

NM1 - 10

C-138

YEAR(S):

2002

District I
1625 French Dr., Hobbs, NM 88240
District II
815 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| | |
|---|--|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator Red Cedar Gathering |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site Antler Treating Plant |
| 2. Management Facility Destination Teresa Land Farm | 6. Transporter Airt |
| 3. Address of Facility Operator 420 CB 5100 AZTEC NM | 8. State CO |
| 7. Location of Material (Street Address or ULSTR) Sec: 15 T: 32N R: 11W | |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL: Soil Impacted with Lube oil



Estimated Volume _____ cy Known Volume (to be entered by the operator at the end of the haul) 15 cy

SIGNATURE [Signature] TITLE: Lead Farm Manager DATE: 7-29-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Jan Nib's TELEPHONE NO. 334-8894

9-205080

(This space for State Use)

APPROVED BY: [Signature] TITLE: Enviro/Engl DATE: 8/02/02
APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 8/05/02

CERTIFICATE OF WASTE STATUS

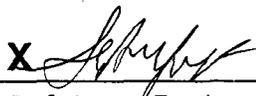
| | |
|---|---|
| 1. Generator Name and Address: Red Cedar Gathering 26266 Highway 160 Durango, CO 81303 | 2. Destination Name and Address: Tierra Environmental Co., Inc., Land Farm 420 Road 3100 Aztec, NM 87410 |
| 3. Originating Site (name): Antler Treating Plant at Section 15 of Township 32 North, Range 11 West | |
| 4. Source and Description of Waste (revised): Soils impacted by lube oil - Approximately 15 yards ³ . | |

I, Shawn A. Young, representative for Red Cedar Gathering do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1998 regulatory determination, the above-described waste is classified as indicated below:

- EXEMPT oilfield waste
 NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste only, the following documentation is attached:

- MSDS Information
 Other (Description): Laboratory Analysis
 RCRA Hazardous Waste Analysis
 Chain of Custody

Name (Original Signature): X 
Title: Safety & Environmental Manager
Date: April 25, 2002

MAY 03 2002

**Certificate From Out Of State Agency Authorizing Removal Of RCRA
Non-Exempt, Non-Toxic, Oilfield Waste From Their Jurisdiction To
New Mexico**

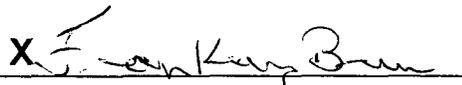
I have reviewed the enclosed information concerning the Non-exempt, Non-toxic oilfield waste material from Red Cedar Gathering Company's Antler Treating Plant at Section 15 of Township 32 North Range 11 West and agree that by its description it is non-hazardous as defined by the Resource Conservation and Recovery Act (RCRA) and my jurisdiction's rules, regulations or statutes.

- The material is Non-exempt oilfield waste.
- The material is Non-hazardous by regulatory definition.

THEREFORE:

As a representative for the Southern Ute Indian Tribe I have no objection to the material being removed to New Mexico.

Name: Fran King-Brown Title: Head of Environmental Programs Division

Signature: X  Date: 4-29-02

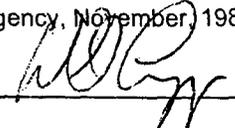
Agency: Southern Ute Indian Tribe
Address: P.O. Box 737, Ignacio, Colorado 81137
Phone: (970) 563-0135

Client: Red Cedar Gathering
Project: Antler / Coyote Gulch
Sample ID: Antler - Soil Pile
Lab ID: 0302W00779
Matrix: Soil
Condition: Cool/Intact

Date Reported: 04/24/02
Date Sampled: 03/07/02
Date Received: 03/07/02
Date Extracted: N/A

| Parameter | Analytical Result | PQL | Units |
|---------------------------|-------------------|-----|--------|
| GENERAL PARAMETERS | | | |
| Corrosivity -pH | 7.1 | | s.u. |
| Flash Point | >140 | 140 | °F |
| Reactivity - HCN | <1 | 1 | meq/Kg |
| Reactivity-H2S | 68 | 1 | mg/Kg |

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, Final Update 1, July 1992.
 SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, November, 1986.

Reviewed By: 

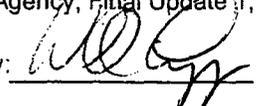
Analyst: _____

Client: Red Cedar Gathering
 Project: Antler / Coyote Gulch
 Sample ID: Antler - Soil Pile
 Lab ID: 0302W00779
 Matrix: Soil
 Condition: Cool/Intact

Date Reported: 04/24/02
 Date Sampled: 03/07/02
 Date Received: 03/07/02
 Date Extracted: N/A
 Date Analyzed: 03/25/02

| Parameter | Analytical Result | PQL | Units |
|-----------------------------------|-------------------|------|-------|
| TOTAL METALS - Method 3050 | | | |
| Arsenic | <6 | 6 | mg/Kg |
| Barium | 3 | 1 | mg/Kg |
| Cadmium | <0.5 | 0.5 | mg/Kg |
| Chromium | <1 | 1 | mg/Kg |
| Lead | <5 | 5 | mg/Kg |
| Mercury | <0.06 | 0.06 | mg/Kg |
| Selenium | <4 | 4 | mg/Kg |
| Silver | <2 | 2 | mg/Kg |

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, November, 1986.
 SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, Final Update 1, July 1992.

Reviewed By: 

Analyst: _____

Client: Red Cedar Gathering
 Project: Antler / Coyote Gulch
 Sample ID: Antler - Soil Pile
 Lab ID: 0302W00779
 Matrix: Soil
 Condition: Cool/Intact

Date Reported: 04/24/02
 Date Sampled: 03/07/02
 Date Received: 03/07/02
 Date Extracted: N/A

| Parameter | Analytical Result | PQL | Units |
|----------------------------|-------------------|-----|-------|
| BTEX - Method 8021B | | | |
| Benzene | <5 | 5 | mg/Kg |
| Toluene | <5 | 5 | mg/Kg |
| Ethylbenzene | <5 | 5 | mg/Kg |
| Xylenes (total) | <15 | 15 | mg/Kg |

| Quality Control - Surrogate Recovery | % | QC Limits |
|--------------------------------------|-----|-----------|
| 4-Bromofluorobenzene(SUR-8021B) | 102 | 70 - 130 |

Reference: Method 8021b, Volatile Organic Compounds, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, United States Environmental Protection Agency, SW-846, Volume IB.

Reviewed By: 

Analyst: _____

Client: Red Cedar Gathering
 Project: Antler / Coyote Gulch
 Sample ID: Antler - Soil Pile
 Lab ID: 0302W00779
 Matrix: Soil
 Condition: Cool/Intact

Date Reported: 04/24/02
 Date Sampled: 03/07/02
 Date Received: 03/07/02
 Date Extracted: N/A

| Parameter | Analytical Result | PQL | Units |
|---|-------------------|------------------|-------|
| DRO - Method 8015M | | | |
| Diesel Range Organics (C10 - C22) | 660 | 50 | mg/Kg |
| Quality Control - Surrogate Recovery | | | |
| | % | QC Limits | |
| o-Terphenyl(SUR-8015) | 115 | 70 - 130 | |

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, November, 1986.

Reviewed By: 

Analyst: _____

605717-00 MOBIL PEGASUS 89
MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL PEGASUS 89
SUPPLIER: EXXONMOBIL OIL CORPORATION
3225 GALLOWES RD.
FAIRFAX, VA 22037
24 - Hour Emergency (call collect): 609-737-4411
Product and MSDS Information: 800-662-4525 856-224-4644
CHEMTREC: 800-424-9300 202-483-7616

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: PET. HYDROCARBONS AND ADDITIVES
INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:
This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives. See Section 15 for a regulatory analysis of the ingredients.
See Section 15 for European Label Information.
See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined not to be hazardous.
EFFECTS OF OVEREXPOSURE: No significant effects expected.
EMERGENCY RESPONSE DATA: Amber Liquid. DOT ERG No. : NA

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.
SKIN CONTACT: Wash contact areas with soap and water.
INHALATION: Not expected to be a problem.
INGESTION: Not expected to be a problem. However, if greater than 1/2 liter (pint) ingested, seek medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.
SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from

fire control or dilution from entering streams, sewers, or drinking water supply.
SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None. Flash Point C(F): > 246(475) (ASTM D-92). Flammable limits - LEL: NA, UEL: NA.
NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Metal oxides, Elemental oxides.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8302. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: No special requirements under ordinary conditions of use and with adequate ventilation.

RESPIRATORY PROTECTION: No special requirements under ordinary conditions of use and with adequate ventilation.

EYE PROTECTION: Normal industrial eye protection practices should be employed.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.

EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, a exposure limit of 5.00 mg/m3 is suggested for oil mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid

COLOR: Amber

ODOR: Mild
 ODOR THRESHOLD-ppm: NE
 pH: 8.8
 BOILING POINT C(F): 388(730)
 MELTING POINT C(F): NA
 FLASH POINT C(F): > 245(475) (ASTM D-92)
 FLAMMABILITY: NE
 AUTO FLAMMABILITY: NE
 EXPLOSIVE PROPERTIES: NA
 OXIDIZING PROPERTIES: NA
 VAPOR PRESSURE-mmHg 20 C: < 0.1
 VAPOR DENSITY: > 2.0
 EVAPORATION RATE: NE
 RELATIVE DENSITY, 15/4 C: 0.896
 SOLUBILITY IN WATER: Negligible
 PARTITION COEFFICIENT: > 3.5
 VISCOSITY AT 40 C, cSt: 121.0
 VISCOSITY AT 100 C, cSt: 13.3
 POUR POINT C(F): < -15(5)
 FREEZING POINT C(F): NE
 VOLATILE ORGANIC COMPOUND: NE
 NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES
 FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
 CONDITIONS TO AVOID: Extreme heat.
 INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.
 HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Metal oxides.
 Elemental oxides.
 HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.

EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.

SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.

OTHER ACUTE TOXICITY DATA: The acute toxicological results summarized above are based on testing of representative Mobil products. Representative Mobil formulations have shown no acute effects, administered via the inhalation route, when tested at maximum attainable oil mist or vapor concentrations.

---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Representative Mobil formulations have been tested at the Mobil Environmental and Health Sciences Laboratory by dermal applications to rats 5 days/week for 90 days at doses

significantly higher than those expected during normal industrial exposure. Extensive evaluations, including microscopic examination of internal organs and clinical chemistry of body fluids, showed no adverse effects.

---REPRODUCTIVE TOXICOLOGY (SUMMARY)---

Dermal exposure of pregnant rats to representative formulations did not cause adverse effects in either the mothers or their offspring.

---CHRONIC TOXICOLOGY (SUMMARY)---

The base oils in this product are severely solvent refined and/or severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects. These results are confirmed on a continuing basis using various screening methods such as the Mobil Modified Ames Test and IP-346.

---SENSITIZATION (SUMMARY)---

Representative Mobil formulations have not caused skin sensitization in guinea pigs.

---OTHER TOXICOLOGY DATA---

Used gasoline engine oils have shown evidence of skin carcinogenic activity in laboratory tests when no effort was made to wash the oil off between applications. Used oil from diesel engines did not produce this effect.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: This product is expected to be inherently biodegradable. There is no evidence to suggest bioaccumulation will occur. It is not expected to be toxic to aquatic organisms.

Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel waste or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.
RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.
IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, and DSL.

EU Labeling: EU labeling not required.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:

This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

| CHEMICAL NAME | CAS NUMBER | LIST CITATIONS |
|---|------------|----------------|
| ZINC (ELEMENTAL ANALYSIS) (>0.02%) | 7440-66-6 | 22 |
| PHOSPHORODITHIOIC ACID, O,O-DI | 58649-42-3 | 22 |
| C1-14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDDP) (0.26%) | | |

--- REGULATORY LISTS SEARCHED ---

| | | | | |
|-------------|-------------|-------------|-----------------|-----------|
| 1=ACGIH ALL | 6=IARC 1 | 11=TSCA 4 | 16=CA P65 CARC | 21=LA RTK |
| 2=ACGIH A1 | 7=IARC 2A | 12=TSCA 5a2 | 17=CA P65 REPRO | 22=NI 293 |
| 3=ACGIH A2 | 8=IARC 2B | 13=TSCA 5e | 18=CA RTK | 23=MN RTK |
| 4=NTP CARC | 9=OSHA CARC | 14=TSCA 6 | 19=FL RTK | 24=NJ RTK |
| 5=NTP SUS | 10=OSHA 2 | 15=TSCA 12b | 20=IL RTK | 25=PA RTK |
| | | | | 26=RI RTK |

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

16. OTHER INFORMATION

USE: NATURAL GAS ENGINE OIL

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBs.

Please call the Customer Response Center on 800-662-4525 for formulation disclosure.

For Internal Use Only: MHC: 1* 1* 0* 1* 1*, MPPEC: A) IPN: 605717-00,
ELIS: 403154, CMCS97: 979930, REC: US - MARKETING, SAFE USE: L
EHS Approval Date: 01JAN2001

Legally required information is given in accordance with applicable information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. Nothing is intended as a recommendation for uses which infringe valid patents or as extending any license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users. Use or retransmission of the information contained herein in any other format than the format as presented is strictly prohibited. Mobil neither represents nor warrants that the format, content or product formulas contained in this document comply with the laws of any other country except the United States of America.

IMO: NOT REGULATED BY IMO.
IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, and DSL.

EU Labeling: EU labeling not required.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

| CHEMICAL NAME | CAS NUMBER | LIST CITATIONS |
|------------------------------------|------------|----------------|
| ZINC (ELEMENTAL ANALYSIS) (>.02%) | 7440-66-6 | 22 |
| PHOSPHORODITHOIC ACID, O,O-DI | 58649-42-3 | 22 |
| C1-14-ALKYL ESTERS, ZINC SALTS (2: | | |
| 1) (ZDDP) (0.26%) | | |

--- REGULATORY LISTS SEARCHED ---

| | | | | |
|-------------|-------------|-------------|-----------------|-----------|
| 1=ACGIH ALL | 6=IARC 1 | 11=TSCA 4 | 16=CA P65 CARC | 21=LA RTK |
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| 5=NTP SUS | 10=OSHA Z | 15=TSCA 12b | 20=IL RTK | 25=PA RTK |
| | | | | 26=RI RTK |

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRC=Reproductive

16. OTHER INFORMATION

USE: NATURAL GAS ENGINE OIL

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Please call the Customer Response Center on 800-662-4525 for formulation disclosure.

For Internal Use Only: MHC: 1* 1* 0* 1* 1*, MPPEC: A, TRN: 605717-00,
ELIS: 403154, CMCS97: 979930, REC: US - MARKETING, SAFE USE: L
EHS Approval Date: 01JAN2001

Legally required information is given in accordance with applicable Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. Nothing is intended as a recommendation for uses which infringe valid patents or as extending any license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users. Use or re-transmission of the information contained herein in any other format than the format as presented is strictly prohibited. Mobil neither represents nor warrants that the format, content or product formulas contained in this document comply with the laws of any other country except the United States of America.

605717-00 MOBIL PEGASUS 89
MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL PEGASUS 89
SUPPLIER: EXXONMOBIL OIL CORPORATION
3225 GALLOWES RD.
FAIRFAX, VA 22037

24 - Hour Emergency (call collect): 609-737-4411
Product and MSDS Information: 800-662-4525 856-224-4644
CHEMTREC: 800-424-9300 202-483-7616

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: PET. HYDROCARBONS AND ADDITIVES
INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives. See Section 15 for a regulatory analysis of the ingredients.

See Section 15 for European Label Information.

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined not to be hazardous.

EFFECTS OF OVEREXPOSURE: No significant effects expected.

EMERGENCY RESPONSE DATA: Amber Liquid. DOT ERG No.: NA

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.

SKIN CONTACT: Wash contact areas with soap and water.

INHALATION: Not expected to be a problem.

INGESTION: Not expected to be a problem. However, if greater than 1/2 liter (pint) ingested, seek medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing.

Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from

fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None. Flash Point C(F): > 246(475) (ASTM D-92). Flammable limits - LEL: NA, UEL: NA.

NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Metal oxides. Elemental oxides.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8302. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section 6

7. HANDLING AND STORAGE

HANDLING: No special precautions are necessary beyond normal good hygiene practices. See Section 6 for additional personal protection advice when handling this product.

STORAGE: Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: No special requirements under ordinary conditions of use and with adequate ventilation.

RESPIRATORY PROTECTION: No special requirements under ordinary conditions of use and with adequate ventilation.

EYE PROTECTION: Normal industrial eye protection practices should be employed.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.

EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, a exposure limit of 5.00 mg/m3 is suggested for oil mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid

COLOR: Amber

ODOR: Mild
 ODOR THRESHOLD-ppm: NE
 pH: 8.8
 BOILING POINT C(F): 388(730)
 MELTING POINT C(F): NA
 FLASH POINT C(F): > 246(475) (ASTM D-92)
 FLAMMABILITY: NE
 AUTO FLAMMABILITY: NE
 EXPLOSIVE PROPERTIES: NA
 OXIDIZING PROPERTIES: NA
 VAPOR PRESSURE-mmHg 20 C: < 0.1
 VAPOR DENSITY: > 2.0
 EVAPORATION RATE: NE
 RELATIVE DENSITY, 15/4 C: 0.896
 SOLUBILITY IN WATER: Negligible
 PARTITION COEFFICIENT: > 3.5
 VISCOSITY AT 40 C, cSt: 121.0
 VISCOSITY AT 100 C, cSt: 13.3
 POUR POINT C(F): < -15(5)
 FREEZING POINT C(F): NE
 VOLATILE ORGANIC COMPOUND: NE
 NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES
 FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
 CONDITIONS TO AVOID: Extreme heat.
 INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.
 HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Metal oxides,
 Elemental oxides.
 HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
 DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
 INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.
 EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.
 SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.
 OTHER ACUTE TOXICITY DATA: The acute toxicological results summarized above are based on testing of representative Mobil products. Representative Mobil formulations have shown no acute effects, administered via the inhalation route, when tested at maximum attainable oil mist or vapor concentrations.

---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Representative Mobil formulations have been tested at the Mobil Environmental and Health Sciences Laboratory by dermal applications to rats 5 days/week for 90 days at doses

significantly higher than those expected during normal industrial exposure. Extensive evaluations, including microscopic examination of internal organs and clinical chemistry of body fluids, showed no adverse effects.

---REPRODUCTIVE TOXICOLOGY (SUMMARY)---

Dermal exposure of pregnant rats to representative formulations did not cause adverse effects in either the mothers or their offspring.

---CHRONIC TOXICOLOGY (SUMMARY)---

The base oils in this product are severely solvent refined and/or severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects. These results are confirmed on a continuing basis using various screening methods such as the Mobil Modified Ames Test and IP-346.

---SENSITIZATION (SUMMARY)---

Representative Mobil formulations have not caused skin sensitization in guinea pigs.

---OTHER TOXICOLOGY DATA---

Used gasoline engine oils have shown evidence of skin carcinogenic activity in laboratory tests when no effort was made to wash the oil off between applications. Used oil from diesel engines did not produce this effect.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: This product is expected to be inherently biodegradable. There is no evidence to suggest bioaccumulation will occur. It is not expected to be toxic to aquatic organisms.

Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.
RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.
 IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, and DSL.
 EU Labeling: EU labeling not required.
 U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".
 SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.
 This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.
 The following product ingredients are cited on the lists below:

| CHEMICAL NAME | CAS NUMBER | LIST CITATIONS |
|-------------------------------------|------------|----------------|
| ZINC (ELEMENTAL ANALYSIS) (>0.02%) | 7440-66-6 | 22 |
| PHOSPHORODITHIOIC ACID, O,O-DI | 58649-42-3 | 22 |
| C1-14-ALKYL ESTERS, ZINC SALTS (2): | | |
| 1) (ZDDP) (0.25%) | | |

--- REGULATORY LISTS SEARCHED ---

| | | | | |
|-------------|-------------|-------------|-----------------|-----------|
| 1=ACGIH ALL | 6=IARC 1 | 11=TSCA 4 | 16=CA P65 CARC | 21=LA RTK |
| 2=ACGIH A1 | 7=IARC 2A | 12=TSCA 5a2 | 17=CA P65 REPRO | 22=NI 293 |
| 3=ACGIH A2 | 8=IARC 2B | 13=TSCA 5e | 18=CA RTK | 23=MV RTK |
| 4=NTP CARC | 9=OSHA CARC | 14=TSCA 6 | 19=FL RTK | 24=NJ RTK |
| 5=NTP SUS | 10=OSHA 2 | 15=TSCA 12b | 20=IL RTK | 25=PA RTK |
| | | | 26=RI RTK | |

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRC=Reproductive

16. OTHER INFORMATION

USE: NATURAL GAS ENGINE OIL
 NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Please call the Customer Response Center on 800-662-4525 for formulation disclosure.

 For Internal Use Only: MHC: 1* 1* 0* 1* 1*, MPPEC: A, TRN: 005717-00, ELIS: 403164, CMCS97: 979930, REC: US - MARKETING, SAFE USE: L
 EHS Approval Date: 01JAN2001

 Legally required information is given in accordance with applicable Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. Nothing is intended as a recommendation for uses which infringe valid patents or as extending any license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users. Use or retransmission of the information contained herein in any other format than the format as presented is strictly prohibited. Mobil neither represents nor warrants that the format, content or product formulas contained in this document comply with the laws of any other country except the United States of America.

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1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

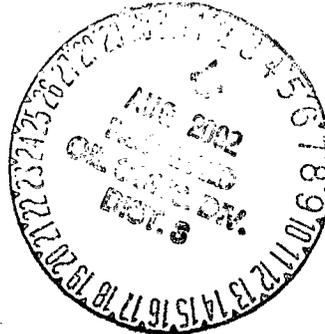
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02058

| | |
|--|---|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator <u>Red Willow Production?</u> |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site <u>Southern Ute 33-10 #34-5</u> |
| 2. Management Facility Destination <u>Tierra Land Farm</u> | 6. Transporter <u>T.R.C.</u> |
| 3. Address of Facility Operator # <u>420 CR 3100 Aztec</u> | 8. State <u>New Mexico</u> |
| 7. Location of Material (Street Address or ULSTR) <u>Southern Ute #33-10 34-5</u> | <u>Sec 34, T. 33N, R. 10W</u> |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil Contaminated By New compressor Oil From Storage Tank



Estimated Volume 1 cy Known Volume (to be entered by the operator at the end of the haul) 1 1/2 cy

SIGNATURE David Benowitz TITLE: Land Farm Manager DATE: 8-2-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: David Benowitz TELEPHONE NO. 334-8894

(This space for State Use)

APPROVED BY: Denny Feant TITLE: Enviro/Engr DATE: 8/02/02
 APPROVED BY: Martin J. H. TITLE: Environmental Geologist DATE: 8/05/02

5-205080



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1800 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 874
(505) 334-6178 Fax (505) 334-

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|---|--|
| <p>1. Generator Name and Address: <i>RED willow PRODUCTION 116 ARIZONA DR. GUNN, CO 81137</i></p> | <p>2. Destination Name: <i>Tierra Land farm</i></p> |
| <p>3. Originating Site (name): <i>SO. UTE 33-10, 34-5</i></p> <p><small>Attach list of originating sites as appropriate</small></p> | <p>Location of the Waste (Street address &/or ULSTR): <i>SEC. 34-T.33N-R.10W</i></p> |
| <p>4. Source and Description of Waste <i>NEW COMPRESSOR SILEY DIRT from storage tanks</i></p> | |

I, Bob Wren representative for:
Red Willow Production (Print Name)
do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS information Other (description):
 RCRA Hazardous Waste Analysis
 Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): Bob Wren
Title: Senior Field Foreman



T IERRA
E NVIRONMENTAL
C OMPANY
I NC.

PHONE: (505) 334-3394

FAX: (505) 334-9024

P.O. DRAWER 15250
FARMINGTON, NM 87401

**CERTIFICATE FROM OUT OF STATE AGENCY
AUTHORIZING THE REMOVAL OF RCRA EXEMPT
OR NON-EXEMPT NON-HAZARDOUS OILFIELD WASTE
FROM ITS JURISDICTION**

I have reviewed the enclosed information concerning RCRA exempt or non-exempt non-hazardous material generated at

Location: Route 33-10 34-5

By: Generator Red Willow Production

As a representative of BTA

the regulatory agency, I have no objection to the material being moved from our jurisdiction to the Tierra Crouch Mesa Landfarm located at 420 CR 3100, in San Juan County New Mexico.

Name: M J STANCAKAWO Title Superintendent, BTA

X Signature [Signature] Date 8/1/02

Phone 979 523-4541 Fax 9321 E-mail _____

MATERIAL SAFETY
DATA SHEET

AMOCO 300 MOTOR OIL SAE 30

MANUFACTURER:
Amoco Oil Company
200 East Randolph Drive
Chicago, Illinois 60601

EMERGENCY HEALTH INFORMATION: (800) 447-8735
EMERGENCY SPILL INFORMATION: (800) 424-9300
OTHER PRODUCT SAFETY INFORMATION: (312) 856-3907

IMPORTANT COMPONENTS: Solvent refined paraffinic petroleum oil. CAS #64741-88-4.
Hydrofinished, solvent refined paraffinic petroleum oil.
CAS #64742-54-7.
Zinc dialkyl dithiophosphate (ZDDP).
Calcium phenate.

WARNING STATEMENT: Continuous long-term contact with used motor oils has caused skin cancer in animal tests. Avoid prolonged skin contact with used motor oils.

APPEARANCE AND ODOR: Pale colored oily liquid.

HEALTH HAZARD INFORMATION

EYE

EFFECT: No significant irritation expected.
FIRST AID: Flush eyes with plenty of water.
PROTECTION: None required, however, use of safety glasses is good industrial practice.

SKIN

EFFECT: None expected for single short-term exposures. Prolonged or repeated contact may produce some irritation.
FIRST AID: None required for unused motor oil. Contact with used motor oil--wash exposed skin thoroughly with soap and water.
PROTECTION: Wear protective clothing and impervious gloves when working with used motor oils.

INHALATION

EFFECT: None expected under usual conditions of use.
FIRST AID: None required.
PROTECTION: None required for usual conditions of use.

INGESTION

EFFECT: Expected to be relatively non-toxic.
FIRST AID: If a large amount is swallowed, induce vomiting, get medical attention.

AMOCO 300 MOTOR OIL SAE 30

PAGE 03 OF 04

TOXICOLOGICAL INFORMATION

EYE: Primary eye irritation score of 0.7/110.0; 24 hours (rabbits).

SKIN: Acute dermal LD50 greater than 2g/kg (rabbits). Primary dermal irritation score of 2.0/8.0 (rabbits). Not a skin sensitizer in guinea pigs.

INGESTION: Acute oral LD50 greater than 10g/kg (rats).

CAUTION!

Continuous long-term contact with used motor oils has caused cancer in animal tests.

In case of contact, wash exposed skin thoroughly with soap and water or use waterless hand cleaners to remove used motor oils from skin. Do not use gasoline, thinners, or solvents.

Wear protective clothing and impervious gloves when working with used motor oils. Remove oil-soaked clothing, including shoes, and thoroughly clean and dry before reuse.

This product contains a zinc dithiophosphate (ZDDP) component. The ZDDP in this product is judged not to present a significant risk to human health when good personal hygiene is observed.

Repeated dermal exposure to ZDDPs have produced severe skin irritation in rabbits which resulted in reduced food consumption and substantial body weight loss. Testicular atrophy was seen in these rabbits, and appeared to be a consequence of the substantial body weight loss. ZDDPs have also been found to be mutagenic in some tests; however, this activity has been attributed to the zinc constituent. Zinc is ubiquitous in the environment and an essential nutrient. Further, it is generally accepted that zinc does not present a mutagenic or carcinogenic risk to humans.

This product contains calcium phenate which produced testicular effects in rabbits following prolonged and repeated skin exposure in high dosages. The concentration of this component is below that which produced no effect in the animal studies. The high levels of exposure that produced adverse effects in rabbits are not expected to result from normal use of the product. No adverse health effects are expected to occur when good personal hygiene is observed.

REGULATORY INFORMATION

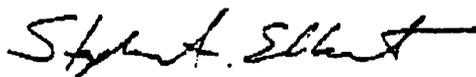
OSHA HAZARD COMMUNICATION STANDARD: Not hazardous per 29 CFR 1910.1200(d).

DOT PROPER SHIPPING NAME (BULK, LAND): Not regulated.

Truck/Rail Shipping Class: Petroleum Lubricating Oil.

ISSUE INFORMATION

BY:



Stephen A. Elbert
Mgr., Product Safety & Toxicology

ISSUED: August 08, 1985
SUPERSEDES: January 02, 1985

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02058

| | |
|--|---|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator <i>Red Willow Production</i> |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site <i>Cabin Compressor Station</i> |
| 2. Management Facility Destination <i>Tierra Land Farm</i> | 6. Transporter <i>TRC</i> |
| 3. Address of Facility Operator # <i>420 CR. 3100 Aztec</i> | 8. State <i>New Mexico</i> |
| 7. Location of Material (Street Address or ULSTR) <i>Cabin Compressor Sta.</i> | <i>Sec. 3-T32N-R.10W</i> |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil Contaminated By New Compressor oil



Estimated Volume 1/4 cy Known Volume (to be entered by the operator at the end of the haul) 2 1/2 cy

SIGNATURE *David Borowitz* TITLE: *Land Farm Manager* DATE: *8-1-02*
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: *David Borowitz* TELEPHONE NO. *334-8894*

(This space for State Use)

APPROVED BY: *Derry Fount* TITLE: *Enviro/Engr* DATE: *8/02/02*
 APPROVED BY: *Monty J. M.* TITLE: *Environmental Geologist* DATE: *8/05/02*

4-205080



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1800 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 874
(505) 334-6178 Fax (505) 334

GARY E. JOHNSON
GOVERNOR

JENNIFER A. JALISBUR
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|--|--|
| 1. Generator Name and Address: RED Willow PRODUCTION 116 MOURACHE DR. TUCUACIO CO 81137 | 2. Destination Name: Tierra Land Service Aztec |
| 3. Originating Site (name): CABIN COMPRESSOR STATION Other Site | Location of the Waste (Street address &/or ULSTR): Sec. 3-T32N-R10W |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste New Compressor OILY DIRT 1/4 yd | |

I, Bob Wren representative for:

Red Willow Production Co (Print Name)

do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste

NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS Information

Other (description):

RCRA Hazardous Waste Analysis

Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): Bob Wren

Title: Senior Field Supervisor



T IERRA
E NVIRONMENTAL
C OMPANY
I NC.

PHONE: (505) 334-8394

FAX: (505) 334-9024

P.O. DRAWER 15250
FARMINGTON, NM 87401

**CERTIFICATE FROM OUT OF STATE AGENCY
AUTHORIZING THE REMOVAL OF RCRA EXEMPT
OR NON-EXEMPT NON-HAZARDOUS OILFIELD WASTE
FROM ITS JURISDICTION**

I have reviewed the enclosed information concerning RCRA exempt or non-exempt non-hazardous material generated at

Location: Cabin Camp Station

By: Generator Red Willow Production

As a representative of BIA

the regulatory agency, I have no objection to the material being moved from our jurisdiction to the Tierra Crouch Mesa Landfarm located at 420 CR 3100, in San Juan County New Mexico.

Name: M. J. STANLEY Title: Site Superintendent

X Signature: [Handwritten Signature] Date: 8/1/02

Phone: 970-563-4511 Fax: 970-563-4511 E-mail: _____

MATERIAL SAFETY
DATA SHEET

AMOCO 300 MOTOR OIL SAE 30

MANUFACTURER:
Amoco Oil Company
200 East Randolph Drive
Chicago, Illinois 60601

EMERGENCY HEALTH INFORMATION: (800) 447-8735
EMERGENCY SPILL INFORMATION: (800) 424-9300
OTHER PRODUCT SAFETY INFORMATION: (312) 856-3907

IMPORTANT COMPONENTS: Solvent refined paraffinic petroleum oil. CAS #64741-88-4.
Hydrofinished, solvent refined paraffinic petroleum oil.
CAS #64742-54-7.
Zinc dialkyl dithiophosphate (ZDDP).
Calcium phenate.

WARNING STATEMENT: Continuous long-term contact with used motor oils has caused skin cancer in animal tests. Avoid prolonged skin contact with used motor oils.

APPEARANCE AND ODOR: Pale colored oily liquid.

HEALTH HAZARD INFORMATION

EYE

EFFECT: No significant irritation expected.
FIRST AID: Flush eyes with plenty of water.
PROTECTION: None required, however, use of safety glasses is good industrial practice.

SKIN

EFFECT: None expected for single short-term exposures. Prolonged or repeated contact may produce some irritation.
FIRST AID: None required for unused motor oil. Contact with used motor oil--wash exposed skin thoroughly with soap and water.
PROTECTION: Wear protective clothing and impervious gloves when working with used motor oils.

INHALATION

EFFECT: None expected under usual conditions of use.
FIRST AID: None required.
PROTECTION: None required for usual conditions of use.

INGESTION

EFFECT: Expected to be relatively non-toxic.
FIRST AID: If a large amount is swallowed, induce vomiting, get medical attention.

AMOCO 300 MOTOR OIL SAE 30

PAGE 03 OF 04

TOXICOLOGICAL INFORMATION

EYE: Primary eye irritation score of 0.7/110.0; 24 hours (rabbits).

SKIN: Acute dermal LD50 greater than 2g/kg (rabbits). Primary dermal irritation score of 2.0/8.0 (rabbits). Not a skin sensitizer in guinea pigs.

INGESTION: Acute oral LD50 greater than 10g/kg (rats).

CAUTION!

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In case of contact, wash exposed skin thoroughly with soap and water or use waterless hand cleaners to remove used motor oils from skin. Do not use gasoline, thinners, or solvents.

Wear protective clothing and impervious gloves when working with used motor oils. Remove oil-soaked clothing, including shoes, and thoroughly clean and dry before reuse.

This product contains a zinc dithiophosphate (ZDDP) component. The ZDDP in this product is judged not to present a significant risk to human health when good personal hygiene is observed.

Repeated dermal exposure to ZDDPs have produced severe skin irritation in rabbits which resulted in reduced food consumption and substantial body weight loss. Testicular atrophy was seen in these rabbits, and appeared to be a consequence of the substantial body weight loss. ZDDPs have also been found to be mutagenic in some tests; however, this activity has been attributed to the zinc constituent. Zinc is ubiquitous in the environment and an essential nutrient. Further, it is generally accepted that zinc does not present a mutagenic or carcinogenic risk to humans.

