	14	171
Bis(2-chloroisopropyl)ether	10	7.09	71	10	197
Bis(2-ethylhexyl)phthalate	10	9.43	94	74	115
4-Bromophenyl phenyl ether	10	7.34	73	24	163
Butylbenzylphthalate	10	9.38	94	71	117
4-Chloro-3-methylphenol	10	10.04	100	74	127
2-Chloronaphthalene	10	8.94	89	77	119
2-Chlorophenol	10	9.05	91	76	115
4-Chlorophenyl phenyl ether	10	7.29	73	28	165
Chrysene	10	8.09	81	68	107
Di-n-Butylphthalate	10	9.64	96	77	126
Di-n-octylphthalate	10	10.47	105	74	136
Dibenzo[a,h]anthracene	10	9.13	91	64	134
Dibenzofuran	10	8.70	87	72	124
1,2-Dichlorobenzene	10	8.58	86	71	121
1,3-Dichlorobenzene	10	8.41	84	72	115
1,4-Dichlorobenzene	10	8.31	83	71	114
2,4-Dichlorophenol	10	9.56	96	78	121
Diethylphthalate	10	9.91	99	73	134
2,4-Dimethylphenol	10	12.11	121	64	123
Dimethylphthalate	10	8.90	89	77	109
4,6-Dinitro-2-methylphenol	10	9.51	95	61	144
2,4-Dinitrophenol	10	8.70	87	46	135
2,4-Dinitrotoluene	10	9.24	92	75	125
2,6-Dinitrotoluene	10	9.30	93	78	122
Fluoranthene	10	9.35	93	72	124

PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270

Client Sample ID: Batch QC  
Client Project ID: Kuhlman Electric  
Lab Sample ID: ASE-LCS-164  
Lab Project ID: G185-81  
Matrix: Soil

Date Collected: N/A  
Date Received: N/A  
Date Analyzed: 09/08/00  
Analyzed By: MRC  
Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Fluorene	10	9.43	94	73	133
Hexachlorobenzene	10	9.34	93	78	120
Hexachlorobutadiene	10	8.20	82	74	119
Hexachloroethane	10	8.29	83	70	122
Indeno(1,2,3-c,d)pyrene	10	7.84	78	54	118
Isophorone	10	9.40	94	81	117
2-Methylnaphthalene	10	8.39	84	70	119
2-Methylphenol	10	9.47	95	76	114
3- & 4-Methylphenol	20	20.65	103	61	141
N-Nitrosodi-n-propylamine	10	8.35	83	60	111
N-Nitrosodiphenylamine	10	9.90	99	10	366
Naphthalene	10	9.34	93	74	123
Nitrobenzene	10	9.10	91	76	122
2-Nitrophenol	10	8.73	87	72	117
4-Nitrophenol	10	8.12	81	20	149
Pentachlorobenzene	10	10.13	101	NA	NA
Pentachlorophenol	10	6.95	70	40	155
Phenanthrene	10	9.31	93	74	123
Phenol	10	10.00	100	73	128
Pyrene	10	9.21	92	64	123
1,2,3,4-Tetrachlorobenzene	10	8.89	89	NA	NA
1,2,3,5-Tetrachlorobenzene*	20	29.45	147	NA	NA
1,2,3-Trichlorobenzene	10	8.97	90	NA	NA
1,2,4-Trichlorobenzene	10	8.33	83	77	114
1,3,5-Trichlorobenzene	10	8.54	85	NA	NA
2,4,5-Trichlorophenol	10	9.73	97	77	131
2,4,6-Trichlorophenol	10	9.58	96	79	119

Comments:

Concentrations are on column amounts.