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REGULATORY INFORMATION

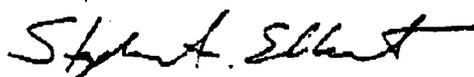
OSHA HAZARD COMMUNICATION STANDARD: Not hazardous per 29 CFR 1910.1200(d).

DOT PROPER SHIPPING NAME (BULK, LAND): Not regulated.

Truck/Rail Shipping Class: Petroleum Lubricating Oil.

ISSUE INFORMATION

BY:



Stephen A. Elbert
Mgr., Product Safety & Toxicology

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SUPERSEDES: January 02, 1985

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State of New Mexico
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Oil Conservation Division
2040 South Pacheco
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Form C-138
Revised March 17, 1999

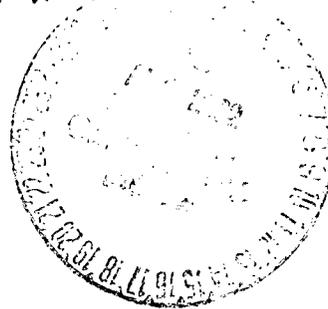
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| | |
|---|--|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator <i>Red Willow Production</i> |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site <i>Florida Mesa Compressor Station</i> |
| 2. Management Facility Destination <i>Tierra Land Farm</i> | 6. Transporter <i>TRC</i> |
| 3. Address of Facility Operator <i># 420 CR 3100 Aztec</i> | 8. State <i>New Mexico</i> |
| 7. Location of Material (Street Address or ULSTR) <i>Flomo Compressor Sta</i> | <i>Sec 16, T. 33N, R. 9W</i> |
| 9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil Contaminated By New lubie oil From Tank leak.



Estimated Volume 2 cy Known Volume (to be entered by the operator at the end of the haul) 4 cy

SIGNATURE *David Borawitz* TITLE: *Land Farm Manager* DATE: *7-24-02*
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: *David Borawitz* TELEPHONE NO. *334-8894*

(This space for State Use)
 APPROVED BY: *Denny Feant* TITLE: *Enviro/Engl* DATE: *8/02/02*
 APPROVED BY: *Martinez jky* TITLE: *Environmental Geologist* DATE: *8/05/02*

7-20508



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
GOVERNOR

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87
(505) 884-8198 Fax (505) 884-1334

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|---|---|
| 1. Generator Name and Address: <i>Red Willow Production</i> <i>116 Marade DR, Box 737</i> <i>Elmwood, CO 81137</i> | 2. Destination Name: |
| 3. Originating Site (name): <i>Traco Compressor Station</i> | Location of the Waste (Street address &/or ULSTR): <i>Tucson Land Farm, Pecos, NM</i> <i>SEC. 16 T. 33N R. 9W</i> |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste <i>New Tube Oil, Leak from oil Tank</i> <i>2 yds of Dirt</i> | |

Travis B. Taylor (Print Name) representative for:

Red Willow Production do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS Information Other (description):
 RCRA Hazardous Waste Analysis
 Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): *Travis Taylor*

Title: *Operations Foreman*



T IERRA
E NVIRONMENTAL
C OMPANY
I NC.

PHONE: (505) 334-8894
FAX: (505) 334-9024

P.O. DRAWER 15250
FARMINGTON, NM 87401

**CERTIFICATE FROM OUT OF STATE AGENCY
AUTHORIZING THE REMOVAL OF RCRA EXEMPT
OR NON-EXEMPT NON-HAZARDOUS OIL FIELD WASTE
FROM ITS JURISDICTION**

I have reviewed the enclosed information concerning RCRA exempt or non-exempt non-hazardous material generated at

Location: From Compressor Station

By Generator Tamara Taylor

As a representative of Red Willow

the regulatory agency, I have no objection to the material being moved from our jurisdiction to the Tierra Crouch Mesa Landfarm located at 420 CR 3100, in San Juan County New Mexico.

Name: _____ Title Acting Superintendent

X Signature Luna In Internet Date 7/17/02

Phone 505 334 8894 Fax 505 334 9024

MATERIAL SAFETY
DATA SHEET

AMOCO 300 MOTOR OIL SAE 30

MANUFACTURER:
Amoco Oil Company
200 East Randolph Drive
Chicago, Illinois 60601

EMERGENCY HEALTH INFORMATION: (800) 447-8735
EMERGENCY SPILL INFORMATION: (800) 424-9300
OTHER PRODUCT SAFETY INFORMATION: (312) 856-3907

IMPORTANT COMPONENTS: Solvent refined paraffinic petroleum oil. CAS #64741-88-4.
Hydrofinished, solvent refined paraffinic petroleum oil.
CAS #64742-54-7.
Zinc dialkyl dithiophosphate (ZDDP).
Calcium phenate.

WARNING STATEMENT: Continuous long-term contact with used motor oils has caused skin cancer in animal tests. Avoid prolonged skin contact with used motor oils.

APPEARANCE AND ODOR: Pale colored oily liquid.

HEALTH HAZARD INFORMATION

EYE

EFFECT: No significant irritation expected.
FIRST AID: Flush eyes with plenty of water.
PROTECTION: None required, however, use of safety glasses is good industrial practice.

SKIN

EFFECT: None expected for single short-term exposures. Prolonged or repeated contact may produce some irritation.
FIRST AID: None required for unused motor oil. Contact with used motor oil--wash exposed skin thoroughly with soap and water.
PROTECTION: Wear protective clothing and impervious gloves when working with used motor oils.

INHALATION

EFFECT: None expected under usual conditions of use.
FIRST AID: None required.
PROTECTION: None required for usual conditions of use.

INGESTION

EFFECT: Expected to be relatively non-toxic.
FIRST AID: If a large amount is swallowed, induce vomiting, get medical attention.

AMOCO 300 MOTOR OIL JAE 30

PAGE 03 OF 04

TOXICOLOGICAL INFORMATION

EYE: Primary eye irritation score of 0.7/110.0; 24 hours (rabbits).

SKIN: Acute dermal LD50 greater than 2g/kg (rabbits). Primary dermal irritation score of 2.0/8.0 (rabbits). Not a skin sensitizer in guinea pigs.

INGESTION: Acute oral LD50 greater than 10g/kg (rats).

CAUTION!

Continuous long-term contact with used motor oils has caused cancer in animal tests.

In case of contact, wash exposed skin thoroughly with soap and water or use waterless hand cleaners to remove used motor oils from skin. Do not use gasoline, thinners, or solvents.

Wear protective clothing and impervious gloves when working with used motor oils. Remove oil-soaked clothing, including shoes, and thoroughly clean and dry before reuse.

This product contains a zinc dithiophosphate (ZDDP) component. The ZDDP in this product is judged not to present a significant risk to human health when good personal hygiene is observed.

Repeated dermal exposure to ZDDPs have produced severe skin irritation in rabbits which resulted in reduced food consumption and substantial body weight loss. Testicular atrophy was seen in these rabbits, and appeared to be a consequence of the substantial body weight loss. ZDDPs have also been found to be mutagenic in some tests; however, this activity has been attributed to the zinc constituent. Zinc is ubiquitous in the environment and an essential nutrient. Further, it is generally accepted that zinc does not present a mutagenic or carcinogenic risk to humans.

This product contains calcium phenate which produced testicular effects in rabbits following prolonged and repeated skin exposure in high dosages. The concentration of this component is below that which produced no effect in the animal studies. The high levels of exposure that produced adverse effects in rabbits are not expected to result from normal use of the product. No adverse health effects are expected to occur when good personal hygiene is observed.

REGULATORY INFORMATION

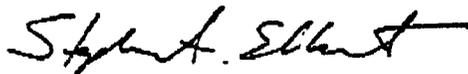
OSHA HAZARD COMMUNICATION STANDARD: Not hazardous per 29 CFR 1910.1200(d).

DOT PROPER SHIPPING NAME (BULK, LAND): Not regulated.

Truck/Rail Shipping Class: Petroleum Lubricating Oil.

ISSUE INFORMATION

BY:



Stephen A. Elbert
Mgr., Product Safety & Toxicology

ISSUED: August 08, 1985
SUPERSEDES: January 02, 1985

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
7000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

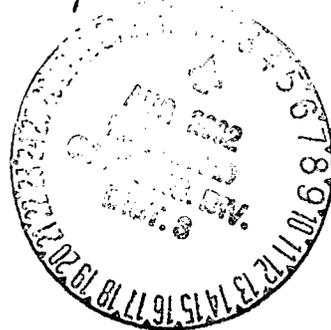
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02058

| | |
|--|--|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 4. Generator <u>Red Willow Production</u> 5. Originating Site <u>North Black Ridge Compressor Station</u> |
| 2. Management Facility Destination <u>Tierra Land Farm</u> | 6. Transporter <u>TRC</u> |
| 3. Address of Facility Operator <u>420 CR, 3100 Aztec</u> | 8. State <u>New Mexico</u> |
| 7. Location of Material (Street Address or ULSTR) <u>North Black Ridge Compressor Sta</u> | <u>Sec. 33N-T10W-R-18</u> |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil Contaminated By New Compressor oil



Estimated Volume 4 cy Known Volume (to be entered by the operator at the end of the haul) 6 cy

SIGNATURE David Benowitz TITLE: Land Farm Manager DATE: 8-2-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: David Benowitz TELEPHONE NO. 334-88941

(This space for State Use)

APPROVED BY: Denny Fout TITLE: Enviro/Eng DATE: 8/02/02
 APPROVED BY: Monty J.H. TITLE: Environmental Geologist DATE: 8/05/02

1-205080



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 874
(505) 334-6178 Fax (505) 334

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|--|--|
| 1. Generator Name and Address: <i>Red Willow Production Co 115 Madison Ln. P.O. Box 11001 Albuquerque, NM 87121</i> | 2. Destination Name: <i>Timberland Forest Services</i> |
| 3. Originating Site (name): <i>CABIN COMPRESSOR STATION</i> | Location of the Waste (Street address &/or ULSTR): <i>Sec. 33N-T10W-R18</i> |
| <small>Attach list of originating sites as appropriate</small> | |
| 4. Source and Description of Waste <i>New Compressor oily dirt 1/4 yd</i> | |

I, *Bob Wren* representative for:
Red Willow Production Co (Print Name)
do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July 1988, regulatory determination, the above described waste is: (Check appropriate classification)
 HAZARDOUS WASTE NON-EXEMPT HAZARDOUS WASTE WHICH IS NOT RECORDED BY CHARACTERISTIC ANALYSIS OR BY PRODUCT IDENTIFICATION

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):
 MSDS Information Other (description):
 RCRA Hazardous Waste Analysis
 Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): *Bob Wren*
Title: *Senior Field Supervisor*



T TERRA
E NVIRONMENTAL
C OMPANY
I NC.

PHONE: (505) 334-3394
FAX: (505) 334-9824

P.O. DRAWER 15250
FARMINGTON, NM 87401

**CERTIFICATE FROM OUT OF STATE AGENCY
AUTHORIZING THE REMOVAL OF RCRA EXEMPT
OR NON-EXEMPT NON-HAZARDOUS OILFIELD WASTE
FROM ITS JURISDICTION**

I have reviewed the enclosed information concerning RCRA exempt or non-exempt non-hazardous material generated at

Location: North Black Ridge

By: Red Willow Production
Generator

As a representative of RTA

the regulatory agency, I have no objection to the material being moved from our jurisdiction to the Tierra Crouch Mesa Landfarm located at 420 CR 3100, in San Juan County New Mexico.

Name: [Signature] Title: Superintendent RTA

X Signature: [Signature] Date: 8/1/02

Phone: 970-523-4511 Fax: 9721 E-mail: _____

MATERIAL SAFETY
DATA SHEET

AMOCO 300 MOTOR OIL SAE 30

MANUFACTURER:
Amoco Oil Company
200 East Randolph Drive
Chicago, Illinois 60601

EMERGENCY HEALTH INFORMATION: (800) 447-8735
EMERGENCY SPILL INFORMATION: (800) 424-9300
OTHER PRODUCT SAFETY INFORMATION: (312) 856-3907

IMPORTANT COMPONENTS: Solvent refined paraffinic petroleum oil. CAS #64741-88-4.
Hydrofinished, solvent refined paraffinic petroleum oil.
CAS #64742-54-7.
Zinc dialkyl dithiophosphate (ZDDP).
Calcium phenate.

WARNING STATEMENT: Continuous long-term contact with used motor oils has caused skin cancer in animal tests. Avoid prolonged skin contact with used motor oils.

APPEARANCE AND ODOR: Pale colored oily liquid.

HEALTH HAZARD INFORMATION

EYE

EFFECT: No significant irritation expected.

FIRST AID: Flush eyes with plenty of water.

PROTECTION: None required, however, use of safety glasses is good industrial practice.

SKIN

EFFECT: None expected for single short-term exposures. Prolonged or repeated contact may produce some irritation.

FIRST AID: None required for unused motor oil. Contact with used motor oil--wash exposed skin thoroughly with soap and water.

PROTECTION: Wear protective clothing and impervious gloves when working with used motor oils.

INHALATION

EFFECT: None expected under usual conditions of use.

FIRST AID: None required.

PROTECTION: None required for usual conditions of use.

INGESTION

EFFECT: Expected to be relatively non-toxic.

FIRST AID: If a large amount is swallowed, induce vomiting, get medical attention.

AMOCO 300 MOTOR OIL SAE 30

PAGE 03 OF 04

TOXICOLOGICAL INFORMATION

EYE: Primary eye irritation score of 0.7/110.0; 24 hours (rabbits).

SKIN: Acute dermal LD50 greater than 2g/kg (rabbits). Primary dermal irritation score of 2.0/8.0 (rabbits). Not a skin sensitizer in guinea pigs.

INGESTION: Acute oral LD50 greater than 10g/kg (rats).

CAUTION!

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Wear protective clothing and impervious gloves when working with used motor oils. Remove oil-soaked clothing, including shoes, and thoroughly clean and dry before reuse.

This product contains a zinc dithiophosphate (ZDDP) component. The ZDDP in this product is judged not to present a significant risk to human health when good personal hygiene is observed.

Repeated dermal exposure to ZDDPs have produced severe skin irritation in rabbits which resulted in reduced food consumption and substantial body weight loss. Testicular atrophy was seen in these rabbits, and appeared to be a consequence of the substantial body weight loss. ZDDPs have also been found to be mutagenic in some tests; however, this activity has been attributed to the zinc constituent. Zinc is ubiquitous in the environment and an essential nutrient. Further, it is generally accepted that zinc does not present a mutagenic or carcinogenic risk to humans.

This product contains calcium phenate which produced testicular effects in rabbits following prolonged and repeated skin exposure in high dosages. The concentration of this component is below that which produced no effect in the animal studies. The high levels of exposure that produced adverse effects in rabbits are not expected to result from normal use of the product. No adverse health effects are expected to occur when good personal hygiene is observed.

REGULATORY INFORMATION

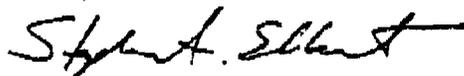
OSHA HAZARD COMMUNICATION STANDARD: Not hazardous per 29 CFR 1910.1200(d).

DOT PROPER SHIPPING NAME (BULK, LAND): Not regulated.

Truck/Rail Shipping Class: Petroleum Lubricating Oil.

ISSUE INFORMATION

BY:



Stephen A. Elbert
Mgr., Product Safety & Toxicology

ISSUED: August 08, 1985
SUPERSEDES: January 02, 1985

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| | |
|---|--|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator <u>Key Energy</u> |
| Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | 5. Originating Site <u>Key Energy Hwy 64</u> |
| 2. Management Facility Destination <u>Teresa Land Farm</u> | 6. Transporter <u>Key Energy</u> |
| 3. Address of Facility Operator <u>420 CR 7100 Aztec NM</u> | 8. State <u>NM</u> |
| 7. Location of Material (Street Address or ULSTR) <u>36 Degrees, 39,477.4' 107 Degrees 41.566'</u> | |
| 9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL: Diesel fuel & Dirt from a ruptured tank



Estimated Volume _____ cy Known Volume (to be entered by the operator at the end of the haul) 10 cy

SIGNATURE [Signature] TITLE: Land Farm manager DATE: 6-25-02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Jan Nabis TELEPHONE NO. 334-8894

(This space for State Use)
APPROVED BY: [Signature] TITLE: Enviro/Engr DATE: 07/08/02
APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 7/16/02



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFICATE OF WASTE STATUS

| | |
|--|--|
| <p>1. Generator Name and Address Key Energy Services, Inc. Four Corners Division 5651 US Highway 64 Farmington, NM 87401</p> | <p>2. Destination Name: Tierra Environmental Company, Inc. Crouch Mesa Landfarm 420 C. R. 3100 Aztec, NM 87401</p> |
| <p>3. Originating Site (name): Key Energy Services, Inc. Four Corners Division 5651 US Highway 64 Farmington, NM 87401 attach list of originating sites as appropriate</p> | <p>Location of the Waste (Street address &/or ULSTR): 36 Degree, 39.447 North 107 Degree 41.566 West San Juan County, NM</p> |
| <p>4. Source and Description of Waste Contaminated dirt was cleaned up from an accident that occurred on a public roadway. A diesel tank was ruptured causing the diesel to be released. All the contaminated dirt was dug up and loaded on a dump truck. It will be transported and disposed of at Tierra.</p> | |

I, **Bob James** representative for **Key Energy Services, Four Corners Division** do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste

NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS Information

Other (description)

RCRA Hazardous Waste Analysis

Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature):

Title:

Equipment & Environmental Manager

Date:

June 24, 2002



USA and WORLDWIDE

September 30, 1998

Material Safety Data Sheet

NO. 2 LOW SULFUR DISTILLATE

PHILLIPS 66 COMPANY
A Division of Phillips Petroleum Company
Bartlesville, Oklahoma 74004

PHONE NUMBERS

Emergency: (918) 661-8118
General MSDS Information: (918) 661-3709
For Additional MSDSs: (918) 661-3709

A. Product Identification

Synonyms: Low Sulfur Diesel Fuel; #2 Distillate
Chemical Name: Mixture
Chemical Family: Hydrocarbons
Chemical Formula: Mixture
CAS Reg. No.: 68476-34-6
Product No.: 34260, 35260

Product and/or Components Entered on EPA's TSCA Inventory: YES

This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.

B. Components

| Ingredients | CAS Number | % By Wt. | OSHA PEL | ACGIH TLV |
|---------------------|------------|----------|----------|-----------|
| Diesel fuel | 63476-34-6 | 100 | NE | NE |
| may include Benzene | 71-43-2 | < 50 ppm | 1 ppm* | 10 ppm |
| Sulfur | 7704-34-9 | < 0.05 | NE | NE |

* Work operations exempted by the Benzene Standard, 29 CFR 1910.1028, will have a 10 ppm 8 hour TWA.

NA - Not Applicable NE - Not Established

C. Personal Protection Information

Ventilation: Use adequate ventilation.

Respiratory Protection: Not generally required unless needed to prevent respiratory irritation. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator.

Eye Protection: For splash protection, use chemical goggles and face shield.

Skin Protection: Use gloves resistant to the material being used. (i.e. neoprene or Nitrile rubber). Use protective garments to prevent excessive skin contact.

NOTE: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. Handling and Storage Precautions

Do not get in eyes, on skin or on clothing. Avoid breathing vapors, mist, fume or dust. Do not swallow. May be aspirated into lungs. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use with adequate ventilation.

Keep away from heat, sparks, and flames. Store in a well-ventilated area. Store in a closed container. Bond and ground during transfer.

E. Reactivity Data

Stability: Stable
Conditions to Avoid: Not Established
Incompatibility (Materials to Avoid): Oxygen and strong oxidizing agents

Hazardous Polymerization: Will not occur
Conditions to Avoid: Not Established
Hazardous Decomposition Products: Carbon and sulfur oxides and various hydrocarbons formed when burned.

F. Health Hazard Data

Recommended Exposure Limits:

Not Established

First Aid and Emergency Procedures:

- Eye:** Flush eyes with running water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.
- Skin:** Immediately wash skin with soap and water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.
- Inhalation:** Remove from exposure. If breathing is difficult, give oxygen. If breathing ceases, administer artificial respiration followed by oxygen. Seek immediate medical attention.
- Ingestion:** Do not induce vomiting. Seek immediate medical attention.
- Note to Physician:** Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

G. Physical Data

Appearance: Amber liquid
Color: Mild
Boiling Point: 300-690F (149-366C)
Vapor Pressure: Not Established
Vapor Density (Air = 1): >1
Solubility in Water: Negligible
Specific Gravity (H2O = 1): 0.8762 @ 60/60F (16/16C)
Percent Volatile by Volume: 100
Evaporation Rate (Butyl Acetate:1): <1
Viscosity: 32.6 - 37.9 SUS @ 100 F (38C)

H. Fire and Explosion Data

Flash Point (Method Used): > 115F (> 46C) (PMCC, ATSM D-93)
Flammable Limits (% by Volume in Air): LEL - Not Established
UEL - Not Established

Fire Extinguishing Media: Dry chemical, foam or carbon dioxide (CO2)

Special Fire Fighting Procedures: Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments described in Section C if conditions warrant. Water fog or spray may be used to cool exposed containers and equipment. Do not spray water directly on fire - product will float and could be reignited on surface of water.

Fire and Explosion Hazards: Carbon and sulfur oxides and various hydrocarbons formed when burned.

I. Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled:

Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in dry, inert material (sand, clay, etc.). Transfer to disposal drums using non-sparking equipment.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations):
Incinerate or place in permitted waste management facility.

J. DOT Transportation

Shipping Name: Fuel oil (No. 2)
Hazard Class: 3 (Flammable liquid)
ID Number: NA 1993
Packing Group: III
Marking: Fuel oil (No. 2), NA 1993
Label: Flammable liquid
Placard: Flammable/1993
Hazardous Substance/RQ: Not applicable
Shipping Description: Fuel oil (No. 2), 3 (Flammable liquid), NA 1993, PG III
Packaging References: 49 CFR 173.150, 173.203, 173.241

NOTE: This product may be reclassified as a combustible liquid when shipped domestically, by land only. If reclassified as a combustible liquid, this product is unregulated by DOT when shipped in non-bulk quantities.

K. RCRA Classification - Unadulterated Product as a Waste

Ignitable (D001)

Prior to disposal, consult your environmental contact to determine if TCLP (Toxicity Characteristic Leaching Procedure, EPA Test Method 1311) is required. Reference 40 CFR Part 261.

L. Protection Required for Work on Contaminated Equipment

Contact immediate supervisor for specific instructions before work is initiated. Wear protective equipment and/or garments described in Section C if exposure conditions warrant.

M. Hazard Classification:

This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

| | | |
|--|---|---|
| <input checked="" type="checkbox"/> Combustible Liquid | <input type="checkbox"/> Flammable Aerosol | <input type="checkbox"/> Oxidizer |
| <input type="checkbox"/> Compressed Gas | <input type="checkbox"/> Explosive | <input type="checkbox"/> Pyrophoric |
| <input type="checkbox"/> Flammable Gas | <input checked="" type="checkbox"/> Health Hazard (Section F) | <input type="checkbox"/> Unstable |
| <input type="checkbox"/> Flammable Liquid | <input type="checkbox"/> Organic Peroxide | <input type="checkbox"/> Water Reactive |
| <input type="checkbox"/> Flammable Solid | | |

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

N. Additional Comments

SARA 313

As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Phillips Petroleum Company (references to Phillips Petroleum Company or Phillips include its divisions, affiliates and subsidiaries) believes that the information contained herein (including data and statements) is accurate as of the date hereof. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE AS CONCERNS THE INFORMATION HEREIN PROVIDED. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and information referred to herein are beyond the control of Phillips, Phillips expressly disclaims any and all liability as to any results obtained or arising from any use of the product or such information. No statement made herein shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents.

Acute Effects of Overexposure:

- Eye:** May cause mild irritation, with stinging and redness of the eyes.
- Skin:** May cause severe irritation. Repeated or prolonged contact may cause defatting of the skin, resulting in dermatitis. Dermal LD50 for diesel fuel is > 5 ml/kg (rabbit).
- Inhalation:** May cause irritation to nose, throat or lungs. Headache, nausea, dizziness, unconsciousness may occur.
- Ingestion:** May cause irritation to intestines. May cause headache, nausea, unconsciousness. If swallowed, may be aspirated resulting in inflammation and possible fluid accumulation in the lungs. Oral LD50 for diesel fuel is 9 ml/kg (rat).

Subchronic and Chronic Effects of Overexposure:

No known applicable information.

Other Health Effects:

Combustion (burning) of most carbon-containing material forms carbon monoxide. Carbon monoxide inhalation may cause carboxyhemoglobinemia. Chronic exposure to carbon monoxide causes fatigue, poor memory, loss of sensation in fingers, visual disturbances and insomnia. Carboxyhemoglobinemia is frequently misdiagnosed as flu.

Sensitive sub-populations to the inhalation of carbon monoxide exist. Carbon monoxide displaces oxygen in the bloodstream and therefore, can adversely effect people with pre-existing heart disease, pregnant women and smokers.

Combustion, a normal use of diesel fuel, results in an exhaust that has been associated with lung cancer in animals. There is limited evidence to suggest an association between occupational exposure to diesel exhaust and lung cancer in humans.

Health Hazard Categories:

| | Animal | Human | | Animal | Human |
|---------------------|--------|-------|----------------------------------|--------|-------|
| Known Carcinogen | — | — | Toxic | — | — |
| Suspect Carcinogen | — | — | Corrosive | — | — |
| Mutagen | — | — | Irritant | X | X |
| Teratogen | — | — | Target Organ Toxin | X | X |
| Allergic Sensitizer | — | — | Specify - Lung-Aspiration Hazard | | |
| Highly Toxic | — | — | | | |

District I
1625 N. French Dr., Hobbs, NM 88240
District II
877 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| | |
|---|--|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator <i>Red Cedar Gathering</i> |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/> | 5. Originating Site <i>Antler Treating Plant</i> |
| 2. Management Facility Destination <i>Tierra Land Farm</i> | 6. Transporter <i>FLint</i> |
| 3. Address of Facility Operator <i>CR 3100 #420 Aztec</i> | 8. State <i>New Mexico</i> |
| 7. Location of Material (Street Address or ULSTR) <i>Antler Treating Plant</i> | <i>Sec. 15-T 32 N.-R 11 W.</i> |
| 9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil Contaminated By kero oil



Estimated Volume 1.5 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE *David Bonowitz* TITLE: *Land Farm Manager* DATE: *7-1-02*
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: *David Bonowitz* TELEPHONE NO. *334-8894*

(This space for State Use)

APPROVED BY: *Denny Feunt* TITLE: *Enviro/Engr* DATE: *07/08/02*
 APPROVED BY: *Marty...* TITLE: *Environmental Geologic* DATE: *7/10/02*

CERTIFICATE OF WASTE STATUS

| | |
|--|--|
| 1. Generator Name and Address: Red Cedar Gathering 26266 Highway 160 Durango, CO 81303 | 2. Destination Name and Address: Tierra Environmental Co., Inc., Land Farm 420 Road 3100 Aztec, NM 87410 |
| 3. Originating Site (name): Antler Treating Plant at Section 15 of Township 32 North, Range 11 West | |
| 4. Source and Description of Waste (revised): Soils impacted by lube oil - Approximately 15 yards ³ . | |

I, Shawn A. Young, representative for Red Cedar Gathering do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1998 regulatory determination, the above-described waste is classified as indicated below:

- EXEMPT** oilfield waste
 NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste only, the following documentation is attached:

- MSDS Information
 Other (Description): Laboratory Analysis
 RCRA Hazardous Waste Analysis
 Chain of Custody

Name (Original Signature):

X 

Title: Safety & Environmental Manager

Date: April 25, 2002

RECEIVED

MAY 03 2002

**Certificate From Out Of State Agency Authorizing Removal Of RCRA
Non-Exempt, Non-Toxic, Oilfield Waste From Their Jurisdiction To
New Mexico**

I have reviewed the enclosed information concerning the Non-exempt, Non-toxic oilfield waste material from Red Cedar Gathering Company's Antler Treating Plant at Section 15 of Township 32 North Range 11 West and agree that by its description it is non-hazardous as defined by the Resource Conservation and Recovery Act (RCRA) and my jurisdiction's rules, regulations or statutes.

- The material is Non-exempt oilfield waste.
- The material is Non-hazardous by regulatory definition.

THEREFORE:

As a representative for the Southern Ute Indian Tribe I have no objection to the material being removed to New Mexico.

Name: Fran King-Brown

Title: Head of Environmental
Programs Division

Signature: X *Fran King Brown*

Date: 4-29-02

Agency:

Southern Ute Indian Tribe

Address

P.O. Box 737, Ignacio, Colorado 81137

Phone:

(970) 563-0135

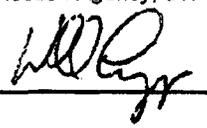
Inter-Mountain Laboratories, Inc.2506 West Main Street
Farmington, NM 87401

Client: Red Cedar Gathering
Project: Antler / Coyote Gulch
Sample ID: Antler - Soil Pile
Lab ID: 0302W00779
Matrix: Soil
Condition: Cool/Intact

Date Reported: 04/24/02
Date Sampled: 03/07/02
Date Received: 03/07/02
Date Extracted: N/A

| Parameter | Analytical Result | PQL | Units |
|--------------------------------------|-------------------|-----|-----------|
| BTEX - Method 8021B | | | |
| Benzene | <5 | 5 | mg/Kg |
| Toluene | <5 | 5 | mg/Kg |
| Ethylbenzene | <5 | 5 | mg/Kg |
| Xylenes (total) | <15 | 15 | mg/Kg |
| Quality Control - Surrogate Recovery | | % | QC Limits |
| 4-Bromofluorobenzene(SUR-8021B) | | 102 | 70 - 130 |

Reference: Method 8021b, Volatile Organic Compounds, Test Methods for Evaluating
 Solid Waste, Physical/Chemical Methods, United States Environmental
 Protection Agency, SW-846, Volume IB.

Reviewed By: 

Analyst: _____

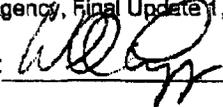
2506 West Main Street
Farmington, NM 87401

Client: Red Cedar Gathering
Project: Antler / Coyote Gulch
Sample ID: Antler - Soil Pile
Lab ID: 0302W00779
Matrix: Soil
Condition: Cool/Intact

Date Reported: 04/24/02
Date Sampled: 03/07/02
Date Received: 03/07/02
Date Extracted: N/A
Date Analyzed: 03/25/02

| Parameter | Analytical Result | PQL | Units |
|-----------------------------------|-------------------|------|-------|
| TOTAL METALS - Method 3050 | | | |
| Arsenic | <6 | 6 | mg/Kg |
| Barium | 3 | 1 | mg/Kg |
| Cadmium | <0.5 | 0.5 | mg/Kg |
| Chromium | <1 | 1 | mg/Kg |
| Lead | <5 | 5 | mg/Kg |
| Mercury | <0.06 | 0.06 | mg/Kg |
| Selenium | <4 | 4 | mg/Kg |
| Silver | <2 | 2 | mg/Kg |

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, November, 1988.
SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, Final Update, July 1992.

Reviewed By: 

Analyst: _____

Inter-Mountain Laboratories, Inc.

2506 West Main Street
Farmington, NM 87401

Client: Red Cedar Gathering
Project: Antler / Coyote Gulch
Sample ID: Antler - Soil Pile
Lab ID: 0302W00779
Matrix: Soil
Condition: Cool/Intact

Date Reported: 04/24/02
Date Sampled: 03/07/02
Date Received: 03/07/02
Date Extracted: N/A

| Parameter | Analytical Result | PQL | Units |
|---------------------------|-------------------|-----|--------|
| GENERAL PARAMETERS | | | |
| Corrosivity -pH | 7.1 | | s.u. |
| Flash Point | >140 | 140 | °F |
| Reactivity - HCN | <1 | 1 | meq/Kg |
| Reactivity-H2S | 68 | 1 | mg/Kg |

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, Final Update 1, July 1992.
SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, November, 1986.

Reviewed By: *[Signature]*

Analyst: _____

605717-00 MOBIL PEGASUS 89
MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL PEGASUS 89
SUPPLIER: EXXONMOBIL OIL CORPORATION
3225 GALLOWS RD.
FAIRFAX, VA 22037

24 - Hour Emergency (call collect): 609-737-4411
Product and MSDS Information: 800-662-4525 856-224-4644
CHEMTREC: 800-424-9300 202-483-7616

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: PET. HYDROCARBONS AND ADDITIVES

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives. See Section 15 for a regulatory analysis of the ingredients.

See Section 15 for European Label Information.

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined not to be hazardous.

EFFECTS OF OVEREXPOSURE: No significant effects expected.

EMERGENCY RESPONSE DATA: Amber Liquid. DOT ERG No. : NA

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.

SKIN CONTACT: Wash contact areas with soap and water.

INHALATION: Not expected to be a problem.

INGESTION: Not expected to be a problem. However, if greater than 1/3 liter (pint) ingested, seek medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing.

Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from

fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None. Flash Point C(F): > 246(475) (ASTM D-92). Flammable limits - LEL: NA, UEL: NA.

NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Metal oxides. Elemental oxides.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: No special requirements under ordinary conditions of use and with adequate ventilation.

RESPIRATORY PROTECTION: No special requirements under ordinary conditions of use and with adequate ventilation.

EYE PROTECTION: Normal industrial eye protection practices should be employed.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.

EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, a exposure limit of 5.00 mg/m3 is suggested for oil mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid

COLOR: Amber

ODOR: Mild
ODOR THRESHOLD-ppm: NE
pH: 8.8
BOILING POINT C(F): 388(730)
MELTING POINT C(F): NA
FLASH POINT C(F): > 246(475) (ASTM D-92)
FLAMMABILITY: NE
AUTO FLAMMABILITY: NE
EXPLOSIVE PROPERTIES: NA
OXIDIZING PROPERTIES: NA
VAPOR PRESSURE-mmHg 20 C: < 0.1
VAPOR DENSITY: > 2.0
EVAPORATION RATE: NE
RELATIVE DENSITY, 15/4 C: 0.896
SOLUBILITY IN WATER: Negligible
PARTITION COEFFICIENT: > 3.5
VISCOSITY AT 40 C, cSt: 121.0
VISCOSITY AT 100 C, cSt: 13.3
POUR POINT C(F): < -15(5)
FREEZING POINT C(F): NE
VOLATILE ORGANIC COMPOUND: NE
NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES
FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.
CONDITIONS TO AVOID: Extreme heat.
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Metal oxides.
Elemental oxides.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.
EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.
SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.
OTHER ACUTE TOXICITY DATA: The acute toxicological results summarized above are based on testing of representative Mobil products. Representative Mobil formulations have shown no acute effects, administered via the inhalation route, when tested at maximum attainable oil mist or vapor concentrations.

---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Representative Mobil formulations have been tested at the Mobil Environmental and Health Sciences Laboratory by dermal applications to rats 5 days/week for 90 days at doses

significantly higher than those expected during normal industrial exposure. Extensive evaluations, including microscopic examination of internal organs and clinical chemistry of body fluids, showed no adverse effects.

---REPRODUCTIVE TOXICOLOGY (SUMMARY)---

Dermal exposure of pregnant rats to representative formulations did not cause adverse effects in either the mothers or their offspring.

---CHRONIC TOXICOLOGY (SUMMARY)---

The base oils in this product are severely solvent refined and/or severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects. These results are confirmed on a continuing basis using various screening methods such as the Mobil Modified Ames Test and IP-346.

---SENSITIZATION (SUMMARY)---

Representative Mobil formulations have not caused skin sensitization in guinea pigs.

---OTHER TOXICOLOGY DATA---

Used gasoline engine oils have shown evidence of skin carcinogenic activity in laboratory tests when no effort was made to wash the oil off between applications. Used oil from diesel engines did not produce this effect.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: This product is expected to be inherently biodegradable. There is no evidence to suggest bioaccumulation will occur. It is not expected to be toxic to aquatic organisms.

Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.
 RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.
IATA: NOT REGULATED BY IATA.

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, AICS, and DSL.
EU Labeling: EU labeling not required.
U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".
SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.
This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.
The following product ingredients are cited on the lists below:

| CHEMICAL NAME | CAS NUMBER | LIST CITATIONS |
|--|------------|----------------|
| ZINC (ELEMENTAL ANALYSIS) (>0.02%) | 7440-66-6 | 22 |
| PHOSPHORODITHOIC ACID, O,O-DI | 68649-42-3 | 22 |
| C1-14-ALKYL ESTERS, ZINC SALTS (2: 1) (ZDDP) (0.26%) | | |

--- REGULATORY LISTS SEARCHED ---

| | | | | |
|-------------|-------------|-------------|-----------------|-----------|
| 1=ACGIH ALL | 6=IARC 1 | 11=TSCA 4 | 16=CA P65 CARC | 21=LA RTK |
| 2=ACGIH A1 | 7=IARC 2A | 12=TSCA 5a2 | 17=CA P65 REPRO | 22=MI 293 |
| 3=ACGIH A2 | 8=IARC 2B | 13=TSCA 5e | 18=CA RTK | 23=MN RTK |
| 4=NTP CARC | 9=OSHA CARC | 14=TSCA 6 | 19=FL RTK | 24=NJ RTK |
| 5=NTP SUS | 10=OSHA Z | 15=TSCA 12b | 20=IL RTK | 25=PA RTK |
| | | | | 26=RI RTK |

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO-Reproductive

16. OTHER INFORMATION

USE: NATURAL GAS ENGINE OIL
NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Please call the Customer Response Center on 800-662-4525 for formulation disclosure.

For Internal Use Only: MHC: 1* 1* 0* 1* 1*, MPPEC: A, TRN: 605717-00, ELIS: 403164, CMCS97: 979930, REQ: US - MARKETING, SAFE USE: L
EHS Approval Date: 01JAN2001

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District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources RECEIVED

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

JUN 03 2002
Environmental Bureau
Oil Conservation Division

Form C-138
Revised March 17, 1999
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02042

| | |
|--|--|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator <u>CSI</u> |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site <u>Key Energy Services Inc. Ignacio CO</u> |
| 2. Management Facility Destination <u>Tierra Landfarm</u> | 6. Transporter <u>Paul & Son trucking</u> |
| 3. Address of Facility Operator <u>420 CR 3100 AZTEC NM</u> | 8. State <u>CO</u> |
| 7. Location of Material (Street Address or ULSTR) <u>Key energy services Inc. 17497 HWY 172 Ignacio CO</u> | |
| 9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

new oil leaked out of storage tank and on to ground MSD S is attached



Estimated Volume _____ cy Known Volume (to be entered by the operator at the end of the haul) 410 cy

SIGNATURE [Signature] TITLE: Land Farm manager DATE: 5-15-02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Jon G. Nobis TELEPHONE NO. 334 8894

(This space for State Use)

APPROVED BY: [Signature] TITLE: Enviro/Eng DATE: 5/22/03
 APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 6-3-02

1-202020



DEPARTMENT OF NATURAL RESOURCES
 Bill Owens, Governor
 1120 Lincoln St., Suite 801
 Denver, CO 80203
 Phone: (303) 894-2100
 FAX: (303) 894-2109
 www.oil-gas.state.co.us

VIA email AND SURFACE MAIL.

May 1, 2002

Compressor Systems Inc. (CSI)
 Terry Christian
 P.O. Box 60760
 Midland, Texas 79711

Dear Mr. Christian:

Re: State Notification of Transportation of 90 cubic feet of Oil Contaminated Soil

Thank you for notifying the Colorado Oil and Gas Conservation Commission (COGCC) of the transportation of waste to the Tierra Land Farm near Farmington, NM for remediation.

The State of New Mexico Oil Conservation Commission (NMOCD) may require certification by your company, the transporter or the generator. Transportation of this waste may be subject to other state and Federal laws.

Sincerely,
 Colorado Oil and Gas Conservation Commission Staff

Dorothy E. Baldwin
 Environmental Supervisor COGCC

Cc: Danney Foust, NMOCD

Jane Cudney, ESI
 4865 Indian School Rd. NE
 Suite 106
 Albuquerque, NM 87110

Material Safety Data Sheet

Click on the product name to go to the Salesfax description sheet.
Click on the grade to go to the Salesfax typical test data sheet.
Chevron HDAX® Low Ash Gas Engine Oils SAE 15W-40, 30, 40
MSDS: 7046 Revision #: 1 Revision Date: 02/18/99

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON HDAX Low Ash Gas Engine Oil and HDAX LFG

PRODUCT NUMBER(S): CPS232325 CPS232327 CPS232328 CPS232331
SYNONYM: CHEVRON HDAX Low Ash Gas Engine Oil SAE 15W-40
CHEVRON HDAX Low Ash Gas Engine Oil SAE 30
CHEVRON HDAX Low Ash Gas Engine Oil SAE 40
CHEVRON HDAX LFG Gas Engine Oil SAE 40

COMPANY IDENTIFICATION

Chevron Products Company
Global Lubricants
555 Market St.
Room 803
San Francisco, CA 94105-2870

EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr): (800)231-0623 or
(510)231-0623 (International)
TRANSPORTATION (24 hr): CHEMTREC
(800)424-9300 or (703)527-3887
Emergency Information Centers
are located in U.S.A.
Int'l collect calls accepted

PRODUCT INFORMATION: MSDS Requests: (800) 414-MSDS or (800) 414-6737
Environmental, Safety, & Health Info: (415) 894-0434
Product Information: (800) 582-3835

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % CHEVRON HDAX Low Ash Gas Engine Oil and HDAX LFG

CONTAINING

| COMPONENTS | AMOUNT | LIMIT/QTY | AGENCY/TYPE |
|---------------------------------------|----------|-----------------|-------------|
| LUBRICATING BASE OIL | | | |
| SEVERELY REFINED PETROLEUM DISTILLATE | > 75.00% | 5 mg/m3 (mist) | ACGIH TWA |
| | | 10 mg/m3 (mist) | ACGIH STEL |
| | | 5 mg/m3 (mist) | OSHA PEL |

The BASE OIL may be a mixture of any of the following: CAS 64741884,
CAS 64741895, CAS 64741964, CAS 64741975, CAS 64742014, CAS 64742525,
CAS 64742536, CAS 64742547, CAS 64742627, CAS 64742650, or CAS 72623837.

ADDITIVES INCLUDING THE FOLLOWING
< 25.00%

ZINC ALKARYL DITHIOPHOSPHATE
Chemical Name: ZINC ALKARYL DITHIOPHOSPHATE

CAS54261675

< 1.50%

NONE

NA

COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

This product fits the ACGIH definition for mineral oil mist. The ACGIH TLV is 5 mg/m³, the OSHA PEL is 5 mg/m³.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS**EYE:**

Not expected to cause prolonged or significant eye irritation.

SKIN:

Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.

INGESTION:

Not expected to be harmful if swallowed.

INHALATION:

Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit.

4. FIRST AID MEASURES

EYE:

No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses, if worn, and flush eyes with water.

SKIN:

No specific first aid measures are required because this material is not expected to be harmful if it contacts the skin. As a precaution, remove clothing and shoes if contaminated. Use a waterless hand cleaner, mineral oil, or petroleum jelly to remove the material. Then wash skin with soap and water. Wash or clean contaminated clothing and shoes before reuse.

INGESTION:

No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.

INHALATION:

If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:

Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION:

No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

SKIN PROTECTION:

No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Viton> <Nitrile> <Silver Shield> <4H>

RESPIRATORY PROTECTION:

No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the recommended mineral oil mist exposure limits. If not wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: particulate.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:

Dark amber liquid.

PH: NDA

VAPOR PRESSURE: NA

VAPOR DENSITY

(AIR=1): NA

BOILING POINT: NDA

MELTING POINT: NDA

SOLUBILITY: NA

SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.

SPECIFIC GRAVITY: 0.88 @ 15.6/15.6C

EVAPORATION RATE: NA

VISCOSITY: 11.0 - 14.4 cst @ 100C (min.)

PERCENT VOLATILE

(VOL): NA

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

H₂S may be released at high temperatures.

CHEMICAL STABILITY:

Stable.

CONDITIONS TO AVOID:

No data available.

INCOMPATIBILITY WITH OTHER MATERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:

The eye irritation hazard is based on an evaluation of the data for the components.

SKIN EFFECTS:

The skin irritation hazard is based on an evaluation of the data for the components.

ACUTE ORAL EFFECTS:

The acute oral toxicity is based on an evaluation of the data for the components.

ACUTE INHALATION EFFECTS:

The acute respiratory toxicity is based on an evaluation of the data for the components.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

This product contains zinc alkaryl dithiophosphate which is similar in toxicity to zinc alkyl dithiophosphate (ZDDP). Several (ZDDPs) have been reported to have weak mutagenic activity in cultured mammalian cells but only at concentrations that were toxic to the test cells. We do not believe that there is any mutagenic risk to workers exposed to ZDDPs.

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water. See Chevron Material Safety Data Sheet No. 1793 for additional information on used motor oil.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

No data available.

ENVIRONMENTAL FATE:

This material is not expected to be readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

14. TRANSPORT INFORMATION

file:///C:/My Documents/Master MSDS Folder/Chevron HDAX Low Ash Gas Engine.txt

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

SHIPPING NAME: NONE
 DOT HAZARD CLASS: NONE
 DOT IDENTIFICATION NUMBER: NONE
 DOT PACKING GROUP: N/A
 ADDITIONAL INFO: Petroleum Lubricating Oil - Not Hazardous by U.S. DOT.
 ADR/RID Hazard class - Not applicable.

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:

| | |
|---------------------------------------|----|
| 1. Immediate (Acute) Health Effects: | NO |
| 2. Delayed (Chronic) Health Effects: | NO |
| 3. Fire Hazard: | NO |
| 4. Sudden Release of Pressure Hazard: | NO |
| 5. Reactivity Hazard: | NO |

REGULATORY LISTS SEARCHED:

| | | |
|-------------------------|-------------------------|----------------------|
| 01=SARA 313 | 11=NJ RTK | 22=TSCA Sect 5(a)(2) |
| 02=MASS RTK | 12=CERCLA 302.4 | 23=TSCA Sect 6 |
| 03=NTP Carcinogen | 13=MN RTK | 24=TSCA Sect 12(b) |
| 04=CA Prop 65-Carcin | 14=ACGIH TWA | 25=TSCA Sect 8(a) |
| 05=CA Prop 65-Repro Tox | 15=ACGIH STEL | 26=TSCA Sect 8(d) |
| 06=IARC Group 1 | 16=ACGIH Calc TLV | 27=TSCA Sect 4(a) |
| 07=IARC Group 2A | 17=OSHA PEL | 28=Canadian WHMIS |
| 08=IARC Group 2B | 18=DOT Marine Pollutant | 29=OSHA CEILING |
| 09=SARA 302/304 | 19=Chevron TWA | 30=Chevron STEL |
| 10=PA RTK | 20=EPA Carcinogen | |

The following components of this material are found on the regulatory lists indicated.

ZINC ALKARYL DITHIOPHOSPHATE

is found on lists: 01,11,

SEVERELY REFINED PETROLEUM DISTILLATE

is found on lists: 14,15,17,

EU RISK AND SAFETY LABEL PHRASES:

May cause long-term adverse effects in the aquatic environment.

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:

PETROLEUM OIL

New Jersey Right-To-Know trade secret registry number 01154100-5031P

New Jersey Right-To-Know trade secret registry number 01154100-5063P

New Jersey Right-To-Know trade secret registry number 01154100-5024P

WHMIS CLASSIFICATION:

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

16. OTHER INFORMATION

OSHA RATINGS: Health 1; Flammability 1; Reactivity 0;

file:///C:/My Documents/Master MSDS Folder/Chevron HDAX Low Ash Gas Engine.bt

HMTS RATINGS: Health 1; Flammability 1; Reactivity 0;
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal
Protection Equipment Index recommendation, *- Chronic Effect
Indicator). These values are obtained using the guidelines or
published evaluations prepared by the National Fire Protection
Association (NFPA) or the National Paint and Coating Association
(for HMTS ratings).

REVISION STATEMENT:

This revision was updated to address: Section 1 (Name change).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

- TLV - Threshold Limit Value
- STEL - Short-term Exposure Limit
- RQ - Reportable Quantity
- C - Ceiling Limit
- A1-5 - Appendix A Categories
- NDA - No Data Available
- TWA - Time Weighted Average
- TPQ - Threshold Planning Quantity
- PEL - Permissible Exposure Limit
- CAS - Chemical Abstract Service Number
- () - Change Has Been Proposed
- NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard
(29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology
and Health Risk Assessment Unit, CRTIC, P.O. Box 1627, Richmond, CA 94804

The above information is based on the data of which we are aware and is
believed to be correct as of the date hereof. Since this information may
be applied under conditions beyond our control and with which we may be
unfamiliar and since data made available subsequent to the date hereof may
suggest modification of the information, we do not assume any responsibil-
ity for the results of its use. This information is furnished upon
condition that the person receiving it shall make his own determination
of the suitability of the material for his particular purpose.

THIS IS THE LAST PAGE OF THIS MSDS

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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Form C-138
Revised March 17, 1999

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

MAY 13 2002

Environmental Bureau
Oil Conservation Division

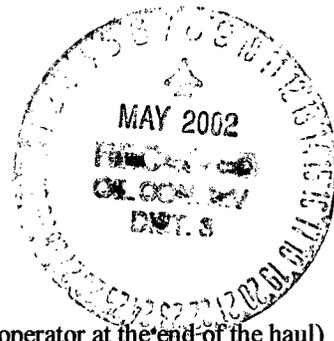
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 62040

| | |
|---|---|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator Red cedar Gathering |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site Copate compressor Sta. |
| 2. Management Facility Destination Tierra Land Farm | 6. Transporter Riley |
| 3. Address of Facility Operator 420 CR 3100 Aztec NM | 8. State CO |
| 7. Location of Material (Street Address or ULSTR) Sec: 33 T: 33N R: 9W | |
| 9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil impacted by Lube oil (lab work included)



Estimated Volume _____ cy Known Volume (to be entered by the operator at the end of the haul) 18 ydscy

SIGNATURE [Signature] TITLE: Manager DATE: 5-1-02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Jon G. Nobis TELEPHONE NO. 334-8894

(This space for State Use)

APPROVED BY: [Signature] TITLE: Enviro/Engr DATE: 05/09/02
APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 5/13/02

1-201302-1

CERTIFICATE OF WASTE STATUS

| | |
|---|---|
| 1. Generator Name and Address: Red Cedar Gathering 26266 Highway 160 Durango, CO 81303 | 2. Destination Name and Address: Tierra Environmental Co., Inc., Land Farm 420 Road 3100 Aztec, NM 87410 |
| 3. Originating Site (name): Capote Compressor Station at Sec. 33 of T33 North R9 West | |
| 4. Source and Description of Waste (revised): Soils impacted by lube oil - Approximately 10 yards ³ . | |

I, Shawn A. Young, representative for Red Cedar Gathering do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1998 regulatory determination, the above-described waste is classified as indicated below:

- EXEMPT oilfield waste
 NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste only, the following documentation is attached:

- MSDS Information
 Other (Description): Laboratory Analysis
 RCRA Hazardous Waste Analysis
 Chain of Custody

Name (Original Signature): X 

Title: Safety & Environmental Manager

Date: April 9, 2002

**Certificate From Out Of State Agency Authorizing Removal Of RCRA
Non-Exempt, Non-Toxic, Oilfield Waste From Their Jurisdiction To
New Mexico**

I have reviewed the enclosed information concerning the Non-exempt, Non-toxic oilfield waste material from Red Cedar Gathering Company's Capote Compressor Station at Section 33 of Township 33 North Range 9 West and agree that by its description it is non-hazardous as defined by the Resource Conservation and Recovery Act (RCRA) and my jurisdiction's rules, regulations or statutes.

- The material is Non-exempt oilfield waste.
- The material is Non-hazardous by regulatory definition.

THEREFORE:

As a representative for the Southern Ute Indian Tribe I have no objection to the material being removed to New Mexico.

Name: Fran King-Brown Title: Head of Environmental Programs Division

Signature: X *Fran King-Brown* Date: 4-15-02

Agency: Southern Ute Indian Tribe
Address: P.O. Box 737, Ignacio, Colorado 81137
Phone: (970) 563-0135

APR 18 2002

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

| | | | |
|----------------------|-----------------|---------------------|-----------|
| Client: | Red Cedar | Project #: | 95031-019 |
| Sample ID: | Units 4 + 6 | Date Reported: | 04-01-02 |
| Laboratory Number: | 22421 | Date Sampled: | 03-28-02 |
| Chain of Custody No: | 8974 | Date Received: | 03-28-02 |
| Sample Matrix: | Soil | Date Extracted: | 03-29-02 |
| Preservative: | Cool | Date Analyzed: | 04-01-02 |
| Condition: | Cool and Intact | Analysis Requested: | 8015 TPH |

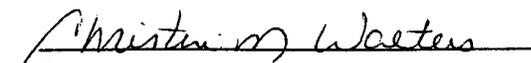
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | 1.3 | 0.2 |
| Diesel Range (C10 - C28) | 47.3 | 0.1 |
| Total Petroleum Hydrocarbons | 48.6 | 0.2 |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Capote.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

| | | | |
|--------------------|---------------|------------------|-------------|
| Client: | Red Cedar | Project #: | 95031-019 |
| Sample ID: | Units 4 + 6 | Date Reported: | 04-01-02 |
| Laboratory Number: | 22421 | Date Sampled: | 03-28-02 |
| Chain of Custody: | 8974 | Date Received: | 03-28-02 |
| Sample Matrix: | Soil | Date Analyzed: | 04-01-02 |
| Preservative: | Cool | Date Digested: | 04-01-02 |
| Condition: | Cool & Intact | Analysis Needed: | RCRA Metals |

| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) | Regulatory Level (mg/Kg) |
|-----------|--------------------------|--------------------------|--------------------------------|
| Arsenic | 0.016 | 0.001 | 5.0 |
| Barium | 7.53 | 0.001 | 100 |
| Cadmium | 0.014 | 0.001 | 1.0 |
| Chromium | 1.13 | 0.001 | 5.0 |
| Lead | 2.32 | 0.001 | 5.0 |
| Mercury | 0.001 | 0.001 | 0.2 |
| Selenium | 0.006 | 0.001 | 1.0 |
| Silver | ND | 0.001 | 5.0 |

ND - Parameter not detected at the stated detection limit.

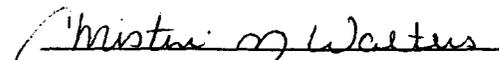
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: **Capote.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|---------------|---------------------|-----------|
| Client: | Red Cedar | Project #: | 95031-019 |
| Sample ID: | Units 4 + 6 | Date Reported: | 04-01-02 |
| Laboratory Number: | 22421 | Date Sampled: | 03-28-02 |
| Chain of Custody: | 8974 | Date Received: | 03-28-02 |
| Sample Matrix: | Soil | Date Analyzed: | 04-01-02 |
| Preservative: | Cool | Date Extracted: | 03-29-02 |
| Condition: | Cool & Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | ND | 1.8 |
| Toluene | ND | 1.7 |
| Ethylbenzene | ND | 1.5 |
| p,m-Xylene | ND | 2.2 |
| o-Xylene | ND | 1.0 |
| Total BTEX | ND | |

ND - Parameter not detected at the stated detection limit.

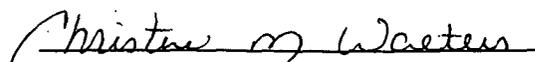
| Surrogate Recoveries: | Parameter | Percent Recovery |
|-----------------------|---------------------|------------------|
| | Fluorobenzene | 99 % |
| | 1,4-difluorobenzene | 99 % |
| | Bromochlorobenzene | 99 % |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Capote.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

| | | | |
|----------------|-----------------|-------------------|-----------|
| Client: | Red Cedar | Project #: | 95031-019 |
| Sample ID: | Units 4 + 6 | Date Reported: | 04-01-02 |
| Lab ID#: | 22421 | Date Sampled: | 03-28-02 |
| Sample Matrix: | Soil | Date Received: | 03-28-02 |
| Preservative: | Cool | Date Analyzed: | 03-29-02 |
| Condition: | Cool and Intact | Chain of Custody: | 8974 |

| Parameter | Result |
|-----------|--------|
|-----------|--------|

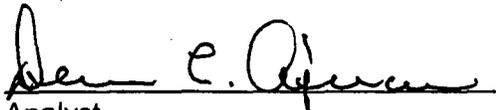
| | |
|----------------------|----------------------------------|
| IGNITABILITY: | Negative |
| CORROSIVITY: | Negative pH = 7.89 |
| REACTIVITY: | Negative |

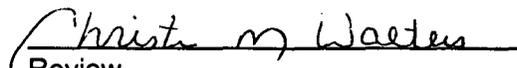
RCRA Hazardous Waste Criteria

| Parameter | Hazardous Waste Criterion |
|---------------|---|
| IGNITABILITY: | Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.) |
| CORROSIVITY: | Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5) |
| REACTIVITY: | Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5) |

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Capote.**


Analyst


Review

District I
1625 N French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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APR 08 2002

Form C-138
Revised March 17, 1999

Environmental Bureau
Oil Conservation Division

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02-029

| | |
|---|---|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator US EPA |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site Beeline Refinery |
| 2. Management Facility Destination Tierra Landfarm | 6. Transporter Inland Trucking |
| 3. Address of Facility Operator 420 CR 3100 Aztec, NM 87410 | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) 8201 E. Main Farmington NM | |
| 9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Liquid waste oil dewatered/stabilized [no free liquids] tank bottoms oil contaminated soil from the clean up of the beeline refinery

Estimated Volume 1500 tons Known Volume (to be entered by the operator at the end of the haul) --- cy

SIGNATURE [Signature] TITLE: Landfarm Manager DATE: 04/02/02
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Jon G. Nobis TELEPHONE NO. 334-8894

(This space for State Use)

APPROVED BY: [Signature] TITLE: Enviro/Engr DATE: 04/02/02
APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 04/08/02

1-208014a



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178 Fax (505) 334-6179

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|--|---|
| <p>1. Generator Name and Address: U.S. EPA 10625 Fallstone Houston, TX 77083 Atten: Warren Zehner</p> | <p>2. Destination Name: Tierra / Crouch Mesa Land Farm 420 cnty rd. 3100 Aztec, NM 87410</p> |
| <p>3. Originating Site (name): Beeline Refinery / General Crude / Mesa Petroleum</p> <p>Attach list of originating sites as appropriate</p> | <p>Location of the Waste (Street address &/or ULSTR): 8201 E. Main (St. Hwy 516) Farmington, NM</p> |
| <p>4. Source and Description of Waste liquid waste oil, dewatered / stabilized (no free liquids) tank bottoms, oil contaminated soils from the clean-up of the Beeline Refinery / General Crude Processing / Mesa Petroleum facility at address referenced above</p> | |

I, Warren Zehner representative for:
U.S. Environmental Protection Agency do hereby certify that,
according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS Information Other (description):
 RCRA Hazardous Waste Analysis
 Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): Warren Zehner for USEPA

Title: Sr. On Scene Coordinator

Date: April 1, 2002



Project Resources Inc.

Soil Sample Results
Sample results as provided to PRI
Project Resources Inc.
San Diego, CA

The lab results provided to PRI (Project Resources Inc.) by SIMA labs of Cincinnati, OH. Is attached

Samples are Duplicates to attain requested volumes by the lab. One set for VOA & a second set for the balance of the required analysis for the impacted soils.

1&1' For
TCLP VOC
TCLP Semi-VOC
TCLP metals
Ph

&

2&2' For
Reactive Sulfides
Reactive Cyanides

These are for the impacted soils waste stream.

James Glenn Johnson

PRI (Project Resources Inc.)
QA, QC



INTERNATIONAL

SAMPLE *soil*

2 AND 2'

Customer: Project Resources Inc.Project No.: 030206.001Source: GENERAL CRUDE

Location: _____

Analysis: ICP METALSInstrument Batch: WG9482,Preparation Batch: WG9435Matrix: LeachateLab Notebook No: 1315,Initial Cal. ID.: E032802-A,Final Volume: 50 mlInitial Volume: 50 mlPH: 6 suPrep. Method: EPA 1311/EPA 3010ALab Sample ID.: L4293-1Date Sampled: 23-MAR-02Date Received: 26-MAR-02Date Digested: 27-MAR-02Date Analyzed: 28-MAR-02

SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-------------------|----------|------------|-----------|----------------|----------|------|
| EPA Method 6010B | ARSENIC | 0.019 | 0.10 | --- | 1 | U |
| EPA Method 6010B | BARIUM | 0.00097 | 0.0090 | 0.19 | 1 | B |
| EPA Method 6010B | CADMIUM | 0.0018 | 0.0080 | --- | 1 | U |
| EPA Method 6010B | CHROMIUM | 0.0060 | 0.020 | 0.0065 | 1 | J |
| EPA Method 6010B | LEAD | 0.021 | 0.10 | --- | 1 | U |
| EPA Method 6010B | SELENIUM | 0.017 | 0.20 | 0.059 | 2 | D,J |
| EPA Method 6010B | SILVER | 0.0053 | 0.060 | 0.010 | 2 | D,J |

RL - Reporting Limit

MDL - Method Detection Limit

B - Blank Contamination

D - Diluted

J - Estimated Value

U - Below MDL

Comments: _____

S I M A L A B S*soil*

SAMPLE NUMBER

1 AND 1'

Customer: Project Resources Inc. Project No.: 030206.001
 Source: GENERAL CRUDE
 Location: N/A
 Analysis: EPA Method 8260B TCLP Volatiles by GC/MS
 Preparation Batch: WG9438 Instrument Batch: WG9439
 Matrix: Leachate Lab Sample ID.: L4293-2
 Lab Notebook No: 1308, P.29&30 Date Sampled: 23-MAR-02
 Initial Cal. ID.: 3VTCLP35 Date Received: 26-MAR-02
 Final Volume: 5 ml Date Extracted: 27-MAR-02
 Initial Volume: .1 ml Date Analyzed: 27-MAR-02
 Prep. Method: EPA 1311/EPA 5030B
 pH: 6 su

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-----|----------|----------------------|---------------|--------------|-------------------|----------|------|
| 1. | 75-35-4 | 1,1-dichloroethene | 0.044 | 0.25 | --- | 1 | U |
| 2. | 107-06-2 | 1,2-dichloroethane | 0.017 | 0.25 | --- | 1 | U |
| 3. | 78-93-3 | 2-Butanone | 0.18 | 1.0 | --- | 1 | U |
| 4. | 71-43-2 | benzene | 0.024 | 0.25 | 0.046 | 1 | J |
| 5. | 56-23-5 | carbon tetrachloride | 0.026 | 0.25 | --- | 1 | U |
| 6. | 108-90-7 | chlorobenzene | 0.020 | 0.25 | --- | 1 | U |
| 7. | 67-66-3 | chloroform | 0.016 | 0.25 | --- | 1 | U |
| 8. | 127-18-4 | tetrachloroethene | 0.023 | 0.25 | --- | 1 | U |
| 9. | 79-01-6 | trichloroethene | 0.023 | 0.25 | 0.17 | 1 | J |
| 10. | 75-01-4 | vinyl chloride | 0.025 | 0.10 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|-----------------------|--------------|----------------|----------|
| 1,2-dichloroethane-d4 | 87 * | 91-108 | 2.5 mg/l |
| 4-bromofluorobenzene | 89 | 89-117 | 2.5 mg/l |
| dibromofluoromethane | 89 | 88-117 | 2.5 mg/l |
| toluene-d8 | 92 | 91-108 | 2.5 mg/l |

RL - Reporting Limit

MDL - Method Detection Limit

* - Value(s) outside of QC limits

J - Estimated Value

U - Below MDL

MM
3-28-2
K 3-28-02

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

S I M A L A B S

INTERNATIONAL

SAMPLE NUMBER

2 AND 2'

Customer: Project Resources Inc.

Project. No.: 030206.001

Source: GENERAL CRUDE

Location: N/A

Analysis: EPA Method 8270C TCLP Semivolatiles by GC/MS

Preparation Batch: WG9445

Instrument Batch: WG9465

Matrix: Leachate

Lab Sample ID.: L4293-1

Lab Notebook No: 1240, P. 94

Date Sampled: 23-MAR-02

Initial Cal. ID.: 1FEB13T

Date Received: 26-MAR-02

Final Volume: 1 ml

Date Extracted: 27-MAR-02

Initial Volume: 250 ml

Date Analyzed: 27-MAR-02

Prep. Method: EPA 1311/EPA 3510C

pH: 6 su

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-----|----------|-----------------------|---------------|--------------|-------------------|----------|------|
| 1. | 106-46-7 | 1,4-Dichlorobenzene | 0.0023 | 0.020 | --- | 1 | U |
| 2. | 95-95-4 | 2,4,5-Trichlorophenol | 0.0027 | 0.020 | --- | 1 | U |
| 3. | 88-06-2 | 2,4,6-Trichlorophenol | 0.0028 | 0.020 | --- | 1 | U |
| 4. | 121-14-2 | 2,4-Dinitrotoluene | 0.0047 | 0.020 | --- | 1 | U |
| 5. | 95-48-7 | 2-Methylphenol | 0.0041 | 0.020 | --- | 1 | U |
| 6. | 106-44-5 | 3 & 4-Methylphenol | 0.0036 | 0.040 | 0.038 | 1 | J |
| 7. | 118-74-1 | Hexachlorobenzene | 0.0046 | 0.020 | --- | 1 | U |
| 8. | 87-68-3 | Hexachlorobutadiene | 0.0023 | 0.020 | --- | 1 | U |
| 9. | 67-72-1 | Hexachloroethane | 0.0021 | 0.020 | --- | 1 | U |
| 10. | 98-95-3 | Nitrobenzene | 0.0025 | 0.020 | --- | 1 | U |
| 11. | 87-86-5 | Pentachlorophenol | 0.0053 | 0.020 | --- | 1 | U |
| 12. | 110-86-1 | Pyridine | 0.0043 | 0.020 | --- | 1 | U |

SURROGATE STANDARD

RECOVERY (%) ACCEPTABLE (%)

SPIKE

| | | | |
|----------------------|----|--------|-----------|
| 2,4,6-Tribromophenol | 98 | 57-131 | 0.20 mg/l |
| 2-Fluorobiphenyl | 76 | 47-124 | 0.10 mg/l |
| 2-Fluorophenol | 46 | 23-81 | 0.20 mg/l |
| Nitrobenzene d5 | 74 | 53-110 | 0.10 mg/l |
| Phenol d6 | 33 | 5-65 | 0.20 mg/l |
| Terphenyl d14 | 92 | 41-160 | 0.10 mg/l |

RL - Reporting Limit

MDL - Method Detection Limit

J - Estimated Value

U - Below MDL

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.