Flags:

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established

Reviewed By: 

**PARADIGM ANALYTICAL LABORATORIES, INC.**

**Results For Soil Laboratory Control Standard (LCS)  
by GCMS 8270**

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-LCS-165  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: N/A  
 Date Received: N/A  
 Date Analyzed: 09/12/00  
 Analyzed By: MRC  
 Solids: 100.0

	Spiked	LCS	LCS	LIMITS	
	ng	ng	% Rec.	LOWER	UPPER
Acenaphthene	10	9.05	91	74	122
Acenaphthylene	10	9.34	93	67	150
Anthracene	10	9.63	96	73	127
Benzo[a]anthracene	10	9.01	90	72	108
Benzo[a]pyrene	10	9.75	97	78	120
Benzo[b]fluoranthene	10	10.64	106	74	129
Benzo[g,h,i]perylene	10	8.88	89	61	116
Benzo[k]fluoranthene	10	8.93	89	75	133
Bis(2-chloroethoxy)methane	10	8.54	85	21	166
Bis(2-chloroethyl)ether	10	8.38	84	14	171
Bis(2-chloroisopropyl)ether	10	8.32	83	10	197
Bis(2-ethylhexyl)phthalate	10	9.51	95	74	115
4-Bromophenyl phenyl ether	10	8.72	87	24	163
Butylbenzylphthalate	10	9.67	97	71	117
4-Chloro-3-methylphenol	10	10.03	100	74	127
2-Chloronaphthalene	10	9.25	92	77	119
2-Chlorophenol	10	9.54	95	76	115
4-Chlorophenyl phenyl ether	10	8.30	83	28	165
Chrysene	10	8.12	81	68	107
Di-n-Butylphthalate	10	9.51	95	77	126
Di-n-octylphthalate	10	11.22	112	74	136
Dibenzo[a,h]anthracene	10	10.47	105	64	134
Dibenzofuran	10	9.06	91	72	124
1,2-Dichlorobenzene	10	8.99	90	71	121
1,3-Dichlorobenzene	10	8.66	87	72	115
1,4-Dichlorobenzene	10	8.94	89	71	114
2,4-Dichlorophenol	10	10.21	102	78	121
Diethylphthalate	10	9.68	97	73	134
2,4-Dimethylphenol	10	10.56	106	64	123
Dimethylphthalate	10	8.54	85	77	109
4,6-Dinitro-2-methylphenol	10	6.91	69	61	144
2,4-Dinitrophenol	10	5.75	57	46	135
2,4-Dinitrotoluene	10	9.21	92	75	125
2,6-Dinitrotoluene	10	9.08	91	78	122
Fluoranthene	10	9.24	92	72	124

PARADIGM ANALYTICAL LABORATORIES, INC.

Results For Soil Laboratory Control Standard (LCS)

by GCMS 8270

Client Sample ID: Batch QC  
 Client Project ID: Kuhlman Electric  
 Lab Sample ID: ASE-LCS-165  
 Lab Project ID: G185-81  
 Matrix: Soil

Date Collected: N/A  
 Date Received: N/A  
 Date Analyzed: 09/12/00  
 Analyzed By: MRC  
 Solids: 100.0

	Spiked ng	LCS ng	LCS % Rec.	LIMITS	
				LOWER	UPPER
Fluorene	10	9.43	94	73	133
Hexachlorobenzene	10	9.69	97	78	120
Hexachlorobutadiene	10	9.11	91	74	119
Hexachloroethane	10	8.24	82	70	122
Indeno(1,2,3-c,d)pyrene	10	9.33	93	54	118
Isophorone	10	9.51	95	81	117
2-Methylnaphthalene	10	8.69	87	70	119
2-Methylphenol	10	9.74	97	76	114
3- & 4-Methylphenol	20	16.56	83	61	141
N-Nitrosodi-n-propylamine	10	8.42	84	60	111
N-Nitrosodiphenylamine	10	11.12	111	10	366
Naphthalene	10	9.32	93	74	123
Nitrobenzene	10	9.39	94	76	122
2-Nitrophenol	10	9.06	91	72	117
4-Nitrophenol	10	7.68	77	20	149
Pentachlorobenzene	10	8.39	84	NA	NA
Pentachlorophenol	10	9.32	93	40	155
Phenanthrene	10	9.47	95	74	123
Phenol	10	9.61	96	73	128
Pyrene	10	9.39	94	64	123
1,2,3,4-Tetrachlorobenzene	10	7.32	73	NA	NA
1,2,3,5-Tetrachlorobenzene*	20	24.91	125	NA	NA
1,2,3-Trichlorobenzene	10	7.18	72	NA	NA
1,2,4-Trichlorobenzene	10	8.96	90	77	114
1,3,5-Trichlorobenzene	10	6.90	69	NA	NA
2,4,5-Trichlorophenol	10	9.74	97	77	131
2,4,6-Trichlorophenol	10	9.68	97	79	119

Comments:

Concentrations are on column amounts.