INTERNATIONAL

oil
SAMPLE

2 AND 2'

Customer: Project Resources Inc. Project. No.: 030206.001

Source: GENERAL CRUDE

Location: _____

Analysis: PSA HG METALS

Instrument Batch: WG9456,

Preparation Batch: WG9450 Lab Sample ID.: L4293-1

Matrix: Leachate Date Sampled: 23-MAR-02

Lab Notebook No: 1323, P.22-24, Date Received: 26-MAR-02

Initial Cal. ID.: WG9456, Date Digested: 27-MAR-02

Final Volume: 100 ml Date Analyzed: 27-MAR-02

Initial Volume: 100 ml

Prep. Method: EPA 1311/ EPA 7470A

pH: 5.50

SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-------------------|---------|------------|-----------|----------------|----------|------|
| EPA Method 7470A | Mercury | 0.000067 | 0.00020 | --- | 1 | U |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

Post Digest Spike Recovery: Mercury-102%

Comments: _____



INTERNATIONAL

ANALYTICAL RESULTS

Date: *Monday, April 01, 2002*

| | | | |
|----------------------------|--------------------------------|------------------------|---------------|
| Client: | Simalabs International of Ohio | Client Project: | L4293 |
| Client Sample ID: | L4293-1 | Work Order: | ME0204003 |
| Sample Description: | 2 & 2 (Acid) | SIMALABS ID: | ME0204003-01B |
| Sample Matrix: | Extract | | |
| Collection Date: | 03/23/02 | | |
| Date Received: | 03/30/02 | | |

| Analyses | Samp Type | Result | Reporting Limit | Qual | Units | DF | Date / Time Analyzed |
|----------|-----------|--------|-----------------|------|-------|----|----------------------|
|----------|-----------|--------|-----------------|------|-------|----|----------------------|

CYANIDE, REACTIVE

Method: SW7.3.3.2

Prep Date: 4/1/02

Analyst: DG

| | | | | | | | |
|------------------|---|----|------|--|-------|---|--------------------|
| Reactive Cyanide | A | ND | 0.50 | | mg/Kg | 1 | 4/1/02 11:47:13 AM |
|------------------|---|----|------|--|-------|---|--------------------|

| | | |
|-------------------|--|--|
| Samp Type: | A - Analyte, S - Surrogate, I - Internal Standard | DF - Dilution Factor |
| | T - Tentatively Identified Compound (TIC, concentration estimated) | |
| Qual: | ND - Not Detected at the Reporting Limit | S - Spike recovery outside recovery limits |
| | B - Detected in the associated Method Blank | RD - Value diluted out |
| | * - Exceeds Maximum Contaminant Level | R - RPD outside accepted recovery limits |
| | | S - Value above quantitation range |
| | | I - Matrix Interference |

H - Analyte was prepared and/or analyzed outside of the analytical method holding time

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX 219.769.1664

SIMALABS

INTERNATIONAL

Customer: Project Resources Inc.
 Source: GENERAL CRUDE
 Analysis: Flashpoint
 Method: EPA Method 1010
 Prep Method: EPA 1010
 Lab Notebook No: 1263
 Initial Cal ID: WG9463

SAMPLE RESULTS

Cust. Proj. No.: 030206.001
 Login No.: L4293
 Date Received: 26-MAR-02
 Date Analyzed: 27-MAR-02
 Date Extracted: 27-MAR-02
 Preparation Batch: WG9449
 Instrument Batch: WG9463

| LAB ID. | CUSTOMER SAMPLE NO. | LOCATION | MATRIX | RESULT (deg F) | FLAG |
|---------|---------------------|----------|--------|----------------|------|
| L4293-1 | 2 AND 2' soil | | Soil | > 200 | |
| L4293-3 | 4 AND 4' soil study | | Oil | > 200 | |

*19 MAR 3-28-02
 ADD 3/25/02*

Comments:

SIMALABS

INTERNATIONAL

Customer: Project Resources Inc.
 Source: GENERAL CRUDE
 Analysis: Reactive Sulfide
 Method: EPA Method 9030B
 Prep Method: EPA 9030B
 Lab Notebook No: 1203
 Initial Cal ID: WG9488

SAMPLE RESULTS
 Cust. Proj. No.: 030206.001
 Login No.: L4293
 Date Received: 26-MAR-02
 Date Analyzed: 28-MAR-02
 Date Extracted: 28-MAR-02
 Preparation Batch: WG9486
 Instrument Batch: WG9488

| LAB ID. | CUSTOMER SAMPLE NO. & LOCATION | MATRIX | DILUTION | % SOLIDS | MDL (mg/kg) | RL (mg/kg) | RESULT (mg/kg) | FLAG |
|---------|--------------------------------|--------|----------|----------|-------------|------------|----------------|------|
| L4293-1 | 2 AND 2' <i>soil</i> | Soil | | N/A | 4.0 | 12.0 | -- | U |
| L4293-3 | 4 AND 4' <i>oil/solvent</i> | Oil | | N/A | 4.0 | 12.0 | -- | U |

0/11A 3-28-02

Comments:

RL - Reporting Limit

U - Below MDL

MDL - Method Detection Limit

SIMALABS

INTERNATIONAL

Customer: Project Resources Inc.
 Source: GENERAL CRUDE
 Analysis: pH
 Method: EPA Method 9045C
 Prep Method: EPA 9045C
 Lab Notebook No: 1312
 Initial Cal ID: WG9473

SAMPLE RESULTS

Cust. Proj. No.: 030206.001
 Login No.: L4293
 Date Received: 26-MAR-02
 Date Analyzed: 27-MAR-02
 Date Extracted: 27-MAR-02
 Preparation Batch: WG9455
 Instrument Batch: WG9473

| LAB ID | CUSTOMER SAMPLE NO. | LOCATION | MATRIX | RESULT (µg) | TEMP (Deg. C) | FLAG |
|---------|---------------------|----------|--------|-------------|---------------|------|
| L4293-1 | 2 AND 2' soil | | Soil | 7.3 | 20 | |

*MA 3-28-02
 CH 3/29/02*

Comments:

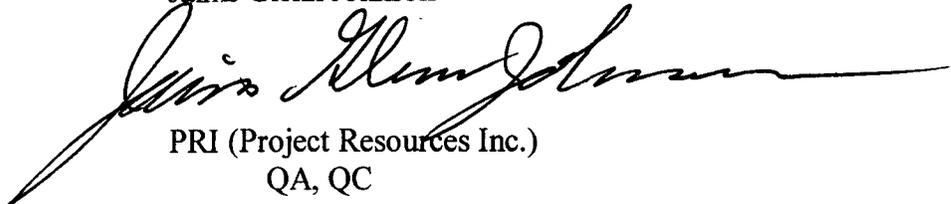


Project Resources Inc.

**QA/QC Documentation
For SIMA Lab's
Sample results as provided to PRI
Project Resources Inc.
San Diego, CA**

The lab results provided to PRI (Project Resources Inc.) by SIMA labs of Cincinnati, OH. The Lab's QA/QC Documentation for all samples also is attached. These are for all waste streams

Jaims Glenn Johnson



PRI (Project Resources Inc.)
QA, QC

SIMALABS INTERNATIONAL NARRATIVE ICP ANALYSIS

Customer Name: PROJECT RESOURCES INC.

Project: L4293

Preparation Batch: WG9435

Digestion Method: EPA 3010A

SAP: INORG6 (Revision 6)

EPA 1311

SAP: INORG10 (Revision 10)

Analytical Batch: WG9482

Analytical Method: EPA 6010B

SAP: INORG1 (Revision 9)

Instrument Name: TJA ENVIRO-I ICAP 61E

Operator Name: ANDREI SHAUCHUK

ICP Instrument File: E032802-A

ICP Run Log: NB#1315

1. Instrument profiled: Yes.
2. **CALIBRATION:** Date: 03-28-2002
Initial Calibration Verification (second source) / Initial Calibration Blank passed: Yes.
Continuing Calibration Verification / Continuing Calibration Blank passed: Yes.
Interference Check passed: Yes, except sulfur failed in ICSAB. It does not affect the results.
Reporting Limit check standard passed: Yes.
3. **DILUTION:** Yes. Sample L4293-1, duplicate, MS, MSD were diluted x2 for Se and Ag.
Interfering with these elements calcium was above a linear range (saturated).
4. **QUALITY CONTROL:**
QC Package for this Preparation Batch is from this Project? Yes.
Method Blank analyzed: Yes. Ba was found above RL but less than 5% of the TCLP regulatory limit.
LCS analyzed: Yes. Is recovery within QC limits? Yes. LCS QC charts checked: Yes.
Duplicate analyzed: Yes. Does RPD pass? Yes, except for Cr and Ag. For these analytes, concentration was found <RL, estimated value.
MS/MSD analyzed: Yes. Is recovery within QC limits? Yes.
5. **POST-SPIKE** needed? No.
6. Any sediment problem, instrument problem, extraction problem, etc.? No.
7. Samples were digested and analyzed within holding time: Yes.

| | | |
|----------------|-----------------------------|----------------------|
| REVIEW: | Level 1: Initials <u>JS</u> | Date: <u>3-28-02</u> |
| | Level 2: Initials <u>JS</u> | Date: <u>3/28/02</u> |

S I M A L A B S

INTERNATIONAL

QUALITY CONTROL

Method Blank

Customer: Project Resources Inc.

Project No.: 030206.001

Source: N/A

Location: N/A

Analysis: ICP METALS

Instrument Batch: WG9482,

Preparation Batch: WG9435

Matrix: Leachate

Lab Notebook No: 1315,

Initial Cal. ID.: E032802-A,

Final Volume: 50 ml

Initial Volume: 50 ml

PH: 5 su

Prep. Method: EPA 1311/EPA 3010A

Lab Sample ID.: WG9435-1

Date Sampled: N/A

Date Received: N/A

Date Digested: 27-MAR-02

Date Analyzed: 28-MAR-02

METHOD BLANK RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-------------------|----------|------------|-----------|----------------|----------|------|
| EPA Method 6010B | ARSENIC | 0.019 | 0.10 | --- | 1 | U |
| EPA Method 6010B | BARIUM | 0.00097 | 0.0090 | 0.015 | 1 | |
| EPA Method 6010B | CADMIUM | 0.0018 | 0.0080 | --- | 1 | U |
| EPA Method 6010B | CHROMIUM | 0.0060 | 0.020 | --- | 1 | U |
| EPA Method 6010B | LEAD | 0.021 | 0.10 | --- | 1 | U |
| EPA Method 6010B | SELENIUM | 0.017 | 0.10 | --- | 1 | U |
| EPA Method 6010B | SILVER | 0.0053 | 0.030 | --- | 1 | U |

RL - Reporting Limit

MDL - Method Detection Limit

J - Estimated Value

U - Below MDL

Comments:

Sima Labs International

Narrative Mercury Analysis

Sima Project No.: L4293 ICV Source: Inorganic Standards Services
 Customer Name: *EQM* Analytical and Digestion Method: EPA 7470A
 Batch No.: WG9450 *3-27-02* SOP No.: Inorg3 R9
 Instrumentation: P.S. Analytical system w/ Merlin detector (model 10.023)
 Instrument batch: WG9456

1. The QC Package is from project: L4293
2. Calibration: -The initial calibration date is: 3/27/02
 -The continuing calibration passed. Describe any problems:
3. Dilutions: No dilutions analyzed.
4. Quality Control:
 -A method blank was analyzed and no contamination was found.
 -An LCS was analyzed. Recovery was within limits.
 -The duplicate was from this project? Yes RPD was high due to sample being below
mdl ~~RL~~ and the duplicate being slightly above the ~~RL~~ *mdl*
 -The MS/MSD was from this project? Yes *Passed*
 -Post Spike analyzed? YES Passing? Yes
5. Any sediment problems, instrument problems, digestion problems, etc. If no problems, type no in the following space: NO If yes describe:

NOTE: QC Charts were viewed.

 Review: Level 1 Initial *RLP* Date *3/27/02*
 Level 2 Initial *RLP* Date *3-28-02*

SIMALABS International

Narrative Sulfide Reactive Analysis

Project No.: L4293 Customer Name: Project Resources Inc.
 Analytical Method: EPA 9030B Prep Method: EPA 9030B
 Prep Work Group.: WG9486 Analytical Work Group: WG9488
 Instrumentation: Titration
 SAP No.: Inorg 35/Rev.#4

1. QC Package for this prep. batch is from project: L4293

2. Calibration: The initial calibration date is: 28-MAR-02 Describe any problems:none

3. Dilutions: No dilutions were needed. N/A

4. Quality Control:
 - Method blank analyzed?: yes Any contamination? none
 - LCS analyzed? yes Is recovery within limits? yes
 - Duplicate analyzed? yes Is duplicate from this project? yes RPD passing? yes
 - MS/MSD analyzed: n/a Are MS/MSD from this project?
Is recovery within QC limits?

5. Any sediment problems, instrument problems, digestion problems, etc. If no problems, type no in the following space: no If yes describe:

6. Control Charts Checked; not set up yet

not enough points

Review: Level 1 Initial GLH *GLH* Date 03/28/02
 Level 2 Initial CJA *CJA* Date 3-28-02

[REDACTED]

INTERNATIONAL
CASE NARRATIVE GC/MS Organic Analysis

Project No.: L4293

Customer Name: Project Resources Inc.

Prep. Batch No: WG9438

Instr. Batch No: WG9439

Method 8260B, SAP# ORG11, Rev.11

1. QC Package for this Prep. Batch is from this Project? **Yes**
2. Instrument: **VOA GC/MS#3, Precept II Autosampler, column J&W DB-624**
3. MSD BFB TUNE CHECK: **Passed**
SPCC CHECK: **Passed**
4. CALIBRATION: Initial calibration **Passed** - Date: **03/11/02**
ICV from a different source: **Passed**
Continuing calibration: **Passed method criteria.** *2-Butanone wash high. No hits in Sample. No data impact. 3-28-02*
5. EXTRACTION: No problems.
6. DILUTION: All samples and QC were run at 100µL initial volume.
7. INTERNAL STANDARD AREA/RETENTION TIME: **Passed.**
8. SURROGATES: Several surrogate recoveries were slightly below QC limit. Surrogate limits for TCLP were set based on the lab historic performance. Due to the changed SS calibration (multi-point curve), additional variables were introduced into the SS recovery. There are still not enough points to chart new statistical distribution of SS.
9. QUALITY CONTROL:
Method Blank analyzed: **YES: No hits above ½ RL.**
LCS analyzed: **YES** Is recovery within QC limits: **YES**
Duplicate analyzed: **N/R**
MS/MSD analyzed: **YES.** 2-Butanone was high in MSD and RPD was out of limits. As there were no hits above action level for 2-Butanone in samples, analytical data was considered unaffected.
10. MANUAL INTEGRATIONS:
 - Initial calibration: 1,1-DCE (100 ppb)
 - ICV: none
 - CCV: none
 - LCS: none
 - Blank: none
 - Samples: none
 - MS/MSD: none
11. **Any sediment problems, instrument problem, extraction problem, etc.:** During original run MSD had no IS/SS/spike recoveries (possibly due to loose cap, puncture in septum or clogged needle). It was repeated the next day.
12. **TIC:** N/R.
13. **QC charts:** Updated and evaluated

REVIEW: Level 1 Initial [Signature] Date 3-28-02

Level 2 Initial [Signature] Date 3-28-02

SIMALABS INTERNATIONAL

CASE NARRATIVE GC/MS Organic Analysis

Project No.: L4293-3
Customer Name: PR/EOM
Description: OBNA0327
Prep Work Group: WG9472

Extraction Method: EPA 3580A, ORG54 REV3
Analytical Method: EPA 8270C, ORG15 REV11
Analytical Work Group: WG9470

1. QC Package for this Prep. Batch is from this Project? **YES.**
2. Analysis by **TOTAL ION CHROM, (GC/MS#1)**
3. MSD DFTPP TUNE EVALUATION: **Passed.**
4. CALIBRATION: Initial calibration date: **Passed 02.13.02**; ICV from second source: **Passed.**
 Continuing calibration: **Passed**; SPCC: **N/A.**
 Manual integration: **Nitrobenzene-d5 was manually integrated in the 5ppm level of the initial calibration. See quantitation reports for specific details.**
5. EXTRACTION: **See extraction log for specific details.**
6. DILUTION: **Surrogates in all extracts were diluted 10X as they were mis-spiked with surrogate. There is no data impact FF 3/28/2**
7. INTERNAL STANDARD AREA RESPONSE/RETENTION TIME: **Chrysene-d12 and Perylene-d12 were below acceptable limits in L4293-3 and the MS/MSD. No TCLP target analytes or are quantitated using these internal standards. Data impact is negligible.**
8. SURROGATES: **Several surrogates are reported above acceptable limits. Samples for this sample were prepared using waste dilution techniques. QC limits for waste dilution samples, however, are not available. Default QC limits for this project are generated from extracted samples which tend to recover spikes with less efficiency.**
9. QUALITY CONTROL:
 - Method Blank analyzed: **YES - No contamination above limits.**
 - LCS analyzed: **YES. Is recovery within QC limits? Several compounds were above acceptable limits for reason described in section 8.**
 - LCS Duplicate analyzed: **NO. Is recovery within QC limits? N/A.**
 - MS/MSD analyzed: **YES. Is recovery within QC limits? Several compounds were above acceptable limits for reason described in section 8..**
10. Any sediment problems, instrument problem, extraction problem, etc.: **See above.**
11. TIC: **Not Required.**
12. QC Charts: **Not enough waste dilution data to review.**

REVIEW: Level 1 Initial SA Date 3.29.2
 Level 2 Initial FF Date 3/28/2

SIMALABS International

Flashpoint Narrative

Project No.: L4293 Customer Name: PRI
 Analytical Method: EPA 1010 Prep Method: EPA 1010
 Prep Work Group.: WG9449 Analytical Work Group: WG9463
 Instrumentation: Koehler Closed Cup Tester
 SAP No.: Inorg 30 rev 9

1. QC Package for this prep. batch is from project: L4293
2. Calibration: The initial calibration date is: 27-MAR-02 Describe any problems:none
3. Dilutions: No dilutions were needed. N/A
4. Quality Control:
 - Method blank analyzed?: n/a Any contamination? none
 - LCS analyzed? yes Is recovery within limits? yes
 - Duplicate analyzed? yes Is duplicate from this project? yes RPD passing? yes
 - MS/MSD analyzed: n/a Are MS/MSD from this project?
Is recovery within QC limits?
5. Any sediment problems, instrument problems, digestion problems, etc. If no problems, type no in the following space: no If yes describe:
6. Control Charts Checked; not available *not enough points*

Review: Level 1 Initial ASD-AD Date 03/27/02
 Level 2 Initial CPM Date 3-28-02

SIMALABS International



Narrative pH Analysis

Project No.: L4293 Customer Name: *Project Resource, Inc.* Environmental Quality MGT., INC. *3/28/02*
 Analytical Method: EPA 9045C Prep Method: EPA 9045C
 Prep Work Group.: WG9455 Analytical Work Group: WG9473
 Instrumentation: AR 25 *Account*
 SAP No.: Inorg 8/Rev.# 11

1. QC Package for this prep. batch is from project: L4293

2. Calibration: The initial calibration date is: 27-MAR-02 Describe any problems:none

3. Dilutions: No dilutions were needed. N/A

4. Quality Control:
 - Method blank analyzed?: n/a Any contamination? none
 - LCS analyzed? yes Is recovery within limits? yes
 - Duplicate analyzed? yes Is duplicate from this project? yes RPD passing? yes
 - MS/MSD analyzed: n/a Are MS/MSD from this project?
Is recovery within QC limits?

5. Any sediment problems, instrument problems, digestion problems, etc. If no problems, type no in the following space: no If yes describe:

6. Control Charts Checked; N/A, not set up for pH yet

Review: Level 1 Initial GLH *GLH* Date 03/28/02
 Level 2 Initial *APK* Date 3-28-02

SIMALABS International



Narrative pH Analysis

Project No.: L4293 Customer Name: Project Resources, Inc.
 Analytical Method: EPA 9045C Prep Method: EPA 9045C
 Prep Work Group.: WG9474 Analytical Work Group: WG9475
 Instrumentation: AR 25 Accumet
 SAP No.: Inorg 8/Rev.# 11

1. QC Package for this prep. batch is from project: L4293

2. Calibration: The initial calibration date is: 27-MAR-02 Describe any problems:none

3. Dilutions: No dilutions were needed. N/A

4. Quality Control:
 - Method blank analyzed?: n/a Any contamination? none
 - LCS analyzed? yes Is recovery within limits? yes
 - Duplicate analyzed? yes Is duplicate from this project? yes RPD passing? yes
 - MS/MSD analyzed: n/a Are MS/MSD from this project?
Is recovery within QC limits?

5. Any sediment problems, instrument problems, digestion problems, etc. If no problems, type no in the following space: no If yes describe:

6. Control Charts Checked; N/A, not set up for pH yet

Review: Level 1 Initial GLH GLH Date 03/28/02

Level 2 Initial CJH Date 3-28-02

SIMALABS INTERNATIONAL

CASE NARRATIVE GC/MS Organic Analysis

Project No.: L4293-1
Customer Name: PR/EQM
Description: BNAT0327
Prep Work Group: WG9445

Extraction Method: EPA 1311/3510C, ORG54 REV3
Analytical Method: EPA 8270C, ORG15 REV11
Analytical Work Group: WG9465

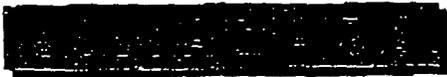
1. QC Package for this Prep. Batch is from this Project? **YES.**
2. Analysis by **TOTAL ION CHROM, (GC/MS#1)**
3. **MSD DFTPP TUNE EVALUATION: Passed.**
4. **CALIBRATION:** Initial calibration date: **Passed 02.13.02**; ICV from second source: **Passed.**
Continuing calibration: **Passed**; SPCC: **N/A.**
Manual integration: **Nitrobenzene-d5 was manually integrated in the 5ppm level of the initial calibration. See quantitation reports for specific details.**
5. **EXTRACTION: See extraction log for specific details.**
6. **DILUTION: None.**
7. **INTERNAL STANDARD AREA RESPONSE/ RETENTION TIME: Passed.**
8. **SURROGATES: Passed.**
9. **QUALITY CONTROL:**
Method Blank analyzed: **YES - No contamination above limits.**

LCS analyzed: **YES. Is recovery within QC limits? YES.**

LCS Duplicate analyzed: **NO. Is recovery within QC limits? N/A.**

MS/MSD analyzed: **YES. Is recovery within QC limits? YES.**
10. **Any sediment problems, instrument problem, extraction problem, etc.: See above.**
11. **TIC: Not Required.**
12. **QC Charts: Reviewed and updated.**

REVIEW: Level 1 Initial SA Date 3.28.02
Level 2 Initial PF Date 3/28/02



INTERNATIONAL

April 01, 2002

Christy Music
Simalabs International of Ohio
6954 Cornell Road
Suite 300
Cincinnati, OH 45242

RE: L4293

Work Order No.: ME0204003

SIMALABS International received 2 samples on 3/30/02 for the analyses presented in the following report.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted. This report includes the numbered pages as well as the Cooler Inspection Report and original Chain of Custody form(s).

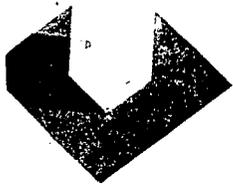
SIMALABS International is an accredited laboratory under the requirements of the National Environmental Laboratory Accreditation Program (IL EPA lab #100435). All data included has been reviewed for and meets all project specific and Quality Control requirements of this accreditation, unless otherwise noted. This report shall not be reproduced except in full, without the written approval of SIMALABS International.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,
SIMALABS International

Allyl McCarron
Project Manager

Enclosures



Project Resources Inc.

Oil/Sludge

Sample results as provided to PRI
Project Resources Inc.
San Diego, CA

The lab results provided to PRI (Project Resources Inc.) by SIMA labs of Cincinnati, OH. Is attached

Samples are Duplicates to attain requested volumes by the lab. One set for VOA & a second set for the balance of the required analysis for the Oil / Sludge waste stream.

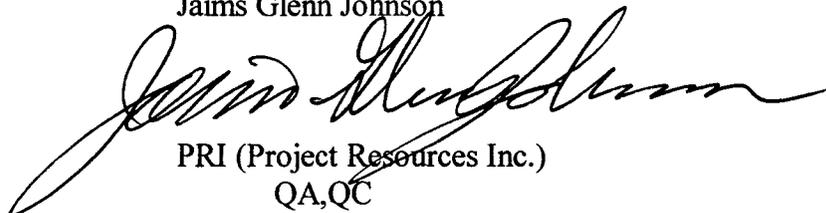
3&3' For
TCLP VOC
TCLP Semi-VOC
TCLP metals
Ph

&

4&4' For
Reactive Sulfides
Reactive Cyanides

These are for the Oils & Sludge waste stream.

Jaims Glenn Johnson



PRI (Project Resources Inc.)
QA, QC

S I M A L A B S

INTERNATIONAL

SAMPLE *oil/sediment*

4 AND 4'

Customer: Project Resources Inc.Project No.: 030206.001Source: GENERAL CRUDE

Location: _____

Analysis: ICP METALSInstrument Batch: WG9482,Preparation Batch: WG9435Matrix: LeachateLab Notebook No: 1315,Initial Cal. ID.: E032802-A,Final Volume: 50 mlInitial Volume: 50 mlPH: 5 suPrep. Method: EPA 1311/EPA 3010ALab Sample ID.: L4293-3Date Sampled: 23-MAR-02Date Received: 26-MAR-02Date Digested: 27-MAR-02Date Analyzed: 28-MAR-02

SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-------------------|----------|------------|-----------|----------------|----------|------|
| EPA Method 6010B | ARSENIC | 0.019 | 0.10 | --- | 1 | U |
| EPA Method 6010B | BARIUM | 0.00097 | 0.0090 | 0.20 | 1 | B |
| EPA Method 6010B | CADMIUM | 0.0018 | 0.0080 | --- | 1 | U |
| EPA Method 6010B | CHROMIUM | 0.0060 | 0.020 | --- | 1 | U |
| EPA Method 6010B | LEAD | 0.021 | 0.10 | 0.044 | 1 | J |
| EPA Method 6010B | SELENIUM | 0.017 | 0.10 | --- | 1 | U |
| EPA Method 6010B | SILVER | 0.0053 | 0.030 | --- | 1 | U |

RL - Reporting Limit

MDL - Method Detection Limit

B - Blank Contamination

J - Estimated Value

U - Below MDL

Comments: _____

S I M A L A B S

I N T E R N A T I O N A L

oil/sludge
SAMPLE NUMBER

3 AND 3'

Customer: Project Resources Inc.Project. No.: 030206.001Source: GENERAL CRUDELocation: N/AAnalysis: EPA Method 8260B TCLP Volatiles by GC/MSPreparation Batch: WG9438Instrument Batch: WG9439Matrix: LeachateLab Sample ID.: L4293-4Lab Notebook No: 1308, P.29&30Date Sampled: 23-MAR-02Initial Cal. ID.: 3VTCLP35Date Received: 26-MAR-02Final Volume: 5 mlDate Extracted: 27-MAR-02Initial Volume: .1 mlDate Analyzed: 27-MAR-02Prep. Method: EPA 1311/EPA 5030BpH: 5 su

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-----|----------|----------------------|---------------|--------------|-------------------|----------|------|
| 1. | 75-35-4 | 1,1-dichloroethene | 0.044 | 0.25 | --- | 1 | U |
| 2. | 107-06-2 | 1,2-dichloroethane | 0.017 | 0.25 | --- | 1 | U |
| 3. | 78-93-3 | 2-Butanone | 0.18 | 1.0 | --- | 1 | U |
| 4. | 71-43-2 | benzene | 0.024 | 0.25 | 0.12 | 1 | J |
| 5. | 56-23-5 | carbon tetrachloride | 0.026 | 0.25 | --- | 1 | U |
| 6. | 108-90-7 | chlorobenzene | 0.020 | 0.25 | --- | 1 | U |
| 7. | 67-66-3 | chloroform | 0.016 | 0.25 | --- | 1 | U |
| 8. | 127-18-4 | tetrachloroethene | 0.023 | 0.25 | --- | 1 | U |
| 9. | 79-01-6 | trichloroethene | 0.023 | 0.25 | 0.033 | 1 | J |
| 10. | 75-01-4 | vinyl chloride | 0.025 | 0.10 | --- | 1 | U |

SURROGATE STANDARD

RECOVERY (%) ACCEPTABLE (%)

SPIKE

| | | | |
|-----------------------|------|--------|----------|
| 1,2-dichloroethane-d4 | 87 * | 91-108 | 2.5 mg/l |
| 4-bromofluorobenzene | 89 | 89-117 | 2.5 mg/l |
| dibromofluoromethane | 88 | 88-117 | 2.5 mg/l |
| toluene-d8 | 91 | 91-108 | 2.5 mg/l |

RL - Reporting Limit

MDL - Method Detection Limit

* - Value(s) outside of QC limits

J - Estimated Value

U - Below MDL

MM
*3-28-02**X3-28-02*

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

SIMALABS**INTERNATIONAL**

SAMPLE NUMBER

4 AND 4'

Customer: Project Resources Inc.

Project. No.: 030206.001

Source: GENERAL CRUDE

Location: N/A

Analysis: EPA Method 8270C Semivolatiles by GC/MS

Preparation Batch: WG9472

Instrument Batch: WG9470

Matrix: Non-Aq Liq

Lab Sample ID.: L4293-3

Lab Notebook No: 1240, P. 94

Date Sampled: 23-MAR-02

Initial Cal. ID.: IFEB13T

Date Received: 26-MAR-02

Final Volume: 10.0 ml

Date Extracted: 27-MAR-02

Initial Volume: 1.18 ml

Date Analyzed: 28-MAR-02

Prep. Method: EPA 3580A

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-----|----------|-----------------------|---------------|--------------|-------------------|----------|------|
| 1. | 106-46-7 | 1,4-Dichlorobenzene | 6.2 | 42.4 | --- | 1 | U |
| 2. | 95-95-4 | 2,4,5-Trichlorophenol | 8.3 | 42.4 | --- | 1 | U |
| 3. | 88-06-2 | 2,4,6-Trichlorophenol | 10.3 | 42.4 | --- | 1 | U |
| 4. | 121-14-2 | 2,4-Dinitrotoluene | 9.6 | 42.4 | --- | 1 | U |
| 5. | 95-48-7 | 2-Methylphenol | 5.4 | 42.4 | --- | 1 | U |
| 6. | 106-44-5 | 3 & 4-Methylphenol | 6.4 | 84.7 | 7.7 | 1 | J |
| 7. | 118-74-1 | Hexachlorobenzene | 8.6 | 42.4 | --- | 1 | U |
| 8. | 87-68-3 | Hexachlorobutadiene | 6.9 | 42.4 | --- | 1 | U |
| 9. | 67-72-1 | Hexachloroethane | 5.8 | 42.4 | --- | 1 | U |
| 10. | 98-95-3 | Nitrobenzene | 6.4 | 42.4 | --- | 1 | U |
| 11. | 87-86-5 | Pentachlorophenol | 4.4 | 42.4 | --- | 1 | U |
| 12. | 110-86-1 | Pyridine | 3.2 | 42.4 | --- | 1 | U |

SURROGATE STANDARD**RECOVERY (%) ACCEPTABLE (%)****SPIKE**

| | | | | |
|----------------------|-----|---|--------|-----------|
| 2,4,6-Tribromophenol | 106 | | 56-125 | 2120 mg/l |
| 2-Fluorobiphenyl | 117 | * | 56-107 | 1060 mg/l |
| 2-Fluorophenol | 108 | * | 30-64 | 2120 mg/l |
| Nitrobenzene d5 | 106 | | 56-107 | 1060 mg/l |
| Phenol d6 | 111 | * | 14-46 | 2120 mg/l |
| Terphenyl d14 | 129 | | 49-137 | 1060 mg/l |

RL - Reporting Limit

MDL - Method Detection Limit

* - Value(s) outside of QC limits

J - Estimated Value

U - Below MDL

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

S I M A L A B S

al/sledge

INTERNATIONAL

SAMPLE

4 AND 4'

Customer: Project Resources Inc. Project No.: 030206.001
 Source: GENERAL CRUDE
 Location: _____
 Analysis: PSA HG METALS
 Instrument Batch: WG9456,
 Preparation Batch: WG9450 Lab Sample ID.: L4293-3
 Matrix: Leachate Date Sampled: 23-MAR-02
 Lab Notebook No: 1323, P.22-24, Date Received: 26-MAR-02
 Initial Cal. ID.: WG9456, Date Digested: 27-MAR-02
 Final Volume: 100 ml Date Analyzed: 27-MAR-02
 Initial Volume: 100 ml
 Prep. Method: EPA 1311/ EPA 7470A
 pH: 6 su

SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|-------------------|---------|------------|-----------|----------------|----------|------|
| EPA Method 7470A | Mercury | 0.000067 | 0.00020 | --- | 1 | U |

RL - Reporting Limit

MDL - Method Detection Limit

U - Below MDL

Comments:

S I M A L A B S

I N T E R N A T I O N A L

Customer: _____
 Project Resources Inc.
 Source: _____
 Analysis: _____
 Method: _____
 EPA Method 9045C
 Prep Method: _____
 Lab Notebook No: _____
 Initial Cal ID: _____
 WG9475

| SAMPLE RESULTS | |
|--------------------|------------|
| Cust. Proj. No.: | 030206.001 |
| Login No.: | L4293 |
| Date Received: | 26-MAR-02 |
| Date Analyzed: | 27-MAR-02 |
| Date Extracted: | 27-MAR-02 |
| Preparation Batch: | WG9474 |
| Instrument Batch: | WG9475 |

| LAB ID. | CUSTOMER SAMPLE NO. | LOCATION | MATRIX | RESULT (su) | TEMP (Deg. C) | FLAG |
|---------|---------------------|----------|--------|-------------|---------------|------|
| L4293-3 | 4 AND 4' | oil | oil | 6.2 | 20.4 | |

oil

Comments:

GH
 3/28/02
 CMM 3-28-02

SIMLABS

INTERNATIONAL

Customer: Project Resources Inc.
 Source: GENERAL CRUDE
 Analysis: Reactive Sulfide
 Method: EPA Method 9030B
 Prep Method: EPA 9030B
 Lab Notebook No: 1203
 Initial Cal ID: WG9488

SAMPLE RESULTS

Cust. Proj. No.: 030206001
 Login No.: 14293
 Date Received: 26-MAR-02
 Date Analyzed: 28-MAR-02
 Date Extracted: 28-MAR-02
 Preparation Batch: WG9486
 Instrument Batch: WG9488

| LABID. | CUSTOMER SAMPLE NO. & LOCATION | MATRIX | DILUTION | % SOLIDS | MDL (mg/kg) | RI (mg/kg) | RESULT (mg/kg) | FLAG |
|---------|--------------------------------|--------|----------|----------|-------------|------------|----------------|------|
| L4293-1 | 2 AND 2' soil | Soil | | N/A | 4.0 | 12.0 | -- | U |
| L4293-3 | 4 AND 4' soil/shingles | Oil | | N/A | 4.0 | 12.0 | -- | U |

CPMA 3-28-02

Comments:

RL - Reporting Limit
 U - Below MDL

MDL - Method Detection Limit

SIMALABS

INTERNATIONAL

Customer: _____
 Project Resources Inc.
 Source: GENERAL CRUDE
 Analysis: Flashpoint
 Method: EPA Method 1010
 Prep Method: EPA 1010
 Lab Notebook No: 1263
 Initial Cal ID: WG9463

| SAMPLE RESULTS | |
|--------------------|-------------------|
| Cust. Proj. No.: | <u>030206.001</u> |
| Login No.: | <u>L4293</u> |
| Date Received: | <u>26-MAR-02</u> |
| Date Analyzed: | <u>27-MAR-02</u> |
| Date Extracted: | <u>27-MAR-02</u> |
| Preparation Batch: | <u>WG9449</u> |
| Instrument Batch: | <u>WG9463</u> |

| LAB ID. | CUSTOMER SAMPLE NO. | LOCATION | MATRIX | RESULT (deg F) | FLAG |
|---------|---------------------|-----------------|--------|-------------------|------|
| L4293-1 | 2 AND 2' | <i>soil</i> | Soil | > 200 | |
| L4293-3 | 4 AND 4' | <i>oil/slug</i> | Oil | > 200 | |

Comments:

L4293-28-02
 For 3/28/02



INTERNATIONAL

ANALYTICAL RESULTS

Date: *Monday, April 01, 2002*

| | | | |
|----------------------------|--------------------------------|------------------------|---------------|
| Client: | Simalabs International of Ohio | Client Project: | L4293 |
| | | Work Order: | ME0204003 |
| Client Sample ID: | L4293-3 | SIMALABS ID: | ME0204003-02B |
| Sample Description: | 4 & 4 (oil/sludge) | | |
| Sample Matrix: | Extract | | |
| Collection Date: | 03/23/02 | | |
| Date Received: | 03/30/02 | | |

| Analyses | Samp Type | Result | Reporting Limit | Qual | Units | DF | Date / Time Analyzed |
|----------|-----------|--------|-----------------|------|-------|----|----------------------|
|----------|-----------|--------|-----------------|------|-------|----|----------------------|

CYANIDE, REACTIVE

Method: SW7.3.3.2

Prep Date: 4/1/02

Analyt: DG

| | | | | | | | |
|------------------|---|----|------|--|-------|---|--------------------|
| Reactive Cyanide | A | ND | 0.50 | | mg/Kg | 1 | 4/1/02 11:50:05 AM |
|------------------|---|----|------|--|-------|---|--------------------|

Samp Type: A - Analyte, S - Surrogate, I - Internal Standard
 T - Tentatively Identified Compound (TIC, concentration estimated) DF - Dilution Factor

Qual: ND - Not Detected at the Reporting Limit
 B - Detected in the associated Method Blank
 * - Exceeds Maximum Contaminant Level

S - Spike recovery outside recovery limits
 SD - Value diluted out
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 I - Matrix Interference

H - Analyte was prepared and/or analyzed outside of the analytical method holding time



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 874
(505) 334-6178 Fax (505) 334-

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|--|---|
| <p>1. Generator Name and Address: U.S. EPA 10625 Fallstone Houston, TX 77083 Atten: Warren Zehner</p> | <p>2. Destination Name: Tierra / Crouch Mesa Land Farm 420 cnty rd. 3100 Aztec, NM 87410</p> |
| <p>3. Originating Site (name): Beeline Refinery / General Crude / Mesa Petroleum</p> <p>Attach list of originating sites as appropriate</p> | <p>Location of the Waste (Street address &/or ULSTR): 8201 E. Main (St. Hwy 516) Farmington, NM</p> |
| <p>4. Source and Description of Waste liquid waste oil, dewatered / stabilized (no free liquids) tank bottoms, oil contaminated soils from the clean-up of the Beeline Refinery / General Crude Processing / Mesa Petroleum facility at address referenced above</p> | |

I, Warren Zehner representative for:
(Print Name)

U.S. Environmental Protection Agency do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS Information Other (description):
 RCRA Hazardous Waste Analysis
 Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): Warren Zehner for USEPA
Title: Sr. On Scene Coordinator

Date: April 1, 2007

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Martyne Kieling

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02027

| | |
|---|--------------------------------------|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator <i>Key Energy</i> |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site <i>Sims yard</i> |
| 2. Management Facility Destination <i>Tierra Landfarm</i> | 6. Transporter <i>Key</i> |
| 3. Address of Facility Operator <i>420 CR 3100</i> | 8. State <i>NM</i> |
| 7. Location of Material (Street Address or ULSTR) <i>CR 527 and Casa Road Rio Arriba</i> | |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL: *Clean diesel fuel and Dirt*



Estimated Volume 3 cy Known Volume (to be entered by the operator at the end of the haul) 3 cy

SIGNATURE *Jan G. Nobis* TITLE: *Landfarm manager* DATE: *3-19-02*
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: *Jan G. Nobis* TELEPHONE NO. *334 8894*

(This space for State Use)

APPROVED BY: *Denny Faust* TITLE: *Enviro/Engr* DATE: *03/25/02*
APPROVED BY: *Martyne Kieling* TITLE: *Environmental Geologist* DATE: *03/11/02*

1-201010



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178 Fax (505) 334-617

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|---|--|
| <p>1. Generator Name and Address: Key Energy Services 5651 U.S. 64 Farmington, N.M. 87429</p> | <p>2. Destination Name: TIERCE LAND FARM.</p> |
| <p>3. Originating Site (name): Sims yard</p> <p>Attach list of originating sites as appropriate</p> | <p>Location of the Waste (Street address &/or ULSTR): CR 527 and Casa Road Rio Arriba.</p> |
| <p>4. Source and Description of Waste Clean Diesel Fuel and Diesel</p> | |

I, Claude L. Cobble representative for:
(Print Name)

Key Energy Services do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS Information Other (description):
 RCRA Hazardous Waste Analysis
 Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): Claude L. Cobble

Title: Lead Pusher

Date: 3/19/02



GASC0220

Revised 10-JAN-1994

Printed 5-APR-1994

No. 2 Diesel Fuel

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

CAS Number 68476-34-6

Tradenames and Synonyms

Diesel Fuel No. 2, Low Sulfur
Diesel Fuel No. 2, High Sulfur

3502, 3504, 3510, 3512, 4152

Company Identification

MANUFACTURER/DISTRIBUTOR
CONOCO INC.
P.O. BOX 2197
HOUSTON, TX 77252

PHONE NUMBERS

Product Information 1-713-293-5550
Transport Emergency CHEMTREC 1-800-424-9300
Medical Emergency 1-800-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

| Components Material | CAS Number | % |
|------------------------|------------|---|
|------------------------|------------|---|

| | | |
|--------------------|------------|-----|
| Diesel Fuel, No. 2 | 68476-34-6 | 100 |
|--------------------|------------|-----|

HAZARDS IDENTIFICATION

Potential Health Effects

Primary Routes of Exposure/Entry: Skin, Inhalation.

Signs and Symptoms of Exposure/Medical Conditions

Aggravated by Exposure:

The product may cause irritation to the eyes, lungs, and skin after prolonged or repeated exposure. Extreme

(Continued)

HAZARDS IDENTIFICATION (Continued)

overexposure or aspiration into the lungs may cause lung damage and death. Overexposure may cause weakness, headache, nausea, confusion, blurred vision, drowsiness, and other nervous system effects; greater exposure may cause dizziness, slurred speech, flushed face, unconsciousness, and convulsions.

It is highly unlikely that human exposure at or below the recommended exposure level poses a significant health hazard. In this regard, good workplace practices and proper engineering designs will minimize exposure.

Decomposition Products:

Studies in mice and rats have shown that chronic exposure (8 hours/day, 7 days/week, 24 months) to unfiltered diesel exhaust produced tumors of the lung and also lymphomas. On the basis of these studies, NIOSH recommends that whole diesel exhaust be regarded as a potential carcinogen.

Carbon monoxide is a gas that can result from incomplete combustion of hydrocarbons, from detoxification of some chemicals like methylene chloride, tobacco smoke, and even from natural body processes. Carbon monoxide binds tightly to hemoglobin and interferes with oxygen transport to body tissues. Overexposure can cause headache, nausea, nervous system depression, coma, and death.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

Wash skin thoroughly with soap and water. If irritation develops and persists, consult a physician.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

(Continued)

FIRST AID MEASURES (Continued)

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physicians

Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg, or 350 mL for an average adult.

FIRE FIGHTING MEASURES

Flammable Properties

| | |
|--------------------------------------|---------------|
| Flash Point | 130 F (54 C) |
| Method | TCC |
| Flammable limits in Air, % by Volume | |
| LEL | 0.4 |
| UEL | 6 |
| Autoignition | 494 F (257 C) |

Vapor forms explosive mixture with air. Vapors or gases may travel considerable distances to ignition source and flash back.

NFPA Classification Class II Combustible Liquid.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Special Fire Fighting Procedures: Use water to keep fire-exposed containers cool. If leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for personnel attempting to stop a leak. Water spray may be used to flush spills away from exposures.

Unusual Fire and Explosion Hazards: Products of combustion may contain carbon monoxide, carbon dioxide and other toxic materials. Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Remove source of heat, sparks, flame, impact, friction and electricity including internal combustion engines and power tools. If equipment is used for spill cleanup, it must be explosion proof and suitable for flammable liquid and vapor.

(Continued)

ACCIDENTAL RELEASE MEASURES (Continued)

NOTE: Vapors released from the spill may create an explosive atmosphere.

Initial Containment

Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up

Soak up with sawdust, sand, oil dry or other absorbent material.

HANDLING AND STORAGE

Handling (Personnel)

Avoid breathing vapors or mist. Wash thoroughly after handling. Wash clothing after use.

Handling (Physical Aspects)

Ground container when pouring. Keep away from heat, sparks and flames.

Storage

Store in a well ventilated place. Keep container tightly closed. Store in accordance with National Fire Protection Association recommendations. Store away from heat, sparks and flames, oxidizers.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use only with adequate ventilation. Keep container tightly closed.

Personal Protective Equipment

Respiratory Protection: Select appropriate NIOSH-approved respiratory protection when needed to avoid inhalation of mist or vapors and to maintain exposures below acceptable limits.

Protective Gloves: Impervious gloves, such as neoprene or NBR, should be worn when the potential exists for prolonged or repeated skin exposure.

Eye Protection: Safety glasses with side shields. Chemical goggles required when exposed to spray or mist or if splashing is probable.

Other Protective Equipment: Coveralls if splashing is probable. Launder contaminated clothing before reuse.

Exposure Guidelines

Exposure Limits

No. 2 Diesel Fuel

PEL (OSHA)

None Established

TLV (ACGIH)

None Established

(Continued)

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

| | |
|---------------------|-------------------------|
| Boiling Point | 350-690 F (177-366 C) |
| Vapor Pressure | 1 mm Hg @ 68 F (20 C) |
| Vapor Density | >1 (Air = 1) |
| % Volatiles | (by volume) Nil |
| Solubility in Water | Insoluble |
| Odor | Aromatic |
| Form | Liquid |
| Color | * |
| Specific Gravity | 0.84-0.88 @ 60 F (16 C) |

*Color : High Sulfur - Green
Low Sulfur - Red or Undyed (Clear or Straw-Colored)

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Conditions to Avoid

Avoid heat, sparks, and flame.

Incompatibility with Other Materials

Incompatible or can react with strong oxidizers.

Decomposition

Incomplete combustion may produce carbon monoxide.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Animal studies have shown that prolonged or repeated inhalation exposures to high concentrations of some petroleum distillates have caused liver tumors in mice and kidney damage and tumors in male rats. However, kidney effects were not seen in similar studies involving female rats, guinea pigs, dogs, or monkeys. Present studies indicate the kidney effects will only occur in male rats. Also, human studies do not indicate this peculiar sensitivity for kidney damage and studies reported in 1992 showed that this particular type of rat kidney damage is not useful in predicting a human health hazard. The significance of liver tumors in mice exposed to high doses of chemicals is highly speculative and probably not a good indicator for predicting a potential human carcinogenic hazard.

~~Mouse skin painting studies have shown that petroleum middle distillates (boiling range 100-700 F; naphtha, jet fuel, diesel fuel, kerosene, etc.) can cause skin cancer when repeatedly applied and never washed from the animal's skin. The relative~~

(Continued)

TOXICOLOGICAL INFORMATION(Continued)

significance of this to human health is uncertain since the petroleum distillates were not washed from the skin and resulting skin effects (irritation, cell damage, etc.) may play a role in the tumorigenic response. A few studies have shown that washing the animal's skin with soap and water between treatments greatly reduces the carcinogenic effect of some petroleum oils.

Diesel Fuel -
Skin : Extremely irritating; no mortality at 5 ml/kg
in rabbits
Oral : LD50 of 9 ml/kg in rats

DISPOSAL CONSIDERATIONS**Waste Disposal**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

By itself, the liquid is expected to be a RCRA ignitable hazardous waste.

TRANSPORTATION INFORMATION**Shipping Information**

INTERNATIONAL HM-181

| | |
|----------------------|------------------|
| Proper Shipping Name | Gas Oil |
| Hazard Class | 3 |
| UN/NA Number | UN 1202 |
| Packing Group | III |
| Label | Flammable liquid |
| Placard | Flammable |

DOMESTIC HM-181

| | |
|----------------------|---|
| Proper Shipping Name | Diesel fuel |
| Hazard Class | Combustible liquid |
| UN/NA Number | NA 1993 |
| Packing Group | III |
| Label | None |
| Placard | Combustible |
| Special Information | If shipped by vessel or air, use international description. |

(Continued)

REGULATORY INFORMATION

U.S. Federal Regulations

OSHA HAZARD DETERMINATION

This material is hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA/SUPERFUND

Not applicable; this material is covered by the CERCLA petroleum exclusion. Releases are not reportable.

SARA, TITLE III, 302/304

This material is not known to contain extremely hazardous substances.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
Chronic : Yes
Fire : Yes
Reactivity : No
Pressure : No

SARA, TITLE III, 313

This material is not known to contain any chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and subject to release reporting requirements.

TSCA

This material is in the TSCA Inventory of Chemical Substances (40 CFR 710) and/or is otherwise in compliance with TSCA.

RCRA

This material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations. It could become a hazardous waste if it is mixed with, or comes in contact with, a listed hazardous waste. If it is a hazardous waste, regulations at 40 CFR 262-266 and 268 may apply.

CLEAN WATER ACT

The material contains the following ingredient(s) which is considered hazardous if spilled into navigable waters and therefore reportable to the National Response Center (1-800-424-8802).

| | |
|---------------------|---|
| Ingredient(s) | Petroleum Hydrocarbons |
| Reportable Quantity | Film or sheen upon, or discoloration of, any water surface. |

State Regulations (U.S.)

CALIFORNIA "PROP 65"

This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT

This material contains the following ingredient(s) subject to the

(Continued)

REGULATORY INFORMATION(Continued)

Pennsylvania Worker and Community Right to Know Hazardous Substances List.

| | |
|------------|---------------------|
| Ingredient | Diesel Fuel Oil |
| Category | Hazardous Substance |

Canadian Regulations

~~CLASS B Division 3 Combustible Liquid.~~

CLASS D Division 2 Subdivision B - Toxic Material. Chronic Toxic Effects.

Transport/Medical Emergency Phone Number: 1-613-348-3616

OTHER INFORMATION**NFPA, NPCA-HMIS**

| | |
|--------------|---|
| NFPA Rating | |
| Health | 0 |
| Flammability | 2 |
| Reactivity | 0 |

| | |
|------------------|---|
| NPCA-HMIS Rating | |
| Health | 1 |
| Flammability | 2 |
| Reactivity | 0 |

Personal Protection rating to be supplied by user depending on use conditions.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

| | |
|-------------------------|---|
| Responsibility for MSDS | MSDS Administrator |
| Address | Conoco Inc. PO Box 2197 Houston, TX 77252 |
| Telephone | 713/293-5550 |

Indicates updated section.

End of MSDS

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

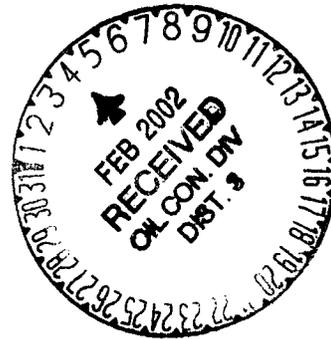
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02012

| | |
|---|---|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 4. Generator Questar S.T. Pipeline Co. |
| 2. Management Facility Destination Tierra Landfarm | 5. Originating Site Shiprock Station |
| 3. Address of Facility Operator 420 CR 3100 Aztec, NM 87410 | 6. Transporter Various |
| 7. Location of Material (Street Address or ULSTR) T30N R18W (4 Mi. S of Shiprock) | 8. State NM |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil impacted by crude oil from a transportation line.



Estimated Volume 1500 cy

Known Volume (to be entered by the operator at the end of the haul) cy

SIGNATURE *J. Bath* TITLE: Environmental Specialist DATE: 2/4/02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Jeremy J. Bath TELEPHONE NO. 334-8894

(This space for State Use)
APPROVED BY: *Denny Feunt* TITLE: Enviro/Eng DATE: 02/04/02
APPROVED BY: *Monty J. ...* TITLE: Environmental Geologist DATE: 02/11/02



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salishury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFICATE OF WASTE STATUS

| | |
|---|--|
| 1. Generator Name and Address Questar Southern Trails Pipeline Co. 180 East 100 South Salt Lake City, UT 84111 | 2. Destination Name: Tierra Environmental Company Inc. Farmington, NM |
| 3. Originating Site (name): Questar - Shiprock Stations attach list of originating sites as appropriate | Location of the Waste (Street address &/or ULSTR): 4 miles South of Shiprock, NM Township 30 North, Range 18 West Next to Hwy 666 |
| 4. Source and Description of Waste Excavation of petroleum contaminated soil. This is a former crude oil pump station that is being converted to transport natural gas. The site was formerly owned and operated by ARCO Pipeline Company. Crude oil was transported through this facility from 1957 until 1998 when Questar assumed ownership. A natural gas compressor station is now being constructed on the property. | |

I, Gordon J. Murdock representative for:
Print Name

Questar Southern Trials Pipeline Company do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

MSDS Information Other (description)
 RCRA Hazardous Waste Analysis
 Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): *Gordon J. Murdock*

Title: Sr. Environmental & Safety Coordinator

Date: 2-04-02



Questar

1140 West 200 South
P.O. Box 45360 M/S OC238
Salt Lake City, UT 84145-0360
Tel 801-324-3411
Fax 801-324-3883
gordonm@questar.com

Gordon Murdock, CIH, CSP
Sr. Env. & Safety Coordinator

January 30, 2002

Mr. Jeremy Bath
Environmental Specialist
Tierra Environmental Company Inc.
P.O. Box 1812
Bloomfield, NM 87413

Dear Mr. Bath:

Please be advised that Questar Southern Trails Pipeline Company (QSTP) intends to transport approximately 1500 yd³ of non-exempt, non-hazardous, petroleum contaminated soil to the Tierra Environmental facility for land farming. The contaminated soil has been excavated from the QSTP Shiprock facility located on the Navajo Indian Reservation, approximately 4 miles south of Shiprock. The soil will be transported to your facility beginning Friday, February 1. Applicable analytical results are attached.

If you have any questions feel free to call. Your cooperation is appreciated.

Sincerely,

Gordon Murdock
Sr. Environmental & Safety Coordinator

CC: Ms. Arlene Luther - Navajo Nation EPA
Window Rock Blvd.
Bldg. #W008090
Window Rock, AZ 86515



United States

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- ▶ Print, Bind & Ship
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Tracking Number 484262249118
 Reference Number GORDON M. 1566 72878
 Ship Date 01/30/2002
 Delivered To Receipt/Fmt desk
 Delivery Location WINDOW ROCK AZ
 Delivery Date/Time 01/31/2002 14:05
 Signed For By D.CHISCHILLY
 Service Type Priority Letter

Tracking Options

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- Email these tracking results to one or more recipients
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Scan Activity

Delivered GALLUP NM
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 Left FedEx Origin Location SALT LAKE CITY UT
 Picked up by FedEx SALT LAKE CITY UT

Date/Time Comments

01/31/2002 14:05
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 01/31/2002 06:10
 01/31/2002 01:28
 01/31/2002 00:53
 01/30/2002 21:57
 01/30/2002 20:22
 01/30/2002 20:18
 01/30/2002 18:30

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Mountain States Analytical, Inc.

1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724



January 30, 2002

Mr. Gordon Murdock
Questar
PO Box 45360
Salt Lake City, UT 84145-0360
(801) 324-3411 Fax: (801) 324-3883

Project: Shiprock Soil

Work Order: 0201237

Purchase Order: G000030060

Dear Mr. Gordon Murdock,

Thank you for using Mountain States Analytical, Inc. (MSAI) as your environmental information resource. Our reports are designed to meet the Certified Laboratory Reporting Requirements of Utah Administrative Code R444-14-12(10) and the National Environmental Laboratory Accreditation Program (NELAP), Section 5.13.

This is Report Number 0201237-1 and contains 30 pages of information for the 2 samples submitted to MSAI on Wednesday, January 23, 2002. Any sample receipt documentation detailed in the Work Order Receipt Summary of this report (e.g., Chain-of-Custody, Work Order Authorization, etc.) and/or analytical results noted as "see attached" are included by reference as attachments following page 30. For regulatory compliance reporting, individual pages or portions of this report may not be separated.

If you have any questions regarding the information contained in this report, please feel free to contact me at (801)973-0050 ext. 3026 or by e-mail at rlarsen@msailabs.com.

Mountain States Analytical, Inc.

Rolf E. Larsen

Senior Project Manager

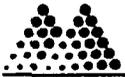


Sample Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

| Lab Sample ID | Client Sample ID | Additional Sample Information | Matrix | Date Collected |
|---------------|------------------|-------------------------------|--------|----------------|
| 0201237-01A | SR-001 | | Soil | 01/21/02 |
| 0201237-01B | SR-001 | | Soil | 01/21/02 |
| 0201237-02A | SR-002 | | Soil | 01/21/02 |
| 0201237-02B | SR-002 | | Soil | 01/21/02 |
| 0201237-02C | SR-002 | | Soil | 01/21/02 |



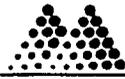
Holding Time Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

| Sample ID | Client Sample ID | Date Collected | | | | | | |
|---------------------------------|------------------|-------------------|-----------------|-----------|------------------|-----------|----------------------|-----------|
| 0201237-01A | SR-001 | 01/21/02 | | | | | | |
| | | Leachate | | | | | | |
| Parameter | | Start Date | End Date | HT | Prep Date | HT | Analysis Date | HT |
| Ignitability | | | | | | | 01/23/02 | |
| Mercury by CVAA, TCLP | | 01/23/02 21:15 | 01/24/02 13:15 | 28 | 01/24/02 21:00 | | 01/25/02 15:49 | 28 |
| Metals by hrICP, (UTS) | | 01/23/02 21:15 | 01/24/02 13:15 | 180 | 01/29/02 10:00 | | 01/29/02 16:51 | 180 |
| Reactivity, (Cyanide & Sulfide) | | | | | | | 01/25/02 | |
| Semi-Volatiles | | 01/23/02 21:15 | 01/24/02 13:15 | 14 | 01/28/02 13:45 | 7 | 01/30/02 00:26 | 40 |
| Waste pH measured in water | | | | | | | 01/23/02 19:55 | |
| 0201237-01B | SR-001 | 01/21/02 | | | | | | |
| | | Leachate | | | | | | |
| Parameter | | Start Date | End Date | HT | Prep Date | HT | Analysis Date | HT |
| Volatiles | | 01/24/02 18:30 | 01/25/02 11:30 | 14 | | | 01/25/02 19:13 | 14 |
| 0201237-02A | SR-002 | 01/21/02 | | | | | | |
| | | Leachate | | | | | | |
| Parameter | | Start Date | End Date | HT | Prep Date | HT | Analysis Date | HT |
| Mercury by CVAA, TCLP | | 01/23/02 21:15 | 01/24/02 13:15 | 28 | 01/24/02 21:00 | | 01/25/02 15:51 | 28 |
| Metals by hrICP, (UTS) | | 01/23/02 21:15 | 01/24/02 13:15 | 180 | 01/29/02 10:00 | | 01/29/02 17:22 | 180 |
| Semi-Volatiles | | 01/23/02 21:15 | 01/24/02 13:15 | 14 | 01/28/02 13:45 | 7 | 01/30/02 00:54 | 40 |
| 0201237-02B | SR-002 | 01/21/02 | | | | | | |
| | | Leachate | | | | | | |
| Parameter | | Start Date | End Date | HT | Prep Date | HT | Analysis Date | HT |
| Ignitability | | | | | | | 01/23/02 | |
| Reactivity, (Cyanide & Sulfide) | | | | | | | 01/25/02 | |
| Waste pH measured in water | | | | | | | 01/23/02 19:55 | |
| 0201237-02C | SR-002 | 01/21/02 | | | | | | |
| | | Leachate | | | | | | |
| Parameter | | Start Date | End Date | HT | Prep Date | HT | Analysis Date | HT |
| Volatiles | | 01/24/02 18:30 | 01/25/02 11:30 | 14 | | | 01/25/02 18:52 | 14 |

* - The recommended holding time was exceeded



Mountain States Analytical, Inc.

1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724



Client: Mr. Gordon Murdock
 Questar
 PO Box 45360
 Salt Lake City, UT 84145-0360
 801-324-3135 Fax: 801-324-3345

Project: Shiprock Soil

Project ID:

Purchase Order: G000030060

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-01A
Client Sample ID: SR-001
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|--|-----------|------|------|-------|----|----------------|---------|
| SW-846 1010 Mod: Ignitability, Solid | | | | | | | |
| Ignitability | >146 (8a) | 35 | 50 | °F | 1 | 01/23/02 | CAW |
| Ignitable by friction | Negative | | | °F | 1 | 01/23/02 | CAW |
| Ignitable upon water contact | Negative | | | °F | 1 | 01/23/02 | CAW |
| Spontaneously combusts in air | Negative | | | °F | 1 | 01/23/02 | CAW |
| Note for 01/23/02 00:00 analysis: Limited Volume. | | | | | | | |
| 8a: See sample comments | | | | | | | |
| SW-846 CH.7.3/9014/9034: Reactivity, (Cyanide & Sulfide), Solid | | | | | | | |
| Cyanide (reactive) | 40 J | 25 | 125 | mg/Kg | 1 | 01/25/02 | CAW |
| Sulfide (reactive) | 80 J | 76 | 380 | mg/Kg | 1 | 01/25/02 | CAW |
| SW-846 1311: TCLP Extraction, Metals, Solid | | | | | | | |
| Prep Batch ID: 7953 | | | | | | 01/23/02 21:15 | RH |
| Note for 01/23/02 21:15 analysis: 100% solids | | | | | | | |
| SW-846 1311: TCLP Extraction, Mercury, Solid | | | | | | | |
| Prep Batch ID: 7954 | | | | | | 01/23/02 21:15 | RH |
| Note for 01/23/02 21:15 analysis: 100% solids | | | | | | | |
| SW-846 1311: TCLP Extraction, Semi-VOA, Solid | | | | | | | |
| Prep Batch ID: 7955 | | | | | | 01/23/02 21:15 | RH |
| Note for 01/23/02 21:15 analysis: 100% solids | | | | | | | |
| SW-846 9045C: Waste pH measured in water, Solid | | | | | | | |
| pH of soil slurry | 8.09 | 0.01 | 0.05 | N/A | 1 | 01/23/02 19:55 | SSJ |
| SW-846 3010A: Flame/hrICP Prep, Extract | | | | | | | |
| Prep Batch ID: 7988 | | | | | | 01/29/02 10:00 | MAM |
| SW-846 7470A: Mercury by CVAA, TCLP, Extract | | | | | | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level

Client: Mr. Gordon Murdock
 Questar
 PO Box 45360
 Salt Lake City, UT 84145-0360
 801-324-3135 Fax: 801-324-3345

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-01A
Client Sample ID: SR-001
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

Project: Shiprock Soil
Project ID:
Purchase Order: G000030060

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|--|----------|-----------------------|-------|------------|----|----------------|---------|
| Mercury | U | 1 | 5 | µg/L | 1 | 01/25/02 15:49 | LC |
| SW-846 7470A: Mercury Prep CVAA, Extract | | | | | | | |
| Prep Batch ID: 7959 | | | | | 10 | 01/24/02 21:00 | TM |
| SW-846 6010B: Metals by hrICP, (UTS), Extract | | | | | | | |
| Arsenic | U | 0.03 | 0.15 | mg/L | 1 | 01/29/02 16:51 | DJK |
| Barium | 0.0924 | 0.003 | 0.015 | mg/L | 1 | 01/29/02 16:51 | DJK |
| Cadmium | 0.0036 J | 0.003 | 0.015 | mg/L | 1 | 01/29/02 16:51 | DJK |
| Chromium | 0.019 J | 0.01 | 0.05 | mg/L | 1 | 01/29/02 16:51 | DJK |
| Lead | U | 0.03 | 0.15 | mg/L | 1 | 01/29/02 16:51 | DJK |
| Selenium | U | 0.04 | 0.2 | mg/L | 1 | 01/29/02 16:51 | DJK |
| Silver | 0.0066 J | 0.003 | 0.015 | mg/L | 1 | 01/29/02 16:51 | DJK |
| SW-846 8270C: Semi-Volatiles, Extract | | | | | | | |
| 2,4-Dinitrotoluene | U | 40 | 100 | µg/L | 5 | 01/30/02 00:26 | KPF |
| Hexachlorobenzene | U | 20 | 100 | µg/L | 5 | 01/30/02 00:26 | KPF |
| Hexachlorobutadiene | U | 40 | 100 | µg/L | 5 | 01/30/02 00:26 | KPF |
| Hexachloroethane | U | 40 | 100 | µg/L | 5 | 01/30/02 00:26 | KPF |
| 2-Methylphenol (o-Cresol) | U | 60 | 200 | µg/L | 5 | 01/30/02 00:26 | KPF |
| 3 and 4- Methylphenol (m+p cresol) | U | 60 | 200 | µg/L | 5 | 01/30/02 00:26 | KPF |
| Nitrobenzene | U | 40 | 100 | µg/L | 5 | 01/30/02 00:26 | KPF |
| Pentachlorophenol | U | 60 | 200 | µg/L | 5 | 01/30/02 00:26 | KPF |
| Pyridine | U | 60 | 100 | µg/L | 5 | 01/30/02 00:26 | KPF |
| 2,4,5-Trichlorophenol | U | 60 | 200 | µg/L | 5 | 01/30/02 00:26 | KPF |
| 2,4,6-Trichlorophenol | U | 40 | 200 | µg/L | 5 | 01/30/02 00:26 | KPF |
| Surrogates | | | | | | | |
| | | Recovery Range | | | | | |
| 2-Fluorobiphenyl | 76.3 | 22-152 | | % Recovery | 5 | 01/30/02 00:26 | KPF |
| 2-Fluorophenol | 20.2 | 2-114 | | % Recovery | 5 | 01/30/02 00:26 | KPF |
| Nitrobenzene-d5 | 72.3 | 17-158 | | % Recovery | 5 | 01/30/02 00:26 | KPF |
| Phenol-d6 | 21.8 | 1-95 | | % Recovery | 5 | 01/30/02 00:26 | KPF |
| Terphenyl-d14 | 97.6 | 30-180 | | % Recovery | 5 | 01/30/02 00:26 | KPF |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

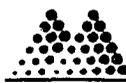
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level



Mountain States Analytical, Inc.

1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724



Client: Mr. Gordon Murdock
 Questar
 PO Box 45360
 Salt Lake City, UT 84145-0360
 801-324-3135 Fax: 801-324-3345

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-01A
Client Sample ID: SR-001
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

Project: Shiprock Soil
Project ID:
Purchase Order: G000030060

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|-----------|--------|-----|-----|-------|----|---------------|---------|
|-----------|--------|-----|-----|-------|----|---------------|---------|

| Surrogates | | Recovery Range | | | | | |
|----------------------|------|----------------|------------|---|----------------|-----|--|
| 2,4,6-Tribromophenol | 59.9 | 14-173 | % Recovery | 5 | 01/30/02 00:26 | KPF | |

Note for 01/30/02 00:26 analysis: Sample diluted due to dark, cloudy nature of extract and potential matrix interferences.