Flags:

\* = Out of limits.

# = Co-elution of 1,2,3,5- & 1,2,4,5-Tetrachlorobenzene

NA = Not applicable, Laboratory limits not established

Reviewed By:



Environmental Chemistry  
Consulting Services, Inc.

2525 Advance Road,  
Madison, WI 53718  
Phone 608-221-8700 FAX 608-221-4889

CHAIN OF CUSTODY

No. 002710

Page 1 of 3

Turn Around (circle one) Normal Rush  
Report Due:

Project Number: \_\_\_\_\_  
 Project Name: Kullberg Electric  
 Project Location: \_\_\_\_\_  
 Sampled By (Print): Tim Fitzpatrick

Mail Report To: Tim Fitzpatrick  
 Company: Ogden Environmental  
 Address: PO BOX 3142  
Huntersville NC 28070

P.O. No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_

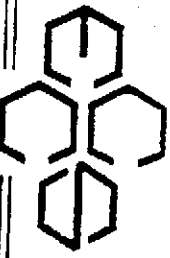
Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
DP 321-0.1	8/31	0929	S	1	N/A	PCBs by 802, 820 extended list (see Patrick)		
DP 322-0.1	8/31	0933		1				
DP 323-0.1	8/31	0935		1				
DP 324-0.1	8/31	0940		1				
DP 370-0.1	8/31	0937		1				
DP 371-0.1	8/31	0946		1				
DP 372-0.1	8/31	0948		1				
RB 7804	8/30	1424		1				
RB 7805	8/30	1433		1				
DP 573-2.5	8/28	1421		1				
ATK-3	8/31	0832		1				
DP 582-0.5	8/29	1020		1				

Relinquished By: Tim Fitzpatrick Date/Time: 8/31/00 1511  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: SKIN J. HARRIS Date/Time: 8/31/00 0900  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

\*Preservation Code  
 A=None B=HCL C=H2SO4  
 D=HNO3 E=EnCore F=Methanol  
 G=NaOH O=Other(Indicate)

Custody Seal: Present/Absent \_\_\_\_\_ Intact/Not Intact \_\_\_\_\_ Seal #'s \_\_\_\_\_  
 Shipped Via: \_\_\_\_\_

WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER/SUBMITTER



**Environmental Chemistry Consulting Services, Inc.**  
 2525 Advance Road,  
 Madison, WI 53718  
 Phone 608-221-8700 FAX 608-221-4889

**CHAIN OF CUSTODY**

No. 002712

Page 3 of 3

Turn Around (circle one) Normal Rush

4155-81

Project Number: **Kuhlman Electric**

Project Location: **Tim Fitzpatrick**

Sampled By (Print): **Tim Fitzpatrick**

Mail Report To:

Company:

Address:

P.O. No.:

Quote No.:

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
DP 520-0.5	8/25	1529	S	1	None	Possibly 8082, 8270 extended list		
DP 518-0.5	8/25	1440		1				
DP 523-2.5	8/25	1541		1				
DP 538-2.5	8/26	1030		1				
DP 523-0.5	8/25	1540		1				
DP 430-0.5	8/24	1422		1				
DP 464-0.5	8/23	0822		1				
DP 464-4	8/23	0829		1				
DP 465-0.5	8/23	0834		1				
DP 465-4	8/23	0826		1				
DP 484-0.5	8/24	1223		1				
DP 529-2.5	8/25	1701		1				

\*Preservation Code

/:None B=HCL C=H2SO4  
 D=HNO3 E=Encore F=Methanol  
 G=NaOH O=Other(Indicate)

Custody Seal: Present/Absent

Inact/Not Inact

Seal #s

Relinquished By: *Tim Fitzpatrick*

Relinquished By: *Tim Fitzpatrick*

Date/Time: 8/16/02 1511

Date/Time: 8/16/02 1511

Received By: *SPIN STEWARD*

Received By: *SPIN STEWARD*

Date/Time: 5/11/02

Date/Time: 5/11/02

Receipt Temp: 34°C

Temp Blank Y N

WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER/SUBMITTER