SW-846 3510C: Separatory Funnel Liq/Liq Ext., SV, Extract

| | | | | | | | |
|---------------------|--|--|--|--|---|----------------|----|
| Prep Batch ID: 7990 | | | | | 4 | 01/28/02 13:45 | TJ |
|---------------------|--|--|--|--|---|----------------|----|

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level

Client: Mr. Gordon Murdock
 Questar
 PO Box 45360
 Salt Lake City, UT 84145-0360
 801-324-3135 Fax: 801-324-3345

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-01B
Client Sample ID: SR-001
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

Project: Shiprock Soil
Project ID:
Purchase Order: G000030060

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|---|--------|-----------------------|------------|-------|----|----------------|---------|
| SW-846 1311: TCLP Extraction, ZHE, Solid | | | | | | | |
| Prep Batch ID: 7960 | | | | | | 01/24/02 18:30 | RH |
| Note for 01/24/02 18:30 analysis: 100% solids | | | | | | | |
| SW-846 5030B/8260B: Volatiles, Extract | | | | | | | |
| Benzene | U | 0.3 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| 2-Butanone (MEK) | U | 0.7 | 12.5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| Carbon tetrachloride | U | 0.9 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| Chlorobenzene | U | 0.5 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| Chloroform | U | 0.3 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| 1,4-Dichlorobenzene | U | 0.4 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| 1,1-Dichloroethene | U | 0.8 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| 1,2-Dichloroethane | U | 0.3 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| Tetrachloroethene | U | 0.7 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| Trichloroethene | U | 0.6 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| Vinyl chloride | U | 3 | 5 | µg/L | 1 | 01/25/02 19:13 | DJH |
| Surrogates | | Recovery Range | | | | | |
| Bromofluorobenzene | 103 | 68.1-124 | % Recovery | | 1 | 01/25/02 19:13 | DJH |
| 1,2-Dichloroethane-d4 | 111 | 60.4-138 | % Recovery | | 1 | 01/25/02 19:13 | DJH |
| Toluene-d8 | 100 | 82.6-123 | % Recovery | | 1 | 01/25/02 19:13 | DJH |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

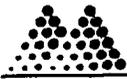
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level



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Client: Mr. Gordon Murdock
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 Salt Lake City, UT 84145-0360
 801-324-3135 Fax: 801-324-3345

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-02A
Client Sample ID: SR-002
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

Project: Shiprock Soil
Project ID:
Purchase Order: G000030060

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|--|----------|-------|-------|-------|----|----------------|---------|
| SW-846 1311: TCLP Extraction, Metals, Solid | | | | | | | |
| Prep Batch ID: 7953 | | | | | | 01/23/02 21:15 | RH |
| Note for 01/23/02 21:15 analysis: 100% solids | | | | | | | |
| SW-846 1311: TCLP Extraction, Mercury, Solid | | | | | | | |
| Prep Batch ID: 7954 | | | | | | 01/23/02 21:15 | RH |
| Note for 01/23/02 21:15 analysis: 100% solids | | | | | | | |
| SW-846 1311: TCLP Extraction, Semi-VOA, Solid | | | | | | | |
| Prep Batch ID: 7955 | | | | | | 01/23/02 21:15 | RH |
| Note for 01/23/02 21:15 analysis: 100% solids | | | | | | | |
| SW-846 3010A: Flame/hrICP Prep, Extract | | | | | | | |
| Prep Batch ID: 7988 | | | | | | 01/29/02 10:00 | MAM |
| SW-846 7470A: Mercury by CVAA, TCLP, Extract | | | | | | | |
| Mercury | U | 1 | 5 | µg/L | 1 | 01/25/02 15:51 | LC |
| SW-846 7470A: Mercury Prep CVAA, Extract | | | | | | | |
| Prep Batch ID: 7959 | | | | | 10 | 01/24/02 21:00 | TM |
| SW-846 6010B: Metals by hrICP, (UTS), Extract | | | | | | | |
| Arsenic | U | 0.03 | 0.15 | mg/L | 1 | 01/29/02 17:22 | DJK |
| Barium | 0.125 | 0.003 | 0.015 | mg/L | 1 | 01/29/02 17:22 | DJK |
| Cadmium | U | 0.003 | 0.015 | mg/L | 1 | 01/29/02 17:22 | DJK |
| Chromium | U | 0.01 | 0.05 | mg/L | 1 | 01/29/02 17:22 | DJK |
| Lead | U | 0.03 | 0.15 | mg/L | 1 | 01/29/02 17:22 | DJK |
| Selenium | U | 0.04 | 0.2 | mg/L | 1 | 01/29/02 17:22 | DJK |
| Silver | 0.0044 J | 0.003 | 0.015 | mg/L | 1 | 01/29/02 17:22 | DJK |
| SW-846 8270C: Semi-Volatiles, Extract | | | | | | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level

Client: Mr. Gordon Murdock
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 Salt Lake City, UT 84145-0360
 801-324-3135 Fax: 801-324-3345

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-02A
Client Sample ID: SR-002
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

Project: Shiprock Soil

Project ID:

Purchase Order: G000030060

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|------------------------------------|--------|-----|-----------------------|------------|----|----------------|---------|
| 2,4-Dinitrotoluene | U | 40 | 100 | µg/L | 5 | 01/30/02 00:54 | KPF |
| Hexachlorobenzene | U | 20 | 100 | µg/L | 5 | 01/30/02 00:54 | KPF |
| Hexachlorobutadiene | U | 40 | 100 | µg/L | 5 | 01/30/02 00:54 | KPF |
| Hexachloroethane | U | 40 | 100 | µg/L | 5 | 01/30/02 00:54 | KPF |
| 2-Methylphenol (o-Cresol) | U | 60 | 200 | µg/L | 5 | 01/30/02 00:54 | KPF |
| 3 and 4- Methylphenol (m+p cresol) | U | 60 | 200 | µg/L | 5 | 01/30/02 00:54 | KPF |
| Nitrobenzene | U | 40 | 100 | µg/L | 5 | 01/30/02 00:54 | KPF |
| Pentachlorophenol | U | 60 | 200 | µg/L | 5 | 01/30/02 00:54 | KPF |
| Pyridine | U | 60 | 100 | µg/L | 5 | 01/30/02 00:54 | KPF |
| 2,4,5-Trichlorophenol | U | 60 | 200 | µg/L | 5 | 01/30/02 00:54 | KPF |
| 2,4,6-Trichlorophenol | U | 40 | 200 | µg/L | 5 | 01/30/02 00:54 | KPF |
| Surrogates | | | Recovery Range | | | | |
| 2-Fluorobiphenyl | 66.1 | | 22-152 | % Recovery | 5 | 01/30/02 00:54 | KPF |
| 2-Fluorophenol | 23.2 | | 2-114 | % Recovery | 5 | 01/30/02 00:54 | KPF |
| Nitrobenzene-d5 | 62.8 | | 17-158 | % Recovery | 5 | 01/30/02 00:54 | KPF |
| Phenol-d6 | 23.4 | | 1-95 | % Recovery | 5 | 01/30/02 00:54 | KPF |
| Terphenyl-d14 | 95.1 | | 30-180 | % Recovery | 5 | 01/30/02 00:54 | KPF |
| 2,4,6-Tribromophenol | 51.3 | | 14-173 | % Recovery | 5 | 01/30/02 00:54 | KPF |

Note for 01/30/02 00:54 analysis: Sample diluted due to dark, cloudy nature of extract and potential matrix interferences.

SW-846 3510C: Separatory Funnel Liq/Liq Ext., SV, Extract

Prep Batch ID: 7990 4 01/28/02 13:45 TJ

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

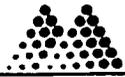
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level



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Client: Mr. Gordon Murdock
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 Salt Lake City, UT 84145-0360
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Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-02B
Client Sample ID: SR-002
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

Project: Shiprock Soil
Project ID:
Purchase Order: G000030060

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|--|----------|------|------|-------|----|----------------|---------|
| SW-846 1010 Mod: Ignitability, Solid | | | | | | | |
| Ignitability | >146 | 35 | 50 | °F | 1 | 01/23/02 | CAW |
| Ignitable by friction | Negative | | | °F | 1 | 01/23/02 | CAW |
| Ignitable upon water contact | Negative | | | °F | 1 | 01/23/02 | CAW |
| Spontaneously combusts in air | Negative | | | °F | 1 | 01/23/02 | CAW |
| SW-846 CH.7.3/9014/9034: Reactivity, (Cyanide & Sulfide), Solid | | | | | | | |
| Cyanide (reactive) | 40 J | 25 | 125 | mg/Kg | 1 | 01/25/02 | CAW |
| Sulfide (reactive) | 100 J | 76 | 380 | mg/Kg | 1 | 01/25/02 | CAW |
| SW-846 9045C: Waste pH measured in water, Solid | | | | | | | |
| pH of soil slurry | 8.06 | 0.01 | 0.05 | N/A | 1 | 01/23/02 19:55 | SSJ |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

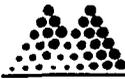
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level



Mountain States Analytical, Inc.

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Client: Mr. Gordon Murdock
 Questar
 PO Box 45360
 Salt Lake City, UT 84145-0360
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Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237
Lab Sample ID: 0201237-02C
Client Sample ID: SR-002
Date Collected: 01/21/02
Date Received: 01/23/02 09:13
Matrix: Soil
COC ID: 24077

Project: Shiprock Soil
Project ID:
Purchase Order: G000030060

| Parameter | Result | MDL | PQL | Units | DF | Date Analyzed | Analyst |
|-----------|--------|-----|-----|-------|----|---------------|---------|
|-----------|--------|-----|-----|-------|----|---------------|---------|

SW-846 1311: TCLP Extraction, ZHE, Solid

Prep Batch ID: 7960 01/24/02 18:30 RH

Note for 01/24/02 18:30 analysis: 100% solids

SW-846 5030B/8260B: Volatiles, Extract

| | | | | | | | |
|----------------------|--------|-----|------|------|---|----------------|-----|
| Benzene | U | 0.3 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| 2-Butanone (MEK) | U | 0.7 | 12.5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| Carbon tetrachloride | U | 0.9 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| Chlorobenzene | U | 0.5 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| Chloroform | 0.32 J | 0.3 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| 1,4-Dichlorobenzene | U | 0.4 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| 1,1-Dichloroethene | U | 0.8 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| 1,2-Dichloroethane | U | 0.3 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| Tetrachloroethene | U | 0.7 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| Trichloroethene | U | 0.6 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |
| Vinyl chloride | U | 3 | 5 | µg/L | 1 | 01/25/02 18:52 | DJH |

Surrogates

| | | Recovery Range | | | | |
|-----------------------|------|----------------|------------|---|----------------|-----|
| Bromofluorobenzene | 102 | 68.1-124 | % Recovery | 1 | 01/25/02 18:52 | DJH |
| 1,2-Dichloroethane-d4 | 114 | 60.4-138 | % Recovery | 1 | 01/25/02 18:52 | DJH |
| Toluene-d8 | 99.3 | 82.6-123 | % Recovery | 1 | 01/25/02 18:52 | DJH |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

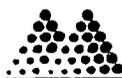
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

* - Result is greater than the associated action level



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

SW-846 1010 Mod: Ignitability, Solid

QC Type: Laboratory Control Spike
Sample ID: LCS 020123-01
Run ID: WC_020123B

Analysis Date: 01/23/02
Prep Batch ID: WC_020123B

Units: °F
Seq No: 312870

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|--------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Ignitability | 83.0 | | 81.0 | 102 | 96.1 | 105.8 | | |

QC Type: Laboratory Control Spike Duplicate
Sample ID: LCS 020123-01 DUP
Run ID: WC_020123B

Analysis Date: 01/23/02
Prep Batch ID: WC_020123B

Units: °F
Seq No: 312871

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|--------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Ignitability | 82.0 | | 81.0 | 101 | 96.1 | 105.84 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

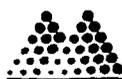
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

SW-846 CH.7.3/9014/9034: Reactivity, (Cyanide & Sulfide), Solid

QC Type: Laboratory Control Spike
Sample ID: LCS 020125-01
Run ID: WC_0201250

Analysis Date: 01/25/02
Prep Batch ID: WC_0201250

Units: mg/Kg
Seq No: 313829

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|--------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Cyanide (reactive) | 35 | | 300 | 11.7 | 0 | 77.7 | | |
| Sulfide (reactive) | 501 | | 536 | 93.5 | 75 | 125 | | |

QC Type: Laboratory Control Spike Duplicate
Sample ID: LCS 020125-01 DUP
Run ID: WC_0201250

Analysis Date: 01/25/02
Prep Batch ID: WC_0201250

Units: mg/Kg
Seq No: 313830

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|--------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Cyanide (reactive) | 40 | | 300 | 13.3 | 0 | 77.7 | 35 J | 13 20 |
| Sulfide (reactive) | 480 | | 536 | 89.6 | 75 | 125 | 501 | 4.3 20 |

QC Type: Method Blank
Sample ID: BLK 020125-01
Run ID: WC_0201250

Analysis Date: 01/25/02
Prep Batch ID: WC_0201250

Units: mg/Kg
Seq No: 313831

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|--------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Cyanide (reactive) | U | 0 | 0 | 0 | | 25 | | |
| Sulfide (reactive) | U | 0 | 0 | 0 | | 76 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

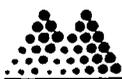
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

SW-846 9045C: Waste pH measured in water, Solid

QC Type: Sample Duplicate
Sample ID: 0201237-02B DUP
Run ID: WC_020123F
Analysis Date: 01/23/02 19:55
Prep Batch ID: WC_020123F
Units: N/A
Seq No: 312893

| Parameter | Result | Spike Parent | True Percent Value Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-------------------|--------|--------------|-----------------------------|-----------|------------|------------------|---------------|
| pH of soil slurry | 8.01 | | | | | 8.06 | 0.62 1.37 |

QC Type: pH Standard 4.0
Sample ID: LCS 020123-01
Run ID: WC_020123F
Analysis Date: 01/23/02 19:55
Prep Batch ID: WC_020123F
Units: N/A
Seq No: 312894

| Parameter | Result | Spike Parent | True Percent Value Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-------------------|--------|--------------|-----------------------------|-----------|------------|------------------|---------------|
| pH of soil slurry | 4.00 | | | 3.95 | 4.05 | | |

QC Type: pH Standard 10.01
Sample ID: LCS 020123-02
Run ID: WC_020123F
Analysis Date: 01/23/02 19:55
Prep Batch ID: WC_020123F
Units: N/A
Seq No: 312895

| Parameter | Result | Spike Parent | True Percent Value Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-------------------|--------|--------------|-----------------------------|-----------|------------|------------------|---------------|
| pH of soil slurry | 10.0 | | | 9.96 | 10.06 | | |

U - Not detected above the MDL
 J - Analyte detected below the PQL
 NC - Not Calculated: Duplicate value(s) are less than the MDL
 B - Analyte detected in the associated Method Blank
 E - Result is outside of quantitation range
 S - Results outside normal recovery* limits
 R - RPD outside normal precision limits



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

SW-846 6010B: Metals by hrICP, (UTS), Extract

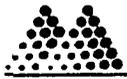
QC Type: Method Blank
Sample ID: PBW-7988
Run ID: TJA-IRIS_020129C
Analysis Date: 01/29/02 15:24
Prep Batch ID: 7988
Units: mg/L
Seq No: 314556

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|----------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Arsenic | 0.0042 | 0 | 0 | 0 | -0.06 | 0.03 | | |
| Barium | 0.00024 | 0 | 0 | 0 | -0.006 | 0.003 | | |
| Cadmium | -0.00016 | 0 | 0 | 0 | -0.006 | 0.003 | | |
| Chromium | 0.00073 | 0 | 0 | 0 | -0.02 | 0.01 | | |
| Lead | -0.0025 | 0 | 0 | 0 | -0.06 | 0.03 | | |
| Selenium | 0.0094 | 0 | 0 | 0 | -0.08 | 0.04 | | |
| Silver | 0.0013 | 0 | 0 | 0 | -0.006 | 0.003 | | |

QC Type: Laboratory Control Sample (Water)
Sample ID: LCSW-7988
Run ID: TJA-IRIS_020129C
Analysis Date: 01/29/02 15:28
Prep Batch ID: 7988
Units: mg/L
Seq No: 314557

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Arsenic | 0.986 | | 1.00 | 98.6 | 75 | 125 | | |
| Barium | 0.192 | | 0.200 | 96.1 | 75 | 125 | | |
| Cadmium | 0.0991 | | 0.100 | 99.1 | 75 | 125 | | |
| Chromium | 0.408 | | 0.400 | 102 | 75 | 125 | | |
| Lead | 0.978 | | 1.00 | 97.8 | 75 | 125 | | |
| Selenium | 1.01 | | 1.00 | 101 | 75 | 125 | | |
| Silver | 0.0970 | | 0.100 | 97.0 | 75 | 125 | | |

U - Not detected above the MDL B - Analyte detected in the associated Method Blank S - Results outside normal recovery limits
 J - Analyte detected below the PQL E - Result is outside of quantitation range R - RPD outside normal precision limits
 NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Sample Duplicate
Sample ID: 0201166-01A D
Run ID: TJA-IRIS_020129C
Analysis Date: 01/29/02 15:38
Prep Batch ID: 7988
Units: mg/L
Seq No: 314559

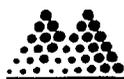
Table with 10 columns: Parameter, Result, Spike Parent, True Value, Percent Recovery, Low Limit, High Limit, Duplicate Parent, RPD, RPD Limit. Rows include Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, and Silver.

3a: Duplicates not evaluated - matrix sample <10x the detection limit

QC Type: Matrix Spike
Sample ID: 0201166-01A MS
Run ID: TJA-IRIS_020129C
Analysis Date: 01/29/02 15:41
Prep Batch ID: 7988
Units: mg/L
Seq No: 314560

Table with 10 columns: Parameter, Result, Spike Parent, True Value, Percent Recovery, Low Limit, High Limit, Duplicate Parent, RPD, RPD Limit. Rows include Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, and Silver.

U - Not detected above the MDL
J - Analyte detected below the PQL
NC - Not Calculated: Duplicate value(s) are less than the MDL
B - Analyte detected in the associated Method Blank
E - Result is outside of quantitation range
S - Results outside normal recovery limits
R - RPD outside normal precision limits



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Matrix Spike Duplicate
Sample ID: 0201166-01A MSD
Run ID: TJA-IRIS_020129C

Analysis Date: 01/29/02 15:45
Prep Batch ID: 7988

Units: mg/L
Seq No: 314561

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Arsenic | 1.13 | U | 1.00 | 113 | 75 | 125 | 1.09 | 3.8 20 |
| Barium | 0.782 | 0.564 | 0.200 | 109 | 75 | 125 | 0.773 | 1.2 20 |
| Cadmium | 0.104 | U | 0.100 | 104 | 75 | 125 | 0.0989 | 5.0 20 |
| Chromium | 0.775 | 0.322 | 0.400 | 113 | 75 | 125 | 0.736 | 5.2 20 |
| Lead | 1.06 | 0.060 J | 1.00 | 99.9 | 75 | 125 | 1.02 | 3.6 20 |
| Selenium | 1.19 | U | 1.00 | 119 | 75 | 125 | 1.12 | 5.8 20 |
| Silver | 0.108 | 0.0046 J | 0.100 | 103 | 75 | 125 | 0.105 | 2.4 20 |

QC Type: Pre-Preservation Spike
Sample ID: 0201166-01A S
Run ID: TJA-IRIS_020129C

Analysis Date: 01/29/02 15:48
Prep Batch ID: 7988

Units: mg/L
Seq No: 314562

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Arsenic | 5.32 | U | 5.00 | 106 | 50 | | | |
| Barium | 8.58 | 0.564 | 10.0 | 80.1 | 50 | | | |
| Cadmium | 0.0937 | U | 0.100 | 93.7 | 50 | | | |
| Chromium | 0.820 | 0.322 | 0.500 | 99.6 | 50 | | | |
| Lead | 0.442 | 0.060 J | 0.500 | 76.3 | 50 | | | |
| Selenium | 5.38 | U | 5.00 | 108 | 50 | | | |
| Silver | 0.0684 | 0.0046 J | 0.100 | 63.8 | 50 | | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

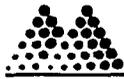
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Post Digestion/Distillation Spike
Sample ID: 0201166-01A A
Run ID: TJA-IRIS_020129C

Analysis Date: 01/29/02 15:52
Prep Batch ID: 7988

Units: mg/L
Seq No: 314563

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Arsenic | 1.11 | U | 1.00 | 111 | 75 | 125 | | |
| Barium | 0.775 | 0.564 | 0.200 | 106 | 75 | 125 | | |
| Cadmium | 0.103 | U | 0.100 | 103 | 75 | 125 | | |
| Chromium | 0.724 | 0.322 | 0.400 | 100 | 75 | 125 | | |
| Lead | 1.07 | 0.060 J | 1.00 | 101 | 75 | 125 | | |
| Selenium | 1.13 | U | 1.00 | 113 | 75 | 125 | | |
| Silver | 0.102 | 0.0046 J | 0.100 | 97.3 | 75 | 125 | | |

QC Type: Serial Dilution
Sample ID: 0201166-01A L
Run ID: TJA-IRIS_020129C

Analysis Date: 01/29/02 15:58
Prep Batch ID: 7988

Units: mg/L
Seq No: 314564

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | %D %D Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|-------------|
| Arsenic | U | | | | | | U | NC 10 |
| Barium | 0.553 | | | | | | 0.564 | 1.9 10 |
| Cadmium | U | | | | | | U | NC 10 |
| Chromium | 0.327 | | | | | | 0.322 | 1.4 10 |
| Lead | U | | | | | | 0.060 J | NC 10 |
| Selenium | U | | | | | | U | NC 10 |
| Silver | U | | | | | | 0.0046 J | NC 10 |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

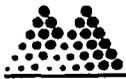
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: TCLP Blank
Sample ID: TBLK-7953
Run ID: TJA-IRIS_020129C

Analysis Date: 01/29/02 17:33
Prep Batch ID: 7988

Units: mg/L
Seq No: 314576

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|----------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Arsenic | 0.018 | 0 | 0 | 0 | -0.06 | 0.25 | | |
| Barium | 0.0051J | 0 | 0 | 0 | -0.006 | 1.05 | | |
| Cadmium | -0.00017 | 0 | 0 | 0 | -0.006 | 0.0055 | | |
| Chromium | 0.00023 | 0 | 0 | 0 | -0.02 | 0.03 | | |
| Lead | -0.0065 | 0 | 0 | 0 | -0.06 | 0.0375 | | |
| Selenium | 0.020 | 0 | 0 | 0 | -0.08 | 0.04 | | |
| Silver | -0.0017 | 0 | 0 | 0 | -0.006 | 0.01 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

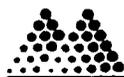
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

SW-846 7470A: Mercury by CVAA, TCLP, Extract

QC Type: Method Blank
Sample ID: PBW-7959
Run ID: FIMS_020125A

Analysis Date: 01/25/02 14:46
Prep Batch ID: 7959

Units: µg/L
Seq No: 313689

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Mercury | -0.015 | 0 | 0 | 0 | -0.2 | 0.1 | | |

QC Type: Laboratory Control Sample (Water)
Sample ID: LCSW-7959
Run ID: FIMS_020125A

Analysis Date: 01/25/02 14:47
Prep Batch ID: 7959

Units: µg/L
Seq No: 313690

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Mercury | 4.65 | | 5.00 | 93.0 | 80 | 120 | | |

QC Type: Sample Duplicate
Sample ID: 0201166-01A D
Run ID: FIMS_020125A

Analysis Date: 01/25/02 14:50
Prep Batch ID: 7959

Units: µg/L
Seq No: 313692

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Mercury | U | | | | | | U | NC 20 |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

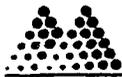
S -Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Matrix Spike
Sample ID: 0201166-01A MS
Run ID: FIMS_020125A
Analysis Date: 01/25/02 14:52
Prep Batch ID: 7959
Units: µg/L
Seq No: 313693

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|-----------|
| Mercury | 50.1 | U | 50.0 | 100 | 80 | 120 | | |

QC Type: Matrix Spike Duplicate
Sample ID: 0201166-01A MSD
Run ID: FIMS_020125A
Analysis Date: 01/25/02 14:53
Prep Batch ID: 7959
Units: µg/L
Seq No: 313694

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|-----------|
| Mercury | 50.6 | U | 50.0 | 101 | 80 | 120 | 50.1 | 1.0 20 |

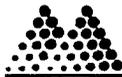
QC Type: Pre-Preservation Spike
Sample ID: 0201166-01A S
Run ID: FIMS_020125A
Analysis Date: 01/25/02 14:55
Prep Batch ID: 7959
Units: µg/L
Seq No: 313695

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|-----------|
| Mercury | 19.6 | U | 25.0 | 78.6 | 50 | | | |

QC Type: Post Digestion/Distillation Spike
Sample ID: 0201166-01A A
Run ID: FIMS_020125A
Analysis Date: 01/25/02 14:56
Prep Batch ID: 7959
Units: µg/L
Seq No: 313696

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|-----------|
| Mercury | 53.9 | U | 50.0 | 108 | 85 | 115 | | |

U - Not detected above the MDL
J - Analyte detected below the PQL
NC - Not Calculated: Duplicate value(s) are less than the MDL
B - Analyte detected in the associated Method Blank
E - Result is outside of quantitation range
S - Results outside normal recovery limits
R - RPD outside normal precision limits



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

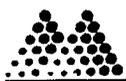
QC Type: Serial Dilution
Sample ID: 0201166-01A L
Run ID: FIMS_020125A
Analysis Date: 01/25/02 14:58
Prep Batch ID: 7959
Units: µg/L
Seq No: 313697

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | %D | RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|----|-----------|
| Mercury | U | | | | | | U | NC | 10 |

QC Type: TCLP Blank
Sample ID: TBLK-7954
Run ID: FIMS_020125A
Analysis Date: 01/25/02 15:52
Prep Batch ID: 7959
Units: µg/L
Seq No: 313715

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD | RPD Limit |
|-----------|--------|--------------|------------|------------------|-----------|------------|------------------|-----|-----------|
| Mercury | -0.026 | 0 | 0 | 0 | -0.2 | 1.25 | | | |

U - Not detected above the MDL
 J - Analyte detected below the PQL
 NC - Not Calculated: Duplicate value(s) are less than the MDL
 B - Analyte detected in the associated Method Blank
 E - Result is outside of quantitation range
 S - Results outside normal recovery limits
 R - RPD outside normal precision limits



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

SW-846 5030B/8260B: Volatiles, Water

QC Type: Laboratory Control Spike

Sample ID: 020125wi

Run ID: HP-6_020125A

Analysis Date: 01/25/02 14:07

Prep Batch ID: R28702

Units: µg/L

Seq No: 313897

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Benzene | 18.0 | | 20.0 | 90.0 | 79.4 | 117 | | |
| Chlorobenzene | 18.8 | | 20.0 | 94.2 | 83.8 | 114 | | |
| 1,1-Dichloroethene | 14.7 | | 20.0 | 73.5 | 59.4 | 139 | | |
| Trichloroethene | 17.9 | | 20.0 | 89.3 | 67.3 | 131 | | |
| Toluene | 20.1 | | 20.0 | 100 | 70.1 | 133 | | |
| Surrogates | | | | | | | | |
| Bromofluorobenzene | 55.6 | | 50.0 | 111 | 68.1 | 124 | | |
| 1,2-Dichloroethane-d4 | 51.9 | | 50.0 | 104 | 60.4 | 138 | | |
| Toluene-d8 | 53.1 | | 50.0 | 106 | 82.6 | 123 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Method Blank
Sample ID: 020125wb
Run ID: HP-6_020125A

Analysis Date: 01/25/02 14:28
Prep Batch ID: R28702

Units: µg/L
Seq No: 313898

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Benzene | U | 0 | 0 | 0 | | 0.3 | | |
| 2-Butanone (MEK) | U | 0 | 0 | 0 | | 0.7 | | |
| Carbon tetrachloride | U | 0 | 0 | 0 | | 0.9 | | |
| Chlorobenzene | U | 0 | 0 | 0 | | 0.5 | | |
| Chloroform | U | 0 | 0 | 0 | | 0.3 | | |
| 1,4-Dichlorobenzene | U | 0 | 0 | 0 | | 0.4 | | |
| 1,1-Dichloroethene | U | 0 | 0 | 0 | | 0.8 | | |
| 1,2-Dichloroethane | U | 0 | 0 | 0 | | 0.3 | | |
| Tetrachloroethene | U | 0 | 0 | 0 | | 0.7 | | |
| Trichloroethene | U | 0 | 0 | 0 | | 0.6 | | |
| Vinyl chloride | U | 0 | 0 | 0 | | 3 | | |
| Surrogates | | | | | | | | |
| Bromofluorobenzene | 48.5 | 0 | 50.0 | 97.0 | 68.1 | 124 | | |
| 1,2-Dichloroethane-d4 | 55.5 | 0 | 50.0 | 111 | 60.4 | 138 | | |
| Toluene-d8 | 49.2 | 0 | 50.0 | 98.5 | 82.6 | 123 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

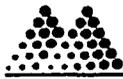
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Matrix Spike
Sample ID: 0201147-04ams
Run ID: HP-6_020125A

Analysis Date: 01/25/02 17:48
Prep Batch ID: R28702

Units: µg/L
Seq No: 313902

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Benzene | 1980 | 200 J | 2000 | 89.1 | 79.4 | 117 | | |
| Chlorobenzene | 1860 | U | 2000 | 93.2 | 83.8 | 114 | | |
| 1,1-Dichloroethene | 1570 | U | 2000 | 78.4 | 59.4 | 139 | | |
| Trichloroethene | 1790 | U | 2000 | 89.6 | 67.3 | 131 | | |
| Toluene | 2140 | 310 J | 2000 | 91.2 | 70.1 | 133 | | |
| Surrogates | | | | | | | | |
| Bromofluorobenzene | 5100 | 0 | 5000 | 102 | 68.1 | 124 | | |
| 1,2-Dichloroethane-d4 | 5420 | 0 | 5000 | 108 | 60.4 | 138 | | |
| Toluene-d8 | 4990 | 0 | 5000 | 99.8 | 82.6 | 123 | | |

QC Type: Matrix Spike Duplicate
Sample ID: 0201147-04amsd
Run ID: HP-6_020125A

Analysis Date: 01/25/02 18:09
Prep Batch ID: R28702

Units: µg/L
Seq No: 313903

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Benzene | 2010 | 200 J | 2000 | 90.8 | 79.4 | 117 | 1980 | 1.7 17.7 |
| Chlorobenzene | 1870 | U | 2000 | 93.6 | 83.8 | 114 | 1860 | 0.42 12.1 |
| 1,1-Dichloroethene | 1630 | U | 2000 | 81.5 | 59.4 | 139 | 1570 | 3.9 20 |
| Trichloroethene | 1850 | U | 2000 | 92.7 | 67.3 | 131 | 1790 | 3.4 12 |
| Toluene | 2110 | 310 J | 2000 | 90.1 | 70.1 | 133 | 2140 | 1.0 12.9 |
| Surrogates | | | | | | | | |
| Bromofluorobenzene | 5010 | 0 | 5000 | 100 | 68.1 | 124 | | |
| 1,2-Dichloroethane-d4 | 5620 | 0 | 5000 | 112 | 60.4 | 138 | | |
| Toluene-d8 | 4930 | 0 | 5000 | 98.7 | 82.6 | 123 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

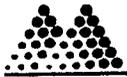
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: TCLP Blank
Sample ID: tblk-7960
Run ID: HP-6_020125A

Analysis Date: 01/25/02 18:31
Prep Batch ID: 7960

Units: µg/L
Seq No: 313937

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|-----------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Benzene | U | 0 | 0 | 0 | | 25 | | |
| 2-Butanone (MEK) | U | 0 | 0 | 0 | | 90 | | |
| Carbon tetrachloride | U | 0 | 0 | 0 | | 15 | | |
| Chlorobenzene | U | 0 | 0 | 0 | | 15 | | |
| Chloroform | U | 0 | 0 | 0 | | 15 | | |
| 1,4-Dichlorobenzene | U | 0 | 0 | 0 | | 0.2 | | |
| 1,1-Dichloroethene | U | 0 | 0 | 0 | | 15 | | |
| 1,2-Dichloroethane | U | 0 | 0 | 0 | | 15 | | |
| Tetrachloroethene | U | 0 | 0 | 0 | | 15 | | |
| Trichloroethene | U | 0 | 0 | 0 | | 15 | | |
| Vinyl chloride | U | 0 | 0 | 0 | | 15 | | |
| Surrogates | | | | | | | | |
| Bromofluorobenzene | 49.5 | 0 | 50.0 | 99.0 | 68.1 | 124 | | |
| 1,2-Dichloroethane-d4 | 54.2 | 0 | 50.0 | 108 | 60.4 | 138 | | |
| Toluene-d8 | 49.3 | 0 | 50.0 | 98.5 | 82.6 | 123 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

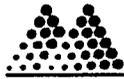
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

SW-846 8270C: Semi-Volatiles, Water

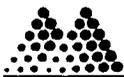
QC Type: Method Blank
Sample ID: MB-7990
Run ID: HP-7_020129A

Analysis Date: 01/29/02 23:03
Prep Batch ID: 7990

Units: µg/L
Seq No: 314617

Table with 9 columns: Parameter, Result, Spike Parent, True Value, Percent Recovery, Low Limit, High Limit, Duplicate Parent, RPD Limit. Rows include various chemical compounds like 2,4-Dinitrotoluene, Hexachlorobenzene, and Surrogates.

U - Not detected above the MDL
B - Analyte detected in the associated Method Blank
S - Results outside normal recovery limits
J - Analyte detected below the PQL
E - Result is outside of quantitation range
R - RPD outside normal precision limits
NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Laboratory Control Spike
Sample ID: LCS-7990
Run ID: HP-7_020129A

Analysis Date: 01/29/02 23:31
Prep Batch ID: 7990

Units: µg/L
Seq No: 314619

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|---------------------------|--------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Acenaphthene | 89.9 | | 100 | 89.9 | 53 | 109 | | |
| 4-Chloro-3-methylphenol | 91.4 | | 100 | 91.4 | 50 | 117 | | |
| 2-Chlorophenol | 75.0 | | 100 | 75.0 | 43 | 100 | | |
| 1,4-Dichlorobenzene | 66.0 | | 100 | 66.0 | 28 | 95 | | |
| 2,4-Dinitrotoluene | 106 | | 100 | 106 | 59 | 120 | | |
| N-Nitrosodi-N-propylamine | 78.7 | | 100 | 78.7 | 46 | 106 | | |
| 4-Nitrophenol | 43.2 | | 100 | 43.2 | 14 | 59 | | |
| Pentachlorophenol | 108 | | 100 | 108 | 46 | 130 | | |
| Phenol | 33.9 | | 100 | 33.9 | 15 | 56 | | |
| Pyrene | 99.3 | | 100 | 99.3 | 55 | 116 | | |
| 1,2,4-Trichlorobenzene | 72.8 | | 100 | 72.8 | 34 | 99 | | |
| Surrogates | | | | | | | | |
| 2,4,6-Tribromophenol | 208 | | 200 | 104 | 14 | 173 | | |
| 2-Fluorophenol | 95.0 | | 200 | 47.5 | 2 | 114 | | |
| 2-Fluorobiphenyl | 85.6 | | 100 | 85.6 | 22 | 152 | | |
| Nitrobenzene-d5 | 79.9 | | 100 | 79.9 | 17 | 158 | | |
| Phenol-d6 | 62.1 | | 200 | 31.0 | 1 | 95 | | |
| Terphenyl-d14 | 102 | | 100 | 102 | 30 | 180 | | |

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

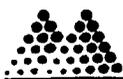
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Matrix Spike
Sample ID: 0201213-01CMS
Run ID: HP-7_020129A

Analysis Date: 01/30/02 02:18
Prep Batch ID: 7990

Units: µg/L
Seq No: 314626

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD RPD Limit |
|---------------------------|-----------|--------------|------------|------------------|-----------|------------|------------------|---------------|
| Acenaphthene | 382 | U | 400 | 95.4 | 53 | 109 | | |
| 4-Chloro-3-methylphenol | 0S(2m) | U | 400 | 0 | 50 | 117 | | |
| 2-Chlorophenol | 408S(2o) | U | 400 | 102 | 43 | 100 | | |
| 1,4-Dichlorobenzene | 439S(2o) | U | 400 | 110 | 28 | 95 | | |
| 2,4-Dinitrotoluene | 303 | U | 400 | 75.8 | 59 | 120 | | |
| N-Nitrosodi-N-propylamine | 389 | U | 400 | 97.3 | 46 | 106 | | |
| 4-Nitrophenol | 0S(2m) | U | 400 | 0 | 14 | 59 | | |
| Pentachlorophenol | 350J | U | 400 | 87.5 | 46 | 130 | | |
| Phenol | 0S(2m) | U | 400 | 0 | 15 | 56 | | |
| Pyrene | 496S(2o) | U | 400 | 124 | 55 | 116 | | |
| 1,2,4-Trichlorobenzene | 0S(2m) | U | 400 | 0 | 34 | 99 | | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl | 408 | 0 | 400 | 102 | 22 | 152 | | |
| 2-Fluorophenol | 75.1 | 0 | 800 | 9.38 | 2 | 114 | | |
| Nitrobenzene-d5 | 3620S(2z) | 0 | 400 | 905 | 17 | 158 | | |
| Phenol-d6 | 17.0 | 0 | 800 | 2.13 | 1 | 95 | | |
| Terphenyl-d14 | 441 | 0 | 400 | 110 | 30 | 180 | | |
| 2,4,6-Tribromophenol | 611 | 0 | 800 | 76.4 | 14 | 173 | | |

2m: MS/MSD are outside acceptable limits - LCS was within limits - matrix interference is suspected

2o: MS/MSD are outside acceptable limits due to dilution - LCS was within limits

2z: Surrogate spike recovery was outside acceptable limits due to dilution and matrix interference

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

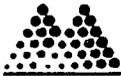
S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL



Mountain States Analytical, Inc.

1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724



Quality Control Summary

Client: Questar
Project: Shiprock Soil
Project ID:

Report Number: 0201237-1
Date Reported: 01/30/02
Work Order: 0201237

QC Type: Matrix Spike Duplicate
Sample ID: 0201213-01CMSD
Run ID: HP-7_020129A

Analysis Date: 01/30/02 02:45
Prep Batch ID: 7990

Units: µg/L
Seq No: 314627

| Parameter | Result | Spike Parent | True Value | Percent Recovery | Low Limit | High Limit | Duplicate Parent | RPD | RPD Limit |
|---------------------------|------------|--------------|------------|------------------|-----------|------------|------------------|-----|-----------|
| Acenaphthene | 397 | U | 400 | 99.3 | 53 | 109 | 382 | 4.0 | 28 |
| 4-Chloro-3-methylphenol | 0S(2m) | U | 400 | 0 | 50 | 117 | U | NC | 37 |
| 2-Chlorophenol | 421 S(2o) | U | 400 | 105 | 43 | 100 | 408 | 3.0 | 29 |
| 1,4-Dichlorobenzene | 452 S(2o) | U | 400 | 113 | 28 | 95 | 439 | 2.8 | 32 |
| 2,4-Dinitrotoluene | 312 | U | 400 | 78.1 | 59 | 120 | 303 | 3.0 | 22 |
| N-Nitrosodi-N-propylamine | 406 | U | 400 | 101 | 46 | 106 | 389 | 4.2 | 55 |
| 4-Nitrophenol | 130J | U | 400 | 31.5 | 14 | 59 | U | NC | 47 |
| Pentachlorophenol | 360J | U | 400 | 89.1 | 46 | 130 | 350 J | 1.9 | 49 |
| Phenol | 0S(2m) | U | 400 | 0 | 15 | 56 | U | NC | 23 |
| Pyrene | 540 S(2o) | U | 400 | 135 | 55 | 116 | 496 | 8.4 | 25 |
| 1,2,4-Trichlorobenzene | 0S(2m) | U | 400 | 0 | 34 | 99 | U | NC | 28 |
| Surrogates | | | | | | | | | |
| 2-Fluorobiphenyl | 424 | 0 | 400 | 106 | 22 | 152 | | | |
| 2-Fluorophenol | 124 | 0 | 800 | 15.5 | 2 | 114 | | | |
| Nitrobenzene-d5 | 4520 S(2z) | 0 | 400 | 1130 | 17 | 158 | | | |
| Phenol-d6 | 0S(2z) | 0 | 800 | 0 | 1 | 95 | | | |
| Terphenyl-d14 | 475 | 0 | 400 | 119 | 30 | 180 | | | |
| 2,4,6-Tribromophenol | 707 | 0 | 800 | 88.4 | 14 | 173 | | | |

2m: MS/MSD are outside acceptable limits - LCS was within limits - matrix interference is suspected

2o: MS/MSD are outside acceptable limits due to dilution - LCS was within limits

2z: Surrogate spike recovery was outside acceptable limits due to dilution and matrix interference

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

S - Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

NC - Not Calculated: Duplicate value(s) are less than the MDL

Mountain States Analytical, Inc.

Sample Receipt Checklist

Client Name: Questar
Carrier: Fed Ex

Work Order No. 0201237
Carrier Number: 8332 5999 2901

Cooler Information: Non-Rad Exempt White I Yellow II Yellow III

Cooler Number/ID: White/green Surface Radioactivity Reading (if required) — mR/hr Ludlum Model 3 Serial # —
Transport Index (1 meter reading for Yellow II & III only) — mR/hr

Condition of Shipping Container: Good Fair Damaged (explain) _____
Cooler Sealed (taped): Yes No Not Applicable PID Reading — ppm
Custody Seals Present: Yes No Not Applicable
Intact Broken Seal Number: _____

Coolant: Ice Blue Ice None Other: _____
State of Coolant: Frozen Partially Frozen Melted
Temperature: 3°C Thermometer ID: 3801 Correction Factor: 0 Temp Blank Included: Yes No

Packing Description: None.

Chain-Of-Custody Information:

COC Present: Yes No Other: _____
COC Number(s): 24077
COC signed (relinquished and received): Yes No Not Applicable
COC agrees with sample labels: Yes No Not Applicable
Notes: per Gordon Murdoch 1/23/02 - analyze each sample for TEL, Mn, Pb, Cu, Ni, VOA & VOA; RCI.
5 TAT. PKP 1/23/02

Sample Information:

Samples included in cooler: SR-001 (X3), SR-002 (X3)

Custody Seals Present: Yes No Not Applicable Other _____
Intact Broken Seal Number(s) _____

Sample containers intact: Yes No Notes: A 250 mL container of sample SR-001
Samples in proper containers: Yes No was received broken. SR-001 (possible
Sufficient sample volume: Yes No limited volume to meet required test)
All samples received in hold time: Yes No

Water - VOA's have zero headspace: Yes No Not Applicable
Pre-preserved with HCl: Pre-preserved with Na2S2O3: Non-Preserved:

Notes: _____

Water - pH acceptable upon receipt: Yes Adjusted (see comments below) Not Applicable
HNO3 = _____ H2SO4 = _____ NaOH = _____ ZnAC / NaOH = _____ HCL = _____

Water - pH adjusted: (MSAI Tracking No.)
HNO3 _____ H2SO4 _____ NaOH _____
ZnAC _____ Na2SO3 _____ Other _____

Notes: _____

Cooler Contents Inspected & Verified By:

[Signature] Date: 1/23/02 Time: 0953 Reviewed by: PKU Date: 01/23/02

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RECEIVED
JAN 22 2002
Form C-138
Revised March 17, 1999
Environmental Bureau Submit Original
Oil Conservation Division Plus 1 Copy
to Appropriate District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02007

| | |
|--|--|
| 1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> | 4. Generator Shell Oil Company |
| Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | 5. Originating Site Standing Rock Sta. |
| 2. Management Facility Destination Tierra Landfarm | 6. Transporter Inland Trucking |
| 3. Address of Facility Operator 420 CR 3100 Aztec, NM 87410 | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) Sec 22 T19N R15W | |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved All transporters must certify the wastes delivered are only those consigned for transport. | |

BRIEF DESCRIPTION OF MATERIAL:

Soil impacted by Crude Oil from a transportation line. Spill occurred in 1981.



Estimated Volume 9,000 cy

Known Volume (to be entered by the operator at the end of the haul) cy

SIGNATURE [Signature] TITLE: Environmental Specialist DATE: 1/10/02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Jeremy J. Bath TELEPHONE NO. 334-8894

(This space for State Use)
APPROVED BY: [Signature] TITLE: Enviro/Eng DATE: 01/15/02
APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 01/22/02



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
GOVERNOR

OIL CONSERVATION DIVISION
ASPER DISTRICT OFFICE
1000 CEDAR BLVD. N.W.
ALBUQU. NEW MEXICO 87104
(505) 324-4170 Fax (505) 324-4174

JENNIFER A. SALZBERG
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

| | |
|---|--|
| 1. Generator Name and Address: Shell Oil Company P.O. Box 2648 Houston, TX 77252 | 2. Destination Name: TURTLE ENVIRONMENTAL CO. 420 County Road 3100 Acton, NM 87410 |
| 3. Originating Site (name): Standing Rock Station 522, T19N, R15W McKinley County, New Mexico <small>Attach list of originating sites as appropriate</small> | Location of the Waste (Street address &/or ULSTN): SAME AS ORIGINATING |
| 4. Source and Description of Waste: Contaminated soil from spill reportedly occurred in 1981 (Crude oil from transportation line) | |

I, E.V. Henry (Print Name) representative for:

Shell Oil Company
According to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

EXEMPT oilfield waste NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

- MSDS information
- RCRA Hazardous Waste Analysis
- Chain of Custody
- Other (description):

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 2.1 subpart 1403.C and D.

Name (Original Signature): E.V. Henry

Title: Residual Disposal Coordinator

Date: 1/7/02



BNC Environmental Services, Inc.
BNC Engineering, LLC

AUSTIN | DALLAS | HOUSTON | MIDLAND

January 8, 2002

Mr. Jeremy Bath
Tierra Environmental Company, Inc.
Environmental Company, Inc.
P.O. Drawer 15250
Farmington, New Mexico 87401

Re: Notification of Soil Removal
Standing Rock Station Soil Disposal

Dear Mr. Bath:

Please be advised that approximately 9,000 cubic yards of non-hazardous crude oil contaminated soil will be removed from the former Shell Oil Company Standing Rock Pumping Station and delivered to your landfarm located in Aztec, New Mexico beginning the week of January 4, 2002.

Attached is the analytical from the characteristic sample taken on 12/19/00. This sample is representative of soil (non-hazardous) that is to be removed from the above mentioned site and delivered to your facility.

If you have any questions, please give me a call.

Sincerely,
BNC Environmental Services, Inc.

A handwritten signature in black ink, appearing to read 'Jim Rose'.

Jim Rose
Project Manager

Attachment:
Analytical Data

Cc Ms. Derrith Watchman Moore
Navajo Nation Environmental Protection Agency

Kyle Landreneau
Equiva Services



FedEx Express
Customer Support Trace
3875 Airways Boulevard
Module H, 4th Floor
Memphis, TN 38116

U.S. Mail: PO Box 727
Memphis, TN 38194-4843

Telephone: 801-389-3800

1/11/2002

Dear Customer:

Here is the proof of delivery for the shipment with tracking number **791750238268**. Our records reflect the following information.

Delivery Information:

Signed For By: D.CHISCHILLY
Delivery Location: NN EPA BLDG
Delivery Date: January 9, 2002
Delivery Time: 1336

Shipping Information:

Tracking No: 791750238268

Ship Date: January 8, 2002

Recipient:

MS. DERRITH WATCHMAN-MOORE
NNEPA
BLG. W008090
WINDOW ROCK, AZ 86515
US

Shipper:

SANDI RAMSEY
BNC ENVIROMENTAL SVC INC
13431 CULLEN BLVD
HOUSTON, TX 770473825

Shipment Reference Information:

867-4

Thank you for choosing FedEx Express. We look forward to working with you in the future.

FedEx Worldwide Customer Service
1-800-Go-FedEx®
Reference No.: R2002011100041492042



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
155 McCutcheon, Suite H

Lubbock, Texas 79424
El Paso, Texas 79932

800•378•1296
888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

Analytical and Quality Control Report

Aaron Wilson
BNC-Midland
P.O. Box 1271
Midland, Tx. 79707

Report Date: January 9, 2001

Order ID Number: A00122119

Project Number: 867-1
Project Name: N/A
Project Location: Standing Rock Station, NM

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace Analysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|----------------|--------|------------|------------|---------------|
| 161337 | SRS Comp. | Soil | 12/19/00 | 14:30 | 12/21/00 |
| 161338 | SRS Background | Soil | 12/19/00 | 15:00 | 12/21/00 |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 15 pages and shall not be reproduced except in its entirety, without written approval of Trace Analysis, Inc.



Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 161337 - SRS Comp.

Analysis: Corrosivity Analytical Method: S 1110 QC Batch: QC07949 Date Analyzed: 1/8/01
Analyst: TL Preparation Method: N/A Prep Batch: PB06914 Date Prepared: 1/8/01

| Param | Flag | Result | Units | Dilution | RDL |
|-------------|------|--------|-------|----------|-----|
| Corrosivity | | non | mm/yr | 1 | |
| pH | | 7.69 | s.u. | 1 | |

Sample: 161337 - SRS Comp.

Analysis: Ignitability Analytical Method: SW-846 Ch. 7.1 QC Batch: QC07950 Date Analyzed: 1/8/01
Analyst: TL Preparation Method: Prep Batch: PB06914 Date Prepared: 1/8/01

| Param | Flag | Result | Units | Dilution | RDL |
|--------------|------|---------------|-------|----------|-----|
| Ignitability | | non-ignitable | | 1 | |

Sample: 161337 - SRS Comp.

Analysis: Reactivity Analytical Method: ASTM D 5049-90/4978-95 QC Batch: QC07947 Date Analyzed: 1/8/01
Analyst: TL Preparation Method: N/A Prep Batch: PB06914 Date Prepared: 1/8/01

| Param | Flag | Result | Units | Dilution | RDL |
|------------------|------|--------------|-------|----------|-----|
| Reactivity | | Non-reactive | | 1 | |
| Hydrogen Sulfide | | <10 | | 1 | |
| Hydrogen Cyanide | | <2.5 | | 1 | |

Sample: 161337 - SRS Comp.

Analysis: TCLP Hg Analytical Method: S 7470A QC Batch: QC07756 Date Analyzed: 12/29/00
Analyst: SSC Preparation Method: E 1311 Prep Batch: PB06791 Date Prepared: 12/26/00

| Param | Flag | Result | Units | Dilution | RDL |
|--------------|------|--------|-------|----------|------|
| TCLP Mercury | | <0.010 | mg/L | 1 | 0.01 |

Sample: 161337 - SRS Comp.

Analysis: TCLP Metals Analytical Method: S 6010B QC Batch: QC07697 Date Analyzed: 12/28/00
Analyst: RR Preparation Method: 1311 Prep Batch: PB06720 Date Prepared: 12/27/00

| Param | Flag | Result | Units | Dilution | RDL |
|---------------|------|--------|-------|----------|------|
| TCLP Arsenic | | <1 | mg/L | 10 | 0.10 |
| TCLP Barium | | <1 | mg/L | 10 | 0.10 |
| TCLP Cadmium | | <0.2 | mg/L | 10 | 0.02 |
| TCLP Chromium | | <1 | mg/L | 10 | 0.10 |
| TCLP Lead | | <1 | mg/L | 10 | 0.10 |
| TCLP Selenium | | <1 | mg/L | 10 | 0.10 |
| TCLP Silver | | <0.5 | mg/L | 10 | 0.05 |

Sample: 161337 - SRS Comp.

Analysis: TCLP Semivolatiles Analytical Method: E 8270C QC Batch: QC07844 Date Analyzed: 1/3/01
Analyst: MA Preparation Method: 1311 Prep Batch: PB06860 Date Prepared: 1/2/01

| Param | Flag | Result | Units | Dilution | RDL |
|-----------------------|------|--------|-------|----------|------|
| Pyridine | | <0.05 | mg/L | 1 | 0.25 |
| 1,4-Dichlorobenzene | | <0.05 | mg/L | 1 | 0.25 |
| o-Cresol | | <0.05 | mg/L | 1 | 0.25 |
| m,p-Cresol | | <0.05 | mg/L | 1 | 0.25 |
| Hexachloroethane | | <0.05 | mg/L | 1 | 0.25 |
| Nitrobenzene | | <0.05 | mg/L | 1 | 0.25 |
| Hexachlorobutadiene | | <0.05 | mg/L | 1 | 0.25 |
| 2,4,6-Trichlorophenol | | <0.05 | mg/L | 1 | 0.25 |
| 2,4,5-Trichlorophenol | | <0.05 | mg/L | 1 | 0.25 |
| 2,4-Dinitrotoluene | | <0.05 | mg/L | 1 | 0.25 |
| 2,4-D | | <0.05 | mg/L | 1 | 0.25 |
| Hexachlorobenzene | | <0.05 | mg/L | 1 | 0.25 |
| 2,4,5-TP | | <0.05 | mg/L | 1 | 0.25 |
| Pentachlorophenol | | < 0.25 | mg/L | 1 | 0.25 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|----------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| 2-Fluorophenol | | 23.35 | mg/Kg | 1 | 80 | 29 | 20 - 67 |
| Phenol-d5 | | 15.79 | mg/Kg | 1 | 80 | 19 | 7 - 55 |
| Nitrobenzene-d5 | | 50.46 | mg/Kg | 1 | 80 | 63 | 33 - 116 |
| 2-Fluorobiphenyl | | 48.63 | mg/Kg | 1 | 80 | 60 | 47 - 107 |
| 2,4,6-Tribromophenol | | 40.90 | mg/Kg | 1 | 80 | 51 | 47 - 113 |
| Terphenyl-d14 | | 48.99 | mg/Kg | 1 | 80 | 61 | 47 - 124 |

Sample: 161337 - SRS Comp.

Analysis: TCLP Volatiles Analytical Method: S 8260B QC Batch: QC07768 Date Analyzed: 12/31/00
Analyst: JG Preparation Method: 1311 Prep Batch: PB06811 Date Prepared: 12/31/00

| Param | Flag | Result | Units | Dilution | RDL |
|--------------------------|------|--------|-------|----------|-------|
| Vinyl Chloride | | <0.10 | mg/L | 1 | 0.001 |
| 1,1-Dichloroethene | | <0.10 | mg/L | 1 | 0.001 |
| Methyl ethyl ketone | | <0.50 | mg/L | 1 | 0.001 |
| Chloroform | | <0.10 | mg/L | 1 | 0.001 |
| 1,2-Dichloroethane (EDC) | | <0.10 | mg/L | 1 | 0.001 |
| Benzene | | <0.10 | mg/L | 1 | 0.001 |
| Carbon Tetrachloride | | <0.10 | mg/L | 1 | 0.001 |
| Trichloroethene (TCE) | | <0.10 | mg/L | 1 | 0.001 |
| Tetrachloroethene (PCE) | | <0.10 | mg/L | 1 | 0.001 |
| Chlorobenzene | | <0.10 | mg/L | 1 | 0.001 |
| 1,4-Dichlorobenzene | | <0.10 | mg/L | 1 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|----------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Dibromofluoromethane | | 48 | mg/Kg | 1 | 50 | 96 | 83 - 119 |
| Toluene-d8 | | 53 | mg/Kg | 1 | 50 | 106 | 87 - 115 |
| 4-Bromofluorobenzene | | 47 | mg/Kg | 1 | 50 | 94 | 79 - 112 |

Sample: 161338 - SRS Background

Analysis: Corrosivity Analytical Method: S 1110 QC Batch: QC07949 Date Analyzed: 1/8/01
Analyst: TL Preparation Method: N/A Prep Batch: PB06914 Date Prepared: 1/8/01

| Param | Flag | Result | Units | Dilution | RDL |
|-------------|------|--------|-------|----------|-----|
| Corrosivity | | non | mm/yr | 1 | |
| pH | | 8.50 | s.u. | 1 | |

Sample: 161338 - SRS Background

Analysis: Ignitability Analytical Method: SW-846 Ch. 7.1 QC Batch: QC07950 Date Analyzed: 1/8/01
Analyst: TL Preparation Method: Prep Batch: PB06914 Date Prepared: 1/8/01

| Param | Flag | Result | Units | Dilution | RDL |
|--------------|------|---------------|-------|----------|-----|
| Ignitability | | non-ignitable | | 1 | |

Sample: 161338 - SRS Background

Analysis: Reactivity Analytical Method: ASTM D 5049-90/4978-95 QC Batch: QC07947 Date Analyzed: 1/8/01
Analyst: TL Preparation Method: N/A Prep Batch: PB06914 Date Prepared: 1/8/01

| Param | Flag | Result | Units | Dilution | RDL |
|------------------|------|--------------|-------|----------|-----|
| Reactivity | | Non-reactive | | 1 | |
| Hydrogen Sulfide | | <10 | | 1 | |
| Hydrogen Cyanide | | <2.5 | | 1 | |

Sample: 161338 - SRS Background

Analysis: TCLP Hg Analytical Method: S 7470A QC Batch: QC07756 Date Analyzed: 12/29/00
Analyst: SSC Preparation Method: E 1311 Prep Batch: PB06791 Date Prepared: 12/26/00

| Param | Flag | Result | Units | Dilution | RDL |
|--------------|------|--------|-------|----------|------|
| TCLP Mercury | | <0.010 | mg/L | 1 | 0.01 |

Sample: 161338 - SRS Background

Analysis: TCLP Metals Analytical Method: S 6010B QC Batch: QC07697 Date Analyzed: 12/28/00
Analyst: RR Preparation Method: 1311 Prep Batch: PB06720 Date Prepared: 12/27/00

| Param | Flag | Result | Units | Dilution | RDL |
|---------------|------|--------|-------|----------|------|
| TCLP Arsenic | | <1 | mg/L | 10 | 0.10 |
| TCLP Barium | | 1.48 | mg/L | 10 | 0.10 |
| TCLP Cadmium | | <0.2 | mg/L | 10 | 0.02 |
| TCLP Chromium | | <1 | mg/L | 10 | 0.10 |
| TCLP Lead | | <1 | mg/L | 10 | 0.10 |
| TCLP Selenium | | <1 | mg/L | 10 | 0.10 |
| TCLP Silver | | <0.5 | mg/L | 10 | 0.05 |

Sample: 161338 - SRS Background

Analysis: TCLP Semivolatiles Analytical Method: E 8270C QC Batch: QC07844 Date Analyzed: 1/3/01
Analyst: MA Preparation Method: 1311 Prep Batch: PB06860 Date Prepared: 1/2/01

| Param | Flag | Result | Units | Dilution | RDL |
|-----------------------|------|--------|-------|----------|------|
| Pyridine | | <0.05 | mg/L | 1 | 0.25 |
| 1,4-Dichlorobenzene | | <0.05 | mg/L | 1 | 0.25 |
| o-Cresol | | <0.05 | mg/L | 1 | 0.25 |
| m,p-Cresol | | <0.05 | mg/L | 1 | 0.25 |
| Hexachloroethane | | <0.05 | mg/L | 1 | 0.25 |
| Nitrobenzene | | <0.05 | mg/L | 1 | 0.25 |
| Hexachlorobutadiene | | <0.05 | mg/L | 1 | 0.25 |
| 2,4,6-Trichlorophenol | | <0.05 | mg/L | 1 | 0.25 |
| 2,4,5-Trichlorophenol | | <0.05 | mg/L | 1 | 0.25 |
| 2,4-Dinitrotoluene | | <0.05 | mg/L | 1 | 0.25 |
| 2,4-D | | <0.05 | mg/L | 1 | 0.25 |
| Hexachlorobenzene | | <0.05 | mg/L | 1 | 0.25 |
| 2,4,5-TP | | <0.05 | mg/L | 1 | 0.25 |
| Pentachlorophenol | | <0.05 | mg/L | 1 | 0.25 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|----------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| 2-Fluorophenol | | 18.21 | mg/Kg | 1 | 80 | 22 | 20 - 67 |
| Phenol-d5 | | 9.30 | mg/Kg | 1 | 80 | 11 | 7 - 55 |
| Nitrobenzene-d5 | | 66.47 | mg/Kg | 1 | 80 | 83 | 33 - 116 |
| 2-Fluorobiphenyl | | 63.84 | mg/Kg | 1 | 80 | 79 | 47 - 107 |
| 2,4,6-Tribromophenol | | 45.03 | mg/Kg | 1 | 80 | 56 | 47 - 113 |
| Terphenyl-d14 | | 56.34 | mg/Kg | 1 | 80 | 70 | 47 - 124 |

Sample: 161338 - SRS Background

Analysis: TCLP Volatiles Analytical Method: S 8260B QC Batch: QC07768 Date Analyzed: 12/31/00
 Analyst: JG Preparation Method: 1311 Prep Batch: PB06811 Date Prepared: 12/31/00

| Param | Flag | Result | Units | Dilution | RDL |
|--------------------------|------|--------|-------|----------|-------|
| Vinyl Chloride | | <0.10 | mg/L | 1 | 0.001 |
| 1,1-Dichloroethene | | <0.10 | mg/L | 1 | 0.001 |
| Methyl ethyl ketone | | <0.50 | mg/L | 1 | 0.001 |
| Chloroform | | <0.10 | mg/L | 1 | 0.001 |
| 1,2-Dichloroethane (EDC) | | <0.10 | mg/L | 1 | 0.001 |
| Benzene | | <0.10 | mg/L | 1 | 0.001 |
| Carbon Tetrachloride | | <0.10 | mg/L | 1 | 0.001 |
| Trichloroethene (TCE) | | <0.10 | mg/L | 1 | 0.001 |
| Tetrachloroethene (PCE) | | <0.10 | mg/L | 1 | 0.001 |
| Chlorobenzene | | <0.10 | mg/L | 1 | 0.001 |
| 1,4-Dichlorobenzene | | <0.10 | mg/L | 1 | 0.001 |

| Surrogate | Flag | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|----------------------|------|--------|-------|----------|--------------|------------------|-----------------|
| Dibromofluoromethane | | 49.5 | mg/Kg | 1 | 50 | 99 | 83 - 119 |
| Toluene-d8 | | 53 | mg/Kg | 1 | 50 | 106 | 87 - 115 |
| 4-Bromofluorobenzene | | 47 | mg/Kg | 1 | 50 | 94 | 79 - 112 |

**Quality Control Report
Method Blank**

Sample: Method Blank QCBatch: QC07697

| Param | Flag | Results | Units | Reporting Limit |
|---------------|------|---------|-------|-----------------|
| TCLP Arsenic | | <0.1 | mg/L | 0.10 |
| TCLP Barium | | <0.1 | mg/L | 0.10 |
| TCLP Cadmium | | <0.02 | mg/L | 0.02 |
| TCLP Chromium | | <0.1 | mg/L | 0.10 |
| TCLP Lead | | <0.1 | mg/L | 0.10 |
| TCLP Selenium | | <0.1 | mg/L | 0.10 |
| TCLP Silver | | <0.05 | mg/L | 0.05 |

Sample: Method Blank QCBatch: QC07756

| Param | Flag | Results | Units | Reporting Limit |
|--------------|------|---------|-------|-----------------|
| TCLP Mercury | | <0.010 | mg/L | 0.01 |

Sample: Method Blank QCBatch: QC07768

| Param | Flag | Results | Units | Reporting Limit |
|--------------------------|------|---------|-------|-----------------|
| Vinyl Chloride | | <0.10 | mg/L | 0.001 |
| 1,1-Dichloroethene | | <0.10 | mg/L | 0.001 |
| Methyl ethyl ketone | | <0.50 | mg/L | 0.001 |
| Chloroform | | <0.10 | mg/L | 0.001 |
| 1,2-Dichloroethane (EDC) | | <0.10 | mg/L | 0.001 |
| Benzene | | <0.10 | mg/L | 0.001 |
| Carbon Tetrachloride | | <0.10 | mg/L | 0.001 |
| Trichloroethene (TCE) | | <0.10 | mg/L | 0.001 |
| Tetrachloroethene (PCE) | | <0.10 | mg/L | 0.001 |
| Chlorobenzene | | <0.10 | mg/L | 0.001 |
| 1,4-Dichlorobenzene | | <0.10 | mg/L | 0.001 |

Sample: Method Blank QCBatch: QC07844

| Param | Flag | Results | Units | Reporting Limit |
|-----------------------|------|---------|-------|-----------------|
| Pyridine | | <0.05 | mg/L | 0.25 |
| 1,4-Dichlorobenzene | | <0.05 | mg/L | 0.25 |
| o-Cresol | | <0.05 | mg/L | 0.25 |
| m,p-Cresol | | <0.05 | mg/L | 0.25 |
| Hexachloroethane | | <0.05 | mg/L | 0.25 |
| Nitrobenzene | | <0.05 | mg/L | 0.25 |
| Hexachlorobutadiene | | <0.05 | mg/L | 0.25 |
| 2,4,6-Trichlorophenol | | <0.05 | mg/L | 0.25 |
| 2,4,5-Trichlorophenol | | <0.05 | mg/L | 0.25 |
| 2,4-Dinitrotoluene | | <0.05 | mg/L | 0.25 |
| 2,4-D | | <0.05 | mg/L | 0.25 |
| Hexachlorobenzene | | <0.05 | mg/L | 0.25 |

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| Param | Flag | Results | Units | Reporting Limit |
|-------------------|------|---------|-------|-----------------|
| 2,4,5-TP | | <0.05 | mg/L | 0.25 |
| Pentachlorophenol | | <0.05 | mg/L | 0.25 |

| Surrogate | Flag | Result | Units | Spike Amount | Percent Recovery | Recovery Limit |
|----------------------|------|--------|-------|--------------|------------------|----------------|
| 2-Fluorophenol | | 24.39 | mg/Kg | 80 | 30 | 20 - 67 |
| Phenol-d5 | | 16.54 | mg/Kg | 80 | 20 | 7 - 55 |
| Nitrobenzene-d5 | | 49.26 | mg/Kg | 80 | 61 | 33 - 116 |
| 2-Fluorobiphenyl | | 46.10 | mg/Kg | 80 | 57 | 47 - 107 |
| 2,4,6-Tribromophenol | | 40.26 | mg/Kg | 80 | 50 | 47 - 113 |
| Terphenyl-d14 | | 56.93 | mg/Kg | 80 | 71 | 47 - 124 |

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC07697

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|---------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Arsenic | | 9.74 | mg/L | 10 | 10 | <0.1 | 97 | | 75 - 125 | 20 |
| TCLP Barium | | 20.6 | mg/L | 10 | 20 | <0.1 | 103 | | 75 - 125 | 20 |
| TCLP Cadmium | | 2 | mg/L | 10 | 2 | <0.02 | 100 | | 75 - 125 | 20 |
| TCLP Chromium | | 4.82 | mg/L | 10 | 4 | <0.1 | 120 | | 75 - 125 | 20 |
| TCLP Lead | | 10.1 | mg/L | 10 | 10 | <0.1 | 101 | | 75 - 125 | 20 |
| TCLP Selenium | | 9 | mg/L | 10 | 10 | <0.1 | 90 | | 75 - 125 | 20 |
| TCLP Silver | | 1.98 | mg/L | 10 | 2 | <0.05 | 99 | | 75 - 125 | 20 |

Sample: LCSD

QC Batch: QC07697

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|---------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Arsenic | | 9.88 | mg/L | 10 | 10 | <0.1 | 98 | 1 | 75 - 125 | 20 |
| TCLP Barium | | 20.5 | mg/L | 10 | 20 | <0.1 | 102 | 0 | 75 - 125 | 20 |
| TCLP Cadmium | | 2.03 | mg/L | 10 | 2 | <0.02 | 101 | 1 | 75 - 125 | 20 |
| TCLP Chromium | | 4.22 | mg/L | 10 | 4 | <0.1 | 105 | 13 | 75 - 125 | 20 |
| TCLP Lead | | 10 | mg/L | 10 | 10 | <0.1 | 100 | 1 | 75 - 125 | 20 |
| TCLP Selenium | | 9.05 | mg/L | 10 | 10 | <0.1 | 90 | 0 | 75 - 125 | 20 |
| TCLP Silver | | 1.97 | mg/L | 10 | 2 | <0.05 | 98 | 0 | 75 - 125 | 20 |

Sample: LCS

QC Batch: QC07756

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Mercury | | 0.0488 | mg/L | 1 | 0.05 | <0.010 | 97 | | 80 - 120 | 20 |

Sample: LCSD QC Batch: QC07756

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Mercury | | 0.0496 | mg/L | 1 | 0.05 | <0.010 | 99 | 2 | 80 - 120 | 20 |

Sample: LCS QC Batch: QC07768

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Vinyl Chloride | | 5.67 | mg/L | 1 | 5 | <0.10 | 113 | | 47 - 147 | 20 |
| 1,1-Dichloroethene | | 7.07 | mg/L | 1 | 5 | <0.10 | 141 | | 63 - 165 | 20 |
| Methyl ethyl ketone | | 6.45 | mg/L | 1 | 5 | <0.50 | 129 | | 52 - 160 | 20 |
| Chloroform | | 4.84 | mg/L | 1 | 5 | <0.10 | 96 | | 82 - 128 | 20 |
| 1,2-Dichloroethane (EDC) | | 4.87 | mg/L | 1 | 5 | <0.10 | 97 | | 80 - 127 | 20 |
| Benzene | | 5.58 | mg/L | 1 | 5 | <0.10 | 111 | | 88 - 126 | 20 |
| Carbon Tetrachloride | | 6.89 | mg/L | 1 | 5 | <0.10 | 137 | | 52 - 167 | 20 |
| Trichloroethene (TCE) | | 5.68 | mg/L | 1 | 5 | <0.10 | 113 | | 77 - 131 | 20 |
| Tetrachloroethene (PCE) | | 4.95 | mg/L | 1 | 5 | <0.10 | 99 | | 66 - 143 | 20 |
| Chlorobenzene | | 4.64 | mg/L | 1 | 5 | <0.10 | 92 | | 85 - 118 | 20 |
| 1,4-Dichlorobenzene | | 4.98 | mg/L | 1 | 5 | <0.10 | 99 | | 81 - 123 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| Dibromofluoromethane | | 48 | mg/Kg | 1 | 50 | 96 | 83 - 119 |
| Toluene-d8 | | 53.5 | mg/Kg | 1 | 50 | 107 | 87 - 115 |
| 4-Bromofluorobenzene | | 48 | mg/Kg | 1 | 50 | 96 | 79 - 112 |

Sample: LCSD QC Batch: QC07768

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Vinyl Chloride | | 5.94 | mg/L | 1 | 5 | <0.10 | 118 | 5 | 47 - 147 | 20 |
| 1,1-Dichloroethene | | 7.10 | mg/L | 1 | 5 | <0.10 | 142 | 0 | 63 - 165 | 20 |
| Methyl ethyl ketone | | 6.77 | mg/L | 1 | 5 | <0.50 | 135 | 5 | 52 - 160 | 20 |
| Chloroform | | 4.89 | mg/L | 1 | 5 | <0.10 | 97 | 1 | 82 - 128 | 20 |
| 1,2-Dichloroethane (EDC) | | 5.06 | mg/L | 1 | 5 | <0.10 | 101 | 4 | 80 - 127 | 20 |
| Benzene | | 5.51 | mg/L | 1 | 5 | <0.10 | 110 | 1 | 88 - 126 | 20 |
| Carbon Tetrachloride | | 6.65 | mg/L | 1 | 5 | <0.10 | 133 | 4 | 52 - 167 | 20 |
| Trichloroethene (TCE) | | 5.60 | mg/L | 1 | 5 | <0.10 | 112 | 1 | 77 - 131 | 20 |
| Tetrachloroethene (PCE) | | 4.84 | mg/L | 1 | 5 | <0.10 | 96 | 2 | 66 - 143 | 20 |

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| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|---------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Chlorobenzene | | 4.60 | mg/L | 1 | 5 | <0.10 | 92 | 1 | 85 - 118 | 20 |
| 1,4-Dichlorobenzene | | 4.98 | mg/L | 1 | 5 | <0.10 | 99 | 0 | 81 - 123 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| Dibromofluoromethane | | 50 | mg/Kg | 1 | 50 | 100 | 83 - 119 |
| Toluene-d8 | | 53.5 | mg/Kg | 1 | 50 | 107 | 87 - 115 |
| 4-Bromofluorobenzene | | 48 | mg/Kg | 1 | 50 | 96 | 79 - 112 |

Sample: LCS

QC Batch: QC07844

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|-----------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Pyridine | | 15.98 | mg/L | 1 | 80 | <0.05 | 19 | | 0 - 92 | 20 |
| 1,4-Dichlorobenzene | | 59.68 | mg/L | 1 | 80 | <0.05 | 74 | | 39 - 87 | 20 |
| o-Cresol | | 49.28 | mg/L | 1 | 80 | <0.05 | 61 | | 41 - 92 | 20 |
| m,p-Cresol | | 89.60 | mg/L | 1 | 160 | <0.05 | 56 | | 7 - 127 | 20 |
| Hexachloroethane | | 59.06 | mg/L | 1 | 80 | <0.05 | 73 | | 35 - 85 | 20 |
| Nitrobenzene | | 69.99 | mg/L | 1 | 80 | <0.05 | 87 | | 43 - 108 | 20 |
| Hexachlorobutadiene | | 61.98 | mg/L | 1 | 80 | <0.05 | 77 | | 38 - 89 | 20 |
| 2,4,6-Trichlorophenol | | 62.28 | mg/L | 1 | 80 | <0.05 | 77 | | 47 - 107 | 20 |
| 2,4,5-Trichlorophenol | | 58.46 | mg/L | 1 | 80 | <0.05 | 73 | | 49 - 105 | 20 |
| 2,4-Dinitrotoluene | | 70.37 | mg/L | 1 | 80 | <0.05 | 87 | | 49 - 105 | 20 |
| 2,4-D | | 51.46 | mg/L | 1 | 80 | <0.05 | 64 | | 0 - 127 | 20 |
| Hexachlorobenzene | | 80.42 | mg/L | 1 | 80 | <0.05 | 100 | | 47 - 122 | 20 |
| 2,4,5-TP | | 132.19 | mg/L | 1 | 80 | <0.05 | 165 | | 0 - 130 | 20 |
| Pentachlorophenol | | 11.69 | mg/L | 1 | 80 | <0.05 | 14 | | 33 - 99 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| 2-Fluorophenol | | 25.59 | mg/Kg | 1 | 80 | 31 | 20 - 67 |
| Phenol-d5 | | 16.23 | mg/Kg | 1 | 80 | 20 | 7 - 55 |
| Nitrobenzene-d5 | | 52.11 | mg/Kg | 1 | 80 | 65 | 33 - 116 |
| 2-Fluorobiphenyl | | 48.73 | mg/Kg | 1 | 80 | 60 | 47 - 107 |
| 2,4,6-Tribromophenol | | 35.78 | mg/Kg | 1 | 80 | 44 | 47 - 113 |
| Terphenyl-d14 | | 59.84 | mg/Kg | 1 | 80 | 74 | 47 - 124 |

Sample: LCSD

QC Batch: QC07844

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|---------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Pyridine | | 16.22 | mg/L | 1 | 80 | <0.05 | 20 | 1 | 0 - 92 | 20 |
| 1,4-Dichlorobenzene | | 59.07 | mg/L | 1 | 80 | <0.05 | 73 | 1 | 39 - 87 | 20 |
| o-Cresol | | 50.53 | mg/L | 1 | 80 | <0.05 | 63 | 2 | 41 - 92 | 20 |

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| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|-----------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| m,p-Cresol | | 90.42 | mg/L | 1 | 160 | <0.05 | 56 | 1 | 7 - 127 | 20 |
| Hexachloroethane | | 57.18 | mg/L | 1 | 80 | <0.05 | 71 | 3 | 35 - 85 | 20 |
| Nitrobenzene | | 69.67 | mg/L | 1 | 80 | <0.05 | 87 | 0 | 43 - 108 | 20 |
| Hexachlorobutadiene | | 61.73 | mg/L | 1 | 80 | <0.05 | 77 | 0 | 38 - 89 | 20 |
| 2,4,6-Trichlorophenol | | 62.26 | mg/L | 1 | 80 | <0.05 | 77 | 0 | 47 - 107 | 20 |
| 2,4,5-Trichlorophenol | | 61.18 | mg/L | 1 | 80 | <0.05 | 76 | 4 | 49 - 105 | 20 |
| 2,4-Dinitrotoluene | | 67.08 | mg/L | 1 | 80 | <0.05 | 83 | 5 | 49 - 105 | 20 |
| 2,4-D | | 49.65 | mg/L | 1 | 80 | <0.05 | 62 | 4 | 0 - 127 | 20 |
| Hexachlorobenzene | | 79.39 | mg/L | 1 | 80 | <0.05 | 99 | 1 | 47 - 122 | 20 |
| 2,4,5-TP | | 126.06 | mg/L | 1 | 80 | <0.05 | 157 | 5 | 0 - 130 | 20 |
| Pentachlorophenol | | 12.31 | mg/L | 1 | 80 | <0.05 | 15 | 5 | 33 - 99 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| 2-Fluorophenol | | 24.57 | mg/Kg | 1 | 80 | 30 | 20 - 67 |
| Phenol-d5 | | 16.84 | mg/Kg | 1 | 80 | 21 | 7 - 55 |
| Nitrobenzene-d5 | | 52.61 | mg/Kg | 1 | 80 | 65 | 33 - 116 |
| 2-Fluorobiphenyl | | 51.38 | mg/Kg | 1 | 80 | 64 | 47 - 107 |
| 2,4,6-Tribromophenol | | 40.01 | mg/Kg | 1 | 80 | 50 | 47 - 113 |
| Terphenyl-d14 | | 55.37 | mg/Kg | 1 | 80 | 69 | 47 - 124 |

Quality Control Report Matrix Spikes and Duplicate Spikes

Sample: MS

QC Batch: QC07697

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|---------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Arsenic | | 9.79 | mg/L | 10 | 10 | <1 | 97 | | 75 - 125 | 20 |
| TCLP Barium | | 21 | mg/L | 10 | 20 | <1 | 105 | | 75 - 125 | 20 |
| TCLP Cadmium | | 1.98 | mg/L | 10 | 2 | <0.2 | 99 | | 75 - 125 | 20 |
| TCLP Chromium | | 4.16 | mg/L | 10 | 4 | <1 | 104 | | 75 - 125 | 20 |
| TCLP Lead | | 9.88 | mg/L | 10 | 10 | <1 | 98 | | 75 - 125 | 20 |
| TCLP Selenium | | 9.03 | mg/L | 10 | 10 | <1 | 90 | | 75 - 125 | 20 |
| TCLP Silver | | 1.96 | mg/L | 10 | 2 | <0.5 | 98 | | 75 - 125 | 20 |

Sample: MSD

QC Batch: QC07697

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Arsenic | | 9.7 | mg/L | 10 | 10 | <1 | 97 | 1 | 75 - 125 | 20 |
| TCLP Barium | | 21 | mg/L | 10 | 20 | <1 | 105 | 0 | 75 - 125 | 20 |
| TCLP Cadmium | | 1.96 | mg/L | 10 | 2 | <0.2 | 98 | 1 | 75 - 125 | 20 |

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| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|---------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Chromium | | 4.13 | mg/L | 10 | 4 | <1 | 103 | 1 | 75 - 125 | 20 |
| TCLP Lead | | 9.78 | mg/L | 10 | 10 | <1 | 97 | 1 | 75 - 125 | 20 |
| TCLP Selenium | | 8.84 | mg/L | 10 | 10 | <1 | 88 | 2 | 75 - 125 | 20 |
| TCLP Silver | | 1.94 | mg/L | 10 | 2 | <0.5 | 97 | 1 | 75 - 125 | 20 |

Sample: MS QC Batch: QC07756

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Mercury | | 0.0501 | mg/L | 1 | 0.05 | <0.010 | 100 | | 80 - 120 | 20 |

Sample: MSD QC Batch: QC07756

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| TCLP Mercury | | 0.050 | mg/L | 1 | 0.05 | <0.010 | 100 | 0 | 80 - 120 | 20 |

Sample: MS QC Batch: QC07768

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------------------|--------------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Vinyl Chloride | | 5.23 | mg/L | 1 | 5 | <0.10 | 104 | | 47 - 147 | 20 |
| 1,1-Dichloroethene | | 6.84 | mg/L | 1 | 5 | <0.10 | 136 | | 63 - 165 | 20 |
| Methyl ethyl ketone | ¹ | 2.60 | mg/L | 1 | 5 | <0.50 | 52 | | 52 - 160 | 20 |
| Chloroform | | 4.80 | mg/L | 1 | 5 | <0.10 | 96 | | 82 - 128 | 20 |
| 1,2-Dichloroethane (EDC) | | 5.00 | mg/L | 1 | 5 | <0.10 | 100 | | 80 - 127 | 20 |
| Benzene | | 5.47 | mg/L | 1 | 5 | <0.10 | 109 | | 88 - 126 | 20 |
| Carbon Tetrachloride | | 6.73 | mg/L | 1 | 5 | <0.10 | 134 | | 52 - 167 | 20 |
| Trichloroethene (TCE) | | 5.68 | mg/L | 1 | 5 | <0.10 | 113 | | 77 - 131 | 20 |
| Tetrachloroethene (PCE) | | 4.91 | mg/L | 1 | 5 | <0.10 | 98 | | 66 - 143 | 20 |
| Chlorobenzene | | 4.58 | mg/L | 1 | 5 | <0.10 | 91 | | 85 - 118 | 20 |
| 1,4-Dichlorobenzene | | 5.02 | mg/L | 1 | 5 | <0.10 | 100 | | 81 - 123 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| Dibromofluoromethane | | 49.5 | mg/Kg | 1 | 50 | 99 | 83 - 119 |
| Toluene-d8 | | 53.5 | mg/Kg | 1 | 50 | 107 | 87 - 115 |
| 4-Bromofluorobenzene | | 46.5 | mg/Kg | 1 | 50 | 93 | 79 - 112 |

Sample: MSD QC Batch: QC07768

¹ spike recovery and RPD out of control limits due to purging characteristics of MEK

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|--------------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Vinyl Chloride | | 5.47 | mg/L | 1 | 5 | <0.10 | 109 | 4 | 47 - 147 | 20 |
| 1,1-Dichloroethene | | 7.15 | mg/L | 1 | 5 | <0.10 | 143 | 4 | 63 - 165 | 20 |
| Methyl ethyl ketone | | 6.66 | mg/L | 1 | 5 | <0.50 | 133 | 88 | 52 - 160 | 20 |
| Chloroform | | 4.91 | mg/L | 1 | 5 | <0.10 | 98 | 2 | 82 - 128 | 20 |
| 1,2-Dichloroethane (EDC) | | 5.14 | mg/L | 1 | 5 | <0.10 | 102 | 3 | 80 - 127 | 20 |
| Benzene | | 5.44 | mg/L | 1 | 5 | <0.10 | 108 | 0 | 88 - 126 | 20 |
| Carbon Tetrachloride | | 6.73 | mg/L | 1 | 5 | <0.10 | 134 | 0 | 52 - 167 | 20 |
| Trichloroethene (TCE) | | 5.66 | mg/L | 1 | 5 | <0.10 | 113 | 0 | 77 - 131 | 20 |
| Tetrachloroethene (PCE) | | 4.89 | mg/L | 1 | 5 | <0.10 | 97 | 0 | 66 - 143 | 20 |
| Chlorobenzene | | 4.62 | mg/L | 1 | 5 | <0.10 | 92 | 1 | 85 - 118 | 20 |
| 1,4-Dichlorobenzene | | 5.02 | mg/L | 1 | 5 | <0.10 | 100 | 0 | 81 - 123 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| Dibromofluoromethane | | 50.5 | mg/Kg | 1 | 50 | 101 | 83 - 119 |
| Toluene-d8 | | 53.5 | mg/Kg | 1 | 50 | 107 | 87 - 115 |
| 4-Bromofluorobenzene | | 47.5 | mg/Kg | 1 | 50 | 95 | 79 - 112 |

Sample: MS

QC Batch: QC07844

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|-----------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Pyridine | | 4.59 | mg/L | 1 | 80 | <0.05 | 5 | | 0 - 92 | 20 |
| 1,4-Dichlorobenzene | | 55.85 | mg/L | 1 | 80 | <0.05 | 69 | | 39 - 87 | 20 |
| o-Cresol | | 36.44 | mg/L | 1 | 80 | <0.05 | 45 | | 41 - 92 | 20 |
| m,p-Cresol | | 64.17 | mg/L | 1 | 160 | <0.05 | 40 | | 7 - 127 | 20 |
| Hexachloroethane | | 54.36 | mg/L | 1 | 80 | <0.05 | 67 | | 35 - 85 | 20 |
| Nitrobenzene | | 66.88 | mg/L | 1 | 80 | <0.05 | 83 | | 43 - 108 | 20 |
| Hexachlorobutadiene | | 58.75 | mg/L | 1 | 80 | <0.05 | 73 | | 38 - 89 | 20 |
| 2,4,6-Trichlorophenol | | 59.11 | mg/L | 1 | 80 | <0.05 | 73 | | 47 - 107 | 20 |
| 2,4,5-Trichlorophenol | | 61.03 | mg/L | 1 | 80 | <0.05 | 76 | | 49 - 105 | 20 |
| 2,4-Dinitrotoluene | | 63.65 | mg/L | 1 | 80 | <0.05 | 79 | | 49 - 105 | 20 |
| 2,4-D | | 76.01 | mg/L | 1 | 80 | <0.05 | 95 | | 0 - 127 | 20 |
| Hexachlorobenzene | | 72.14 | mg/L | 1 | 80 | <0.05 | 90 | | 47 - 122 | 20 |
| 2,4,5-TP | | 222.74 | mg/L | 1 | 80 | <0.05 | 278 | | 0 - 130 | 20 |
| Pentachlorophenol | | 44.80 | mg/L | 1 | 80 | 0.06 | 56 | | 33 - 99 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| 2-Fluorophenol | | 24.17 | mg/Kg | 1 | 80 | 30 | 20 - 67 |
| Phenol-d5 | | 16.92 | mg/Kg | 1 | 80 | 21 | 7 - 55 |
| Nitrobenzene-d5 | | 51.70 | mg/Kg | 1 | 80 | 64 | 33 - 116 |
| 2-Fluorobiphenyl | | 48.75 | mg/Kg | 1 | 80 | 60 | 47 - 107 |
| 2,4,6-Tribromophenol | | 43.68 | mg/Kg | 1 | 80 | 54 | 47 - 113 |
| Terphenyl-d14 | | 50.42 | mg/Kg | 1 | 80 | 63 | 47 - 124 |

Sample: MSD

QC Batch: QC07844

| Param | Flag | Sample Result | Units | Dil. | Spike Amount Added | Matrix Result | % Rec. | RPD | % Rec. Limit | RPD Limit |
|-----------------------|------|---------------|-------|------|--------------------|---------------|--------|-----|--------------|-----------|
| Pyridine | | 5.16 | mg/L | 1 | 80 | <0.05 | 6 | 12 | 0 - 92 | 20 |
| 1,4-Dichlorobenzene | | 55.62 | mg/L | 1 | 80 | <0.05 | 69 | 3 | 39 - 87 | 20 |
| o-Cresol | | 37.60 | mg/L | 1 | 80 | <0.05 | 47 | 2 | 41 - 92 | 20 |
| m,p-Cresol | | 64.14 | mg/L | 1 | 160 | <0.05 | 40 | 1 | 7 - 127 | 20 |
| Hexachloroethane | | 54.35 | mg/L | 1 | 80 | <0.05 | 67 | 3 | 35 - 85 | 20 |
| Nitrobenzene | | 67.50 | mg/L | 1 | 80 | <0.05 | 84 | 0 | 43 - 108 | 20 |
| Hexachlorobutadiene | | 58.63 | mg/L | 1 | 80 | <0.05 | 73 | 0 | 38 - 89 | 20 |
| 2,4,6-Trichlorophenol | | 58.74 | mg/L | 1 | 80 | <0.05 | 73 | 0 | 47 - 107 | 20 |
| 2,4,5-Trichlorophenol | | 62.26 | mg/L | 1 | 80 | <0.05 | 77 | 4 | 49 - 105 | 20 |
| 2,4-Dinitrotoluene | | 62.80 | mg/L | 1 | 80 | <0.05 | 78 | 3 | 49 - 105 | 20 |
| 2,4-D | | 74.46 | mg/L | 1 | 80 | <0.05 | 93 | 4 | 0 - 127 | 20 |
| Hexachlorobenzene | | 69.46 | mg/L | 1 | 80 | <0.05 | 86 | 1 | 47 - 122 | 20 |
| 2,4,5-TP | | 211.32 | mg/L | 1 | 80 | <0.05 | 264 | 5 | 0 - 130 | 20 |
| Pentachlorophenol | | 56.86 | mg/L | 1 | 80 | 0.06 | 71 | 17 | 33 - 99 | 20 |

| Surrogate | Flag | Result | Units | Dil. | Spike Amount | % Rec. | % Rec. Limit |
|----------------------|------|--------|-------|------|--------------|--------|--------------|
| 2-Fluorophenol | | 24.83 | mg/Kg | 1 | 80 | 31 | 20 - 67 |
| Phenol-d5 | | 17.41 | mg/Kg | 1 | 80 | 21 | 7 - 55 |
| Nitrobenzene-d5 | | 51.73 | mg/Kg | 1 | 80 | 64 | 33 - 116 |
| 2-Fluorobiphenyl | | 51.25 | mg/Kg | 1 | 80 | 64 | 47 - 107 |
| 2,4,6-Tribromophenol | | 47.55 | mg/Kg | 1 | 80 | 59 | 47 - 113 |
| Terphenyl-d14 | | 48.94 | mg/Kg | 1 | 80 | 61 | 47 - 124 |

Quality Control Report Duplicate Samples

Sample: Duplicate

QC Batch: QC07947

| Param | Flag | Duplicate Result | Sample Result | Units | Dilution | RPD | RPD Limit |
|------------------|------|------------------|---------------|-------|----------|-----|-----------|
| Reactivity | | Non-reactive | Non-reactive | | 1 | 0 | 20 |
| Hydrogen Sulfide | | <10 | <10 | | 1 | 0 | 20 |
| Hydrogen Cyanide | | <2.5 | <2.5 | | 1 | 0 | 20 |

Sample: Duplicate

QC Batch: QC07949

| Param | Flag | Duplicate Result | Sample Result | Units | Dilution | RPD | RPD Limit |
|-------------|------|------------------|---------------|-------|----------|-----|-----------|
| Corrosivity | | Non-corrosive | non | mm/yr | 1 | 0 | 20 |
| pH | | 7.73 | 7.69 | s.u. | 1 | 0 | 20 |

Sample: Duplicate

QC Batch: QC07950

| Param | Flag | Duplicate Result | Sample Result | Units | Dilution | RPD | RPD Limit |
|--------------|------|------------------|---------------|-------|----------|-----|-----------|
| Ignitability | | Non-ignitable | non-ignitable | | 1 | 0 | 20 |

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1) QC Batch: QC07697

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---------------|------|-------|-----------------|------------------|-----------------------|-------------------------|---------------|
| TCLP Arsenic | | mg/L | 2.50 | 2.5 | 100 | 75 - 125 | 12/28/00 |
| TCLP Barium | | mg/L | 5 | 4.99 | 99 | 75 - 125 | 12/28/00 |
| TCLP Cadmium | | mg/L | 0.50 | 0.495 | 99 | 75 - 125 | 12/28/00 |
| TCLP Chromium | | mg/L | 1 | 0.991 | 99 | 75 - 125 | 12/28/00 |
| TCLP Lead | | mg/L | 2.50 | 2.49 | 99 | 75 - 125 | 12/28/00 |
| TCLP Selenium | | mg/L | 2.50 | 2.48 | 99 | 75 - 125 | 12/28/00 |
| TCLP Silver | | mg/L | 0.50 | 0.492 | 98 | 75 - 125 | 12/28/00 |

Sample: ICV (1) QC Batch: QC07697

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|---------------|------|-------|-----------------|------------------|-----------------------|-------------------------|---------------|
| TCLP Arsenic | | mg/L | 2.50 | 2.51 | 100 | 75 - 125 | 12/28/00 |
| TCLP Barium | | mg/L | 5 | 5.07 | 101 | 75 - 125 | 12/28/00 |
| TCLP Cadmium | | mg/L | 0.50 | 0.501 | 100 | 75 - 125 | 12/28/00 |
| TCLP Chromium | | mg/L | 1 | 1 | 100 | 75 - 125 | 12/28/00 |
| TCLP Lead | | mg/L | 2.50 | 2.51 | 100 | 75 - 125 | 12/28/00 |
| TCLP Selenium | | mg/L | 2.50 | 2.5 | 100 | 75 - 125 | 12/28/00 |
| TCLP Silver | | mg/L | 0.50 | 0.499 | 99 | 75 - 125 | 12/28/00 |

Sample: CCV (1) QC Batch: QC07756

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|--------------|------|-------|-----------------|------------------|-----------------------|-------------------------|---------------|
| TCLP Mercury | | mg/L | 0.005 | 0.00496 | 99 | 80 - 120 | 12/29/00 |

Sample: CCV (1) QC Batch: QC07768

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|----------------|------|-------|-----------------|------------------|-----------------------|-------------------------|---------------|
| Vinyl Chloride | | mg/L | 100 | 85 | 85 | 80 - 120 | 12/31/00 |

Continued ...

... Continued

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|--------------------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| 1,1-Dichloroethene | | mg/L | 100 | 99 | 99 | 80 - 120 | 12/31/00 |
| Methyl ethyl ketone | | mg/L | 100 | 106 | 106 | 80 - 120 | 12/31/00 |
| Chloroform | | mg/L | 100 | 80 | 80 | 80 - 120 | 12/31/00 |
| 1,2-Dichloroethane (EDC) | | mg/L | 100 | 87 | 87 | 80 - 120 | 12/31/00 |
| Benzene | | mg/L | 100 | 91 | 91 | 80 - 120 | 12/31/00 |
| Carbon Tetrachloride | | mg/L | 100 | 106 | 106 | 80 - 120 | 12/31/00 |
| Trichloroethene (TCE) | | mg/L | 100 | 92 | 92 | 80 - 120 | 12/31/00 |
| Tetrachloroethene (PCE) | | mg/L | 100 | 83 | 83 | 80 - 120 | 12/31/00 |
| Chlorobenzene | | mg/L | 100 | 81 | 81 | 80 - 120 | 12/31/00 |
| 1,4-Dichlorobenzene | | mg/L | 100 | 86 | 86 | 80 - 120 | 12/31/00 |
| Dibromofluoromethane | | mg/L | 50 | 47.5 | 95 | 80 - 120 | 12/31/00 |
| Toluene-d8 | | mg/L | 50 | 52.5 | 105 | 80 - 120 | 12/31/00 |
| 4-Bromofluorobenzene | | mg/L | 50 | 49 | 98 | 80 - 120 | 12/31/00 |

Sample: CCV (1)

QC Batch: QC07844

| Param | Flag | Units | CCVs True Conc. | CCVs Found Conc. | CCVs Percent Recovery | Percent Recovery Limits | Date Analyzed |
|-----------------------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Pyridine | | mg/L | 60 | 62.99 | 104 | 80 - 120 | 1/3/01 |
| 1,4-Dichlorobenzene | | mg/L | 60 | 61.49 | 102 | 80 - 120 | 1/3/01 |
| o-Cresol | | mg/L | 60 | 55.90 | 93 | 80 - 120 | 1/3/01 |
| m,p-Cresol | | mg/L | 60 | 53.03 | 88 | 80 - 120 | 1/3/01 |
| Hexachloroethane | | mg/L | 60 | 59.66 | 99 | 80 - 120 | 1/3/01 |
| Nitrobenzene | | mg/L | 60 | 61.75 | 102 | 80 - 120 | 1/3/01 |
| Hexachlorobutadiene | | mg/L | 60 | 59.45 | 99 | 80 - 120 | 1/3/01 |
| 2,4,6-Trichlorophenol | | mg/L | 60 | 58.47 | 97 | 80 - 120 | 1/3/01 |
| 2,4,5-Trichlorophenol | | mg/L | 60 | 56.59 | 94 | 80 - 120 | 1/3/01 |
| 2,4-Dinitrotoluene | | mg/L | 60 | 55.20 | 92 | 80 - 120 | 1/3/01 |
| 2,4-D | | mg/L | 60 | 60.72 | 101 | 80 - 120 | 1/3/01 |
| Hexachlorobenzene | | mg/L | 60 | 66.31 | 110 | 80 - 120 | 1/3/01 |
| 2,4,5-TP | | mg/L | 60 | 56.98 | 94 | 80 - 120 | 1/3/01 |
| Pentachlorophenol | | mg/L | 60 | 57.38 | 95 | 80 - 120 | 1/3/01 |
| 2-Fluorophenol | | mg/L | 60 | 60.15 | 100 | 80 - 120 | 1/3/01 |
| Phenol-d5 | | mg/L | 60 | 62.64 | 104 | 80 - 120 | 1/3/01 |
| Nitrobenzene-d5 | | mg/L | 60 | 60.46 | 100 | 80 - 120 | 1/3/01 |
| 2-Fluorobiphenyl | | mg/L | 60 | 60.05 | 100 | 80 - 120 | 1/3/01 |
| 2,4,6-Tribromophenol | | mg/L | 60 | 49.40 | 82 | 80 - 120 | 1/3/01 |
| Terphenyl-d14 | | mg/L | 60 | 60.71 | 101 | 80 - 120 | 1/3/01 |



- CERTIFICATE OF ANALYSIS -

Client #: I2565

Report Date: 12-Jan-01

Trace Analysis

6701 Aberdeen

Suite 9

Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**

FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-00147

Your Sample ID: 161337

Date Logged In: 1/5/01

Sample Source: RCRA

Sample Type: Soil/Sludge

Client Project #:

Project #:

Date Submitted to Lab: 1/4/2001

PO#:

- COLLECTION INFORMATION -

Date/Time/By: 12/19/00

| EPA Method | Analyst | Prep Date | Analysis Date | | |
|-------------------|-------------------|--|----------------------|---------------|-----------------------------|
| 8081 | SH | 1/5/01 | 1/10/01 | | |
| | CAS Number | Parameter | | Result | Typical Report Limit |
| | 57-74-9 | Chlordane(Total) | | <0.002 mg/l | 0.002 |
| | 72-20-8 | Endrin | | <0.002 mg/l | 0.002 |
| | 76-44-8 | Heptachlor | | <0.0008 mg/l | 0.0008 |
| | 58-89-9 | gamma-BHC (Lindane) | | <0.003 mg/l | 0.003 |
| | 72-43-5 | Methoxychlor | | <0.01 mg/l | 0.01 |
| | 8001-35-2 | Toxaphene | | <0.05 mg/l | 0.05 |
| EPA Method | Analyst | Prep Date | Analysis Date | | |
| 8151 | DAW | 1/5/01 | 1/8/01 | | |
| | CAS Number | Parameter | | Result | Typical Report Limit |
| | 94-75-7 | 2,4-Dichlorophenoxyacetic acid (2,4-D) | | <0.04 mg/l | 0.04 |
| | 93-72-1 | Silvex | | <0.04 mg/l | 0.04 |

Your Sample ID: 161337

Lab Number MEL01-00147



Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

--- Surrogate Recoveries ---

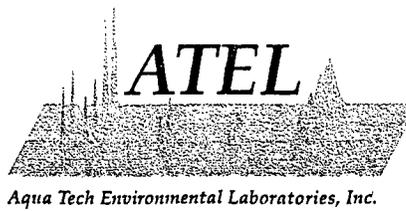
| QC Lab# | EPA Method | Surrogate Name | Percent Recovery | Lower Limit | Upper Limit |
|-------------|------------|---|------------------|-------------|-------------|
| MEL01-00147 | 8081 | Decachlorobiphenyl (Surr) Low surrogate recovery | 4 %R * | 20 | 150 |
| MEL01-00147 | 8081 | Tetrachloro-m-xylene (Surr) | 77 %R | 40 | 130 |
| MEL01-00147 | 8151 | DCAA (Surr) | 123 %R | 19 | 146 |

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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- CERTIFICATE OF ANALYSIS -

Client #: I2565

Report Date: 12-Jan-01

Trace Analysis

6701 Aberdeen

Suite 9

Lubbock, TX 79424-

Attn: Nell Green

Phone: (806) 794-1296 **Ext:**

FAX: (806) 794-1298

Our Lab#: MEL01-00148

Your Sample ID: 161338

Date Logged In: 1/5/01

Sample Source: RCRA

Sample Type: Soil/Sludge

Client Project #:

Project #:

Date Submitted to Lab: 1/4/2001

PO#:

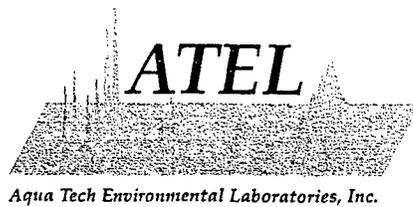
- COLLECTION INFORMATION -

Date/Time/By: 12/19/00

| EPA Method | Analyst | Prep Date | Analysis Date | | |
|-------------------|-------------------|--|----------------------|---------------|-----------------------------|
| 8081 | SH | 1/5/01 | 1/10/01 | | |
| | CAS Number | Parameter | | Result | Typical Report Limit |
| | 57-74-9 | Chlordane(Total) | | < 0.002 mg/l | 0.002 |
| | 72-20-8 | Endrin | | < 0.002 mg/l | 0.002 |
| | 76-44-8 | Heptachlor | | < 0.0008 mg/l | 0.0008 |
| | 58-89-9 | gamma-BHC (Lindane) | | < 0.003 mg/l | 0.003 |
| | 72-43-5 | Methoxychlor | | < 0.01 mg/l | 0.01 |
| | 8001-35-2 | Toxaphene | | < 0.05 mg/l | 0.05 |
| EPA Method | Analyst | Prep Date | Analysis Date | | |
| 8151 | DAW | 1/5/01 | 1/8/01 | | |
| | CAS Number | Parameter | | Result | Typical Report Limit |
| | 94-75-7 | 2,4-Dichlorophenoxyacetic acid (2,4-D) | | < 0.04 mg/l | 0.04 |
| | 93-72-1 | Silvex | | < 0.04 mg/l | 0.04 |

Your Sample ID: 161338

Lab Number MEL01-00148



- CERTIFICATE OF ANALYSIS -

--- Surrogate Recoveries ---

| QC Lab# | EPA Method | Surrogate Name | Percent Recovery | Lower Limit | Upper Limit |
|-------------|------------|-----------------------------|------------------|-------------|-------------|
| MEL01-00148 | 8081 | Decachlorobiphenyl (Surr) | 23 %R | 20 | 150 |
| MEL01-00148 | 8081 | Tetrachloro-m-xylene (Surr) | 98 %R | 40 | 130 |
| MEL01-00148 | 8151 | DCAA (Surr) | 116 %R | 19 | 146 |

End of Report

Report Approved By: Wade T. DeLong
Wade T. DeLong

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- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: 05-Jan-01

Attn: Nell Green

Phone: (806) 794-1296 Ext:
FAX: (806) 794-1298

Our Lab #: MAR00-32744
Date Logged-In: 12/27/00
Matrix: Soil
Project #:

Your Sample ID: 161337
Sample Source: Other/Undefined
Client Project #: PO#:
Date Submitted to Lab: 12/27/2000

- COLLECTION INFORMATION -

Date/Time/By: 12/19/00

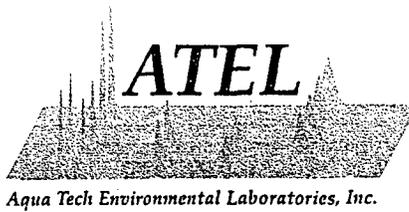
| Test Group | EPA Method | Test | Result | Units | Analysis Date | Analyst | WS# |
|------------|------------|--|--------|-------|---------------|---------|-------|
| TCLP-S | 1311 | TCLP Semivolatile/Pesticide Extraction | -- | | 1/3/01 | MDO | 24023 |

End of Report

Report Approved By:

Deborah K. Johnson

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- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: 05-Jan-01

Attn: Nell Green

Phone: (806) 794-1296 Ext:
FAX: (806) 794-1298

Our Lab #: MAR00-32745 Your Sample ID: 161338
Date Logged-In: 12/27/00 Sample Source: Other/Undefined
Matrix: Soil Client Project #: PO#:
Project #: Date Submitted to Lab: 12/27/2000

- COLLECTION INFORMATION -

Date/Time/By: 12/19/00

| Test Group | EPA Method | Test | Result | Units | Analysis Date | Analyst | WS# |
|------------|------------|--|--------|-------|---------------|---------|-------|
| TCLP-S | 1311 | TCLP Semivolatile/Pesticide Extraction | -- | | 1/3/01 | MDO | 24023 |

End of Report

Report Approved By: _____

Deborah K. Johnson

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