

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

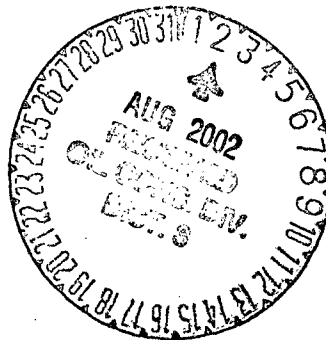
Form C-138
Revised March 17, 1999

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 CR 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 _____ TITLE: Land Farm Manager DATE: 7-29-02
Waste Management Facility Authorized Agent

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

(This space for State Use)

APPROVED BY: Denny Fout TITLE: Environ/Engl DATE: 8/02/02

APPROVED BY: Monty G. G. 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 .	

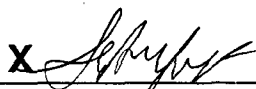
I, Shawn A. Young, representative for Red Cedar Gathering do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1998 regulatory determination, the above-described waste is classified as indicated below:

- ☐ **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.

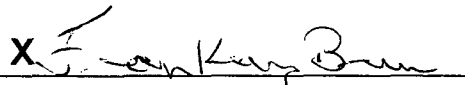
- The material is Non-exempt oilfield waste.
- The material is Non-hazardous by regulatory definition.

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			
4-Bromofluorobenzene(SUR-8021B)	102	QC Limits 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 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 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	38649-42-3	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) 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 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.

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C1-14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDDP) (0.26%)		

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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

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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) 424-8802. 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 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-146.

---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) (ZDCP) (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=MI 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: 605717-00,
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 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.

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

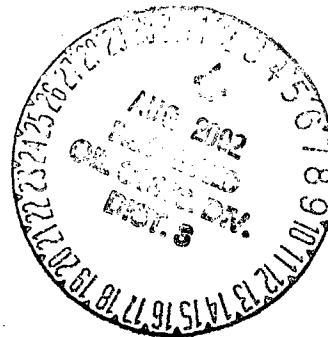
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 02058

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Red Willow Production?</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Southern Ute</u> <u>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</u> <u>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 Benavitz TITLE: Land Farm Manager DATE: 8-2-02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: David Benavitz TELEPHONE NO. 334-8894

(This space for State Use)

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

2-205080



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

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

I, Bob Wren representative for:
(Print Name)
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): 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 STANCAKOW Title Superintendent, BTA

X Signature [Signature] Date 8/1/02

Phone 970 563-3681 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

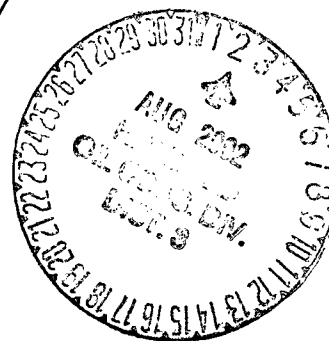
Submit Original
Plus 1 Copy
to Appropriate
District Office

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-R10W</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 Bonowitz* TITLE: *Land Farm Manager* DATE: *8-1-02*
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: *David Bonowitz* TELEPHONE NO. *334-8894*

(This space for State Use)

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



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1800 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 874
(505) 334-6175 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): CARBON 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, Rob 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): Rob Wren

Title: Senior Field Engineer



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 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 State Superintendent

X Signature [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 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

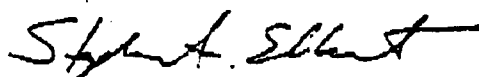
OSHA HAZARD COMMUNICATION STANDARD: Not hazardous per 29 CFR 1910.1200(d).

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
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
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Form C-138
Revised March 17, 1999

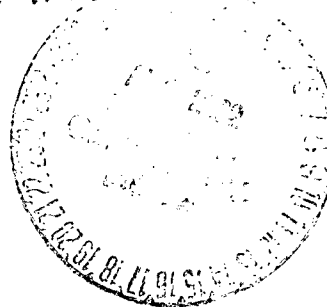
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Red Willow Production</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Florida Mesa 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>Flomo Compressor Sta</u>	<u>Sec 16, T. 33N, R. 9W</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. 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 white 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 Bonawitz TITLE: Land Farm Manager DATE: 7-24-02
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: David Bonawitz TELEPHONE NO. 334-8894

(This space for State Use)

APPROVED BY: Denny Feant TITLE: Enviro/Engl DATE: 8/02/02
APPROVED BY: Martha J. J. TITLE: Environmental Geologist DATE: 8/05/02



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
GOVERNOR

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87614
(505) 884-8178 Fax (505) 884-1334

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

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

1. *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 B. 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 Compression Station

By:
 Generator Tamara Tapia

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 Atencio Date 7/17/02

Phone 505 714 7644 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

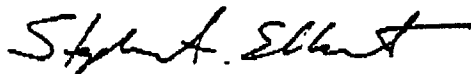
OSHA HAZARD COMMUNICATION STANDARD: Not hazardous per 29 CFR 1910.1200(d).

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
2000 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

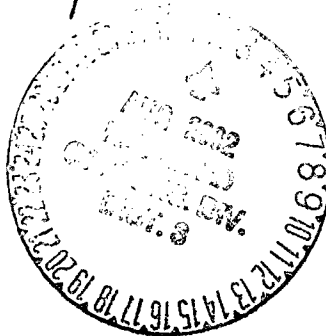
Submit Original
Plus 1 Copy
to Appropriate
District Office

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



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.</i>	2. Destination Name: <i>Trinidad, Louisiana</i>
3. Originating Site (name): <i>CABIN COMPRESSOR STATION</i>	Location of the Waste (Street address &/or ULSTR): <i>Sec. 33N-T10W-R18</i>
Attach list of originating sites as appropriate	
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 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 **TERRA**
E **ENVIRONMENTAL**
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: 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: 970-523-4511 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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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

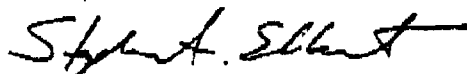
OSHA HAZARD COMMUNICATION STANDARD: Not hazardous per 29 CFR 1910.1200(d).

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
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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
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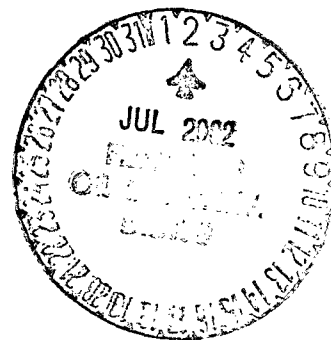
Form C-138
Revised March 17, 1999

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"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	4. Generator <u>Key Energy</u> 5. Originating Site <u>Key Energy Hwy 64</u> 6. Transporter <u>Key Energy</u> 8. State <u>NM</u>
2. Management Facility Destination <u>Teresa Land Farm</u>	
3. Address of Facility Operator <u>420 CR 7100 Aztec 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: Jon Nabis TELEPHONE NO. 334-8894

(This space for State Use)

APPROVED BY: [Signature] TITLE: Enviro/Engl 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

1. Generator Name and Address Key Energy Services, Inc. Four Corners Division 5651 US Highway 64 Farmington, NM 87401	2. Destination Name: Tierra Environmental Company, Inc. Crouch Mesa Landfarm 420 C. R. 3100 Aztec, NM 87401
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	Location of the Waste (Street address &/or ULSTR): 36 Degree, 39.447 North 107 Degree 41.566 West San Juan County, NM
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.	

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):

[Signature]

Title:

Equipment & Environmental Manager

Date:

June 24, 2002



USA and WORLDWIDE

September 30, 1993

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. (ie. 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
874 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
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Form C-138
Revised March 17, 1999

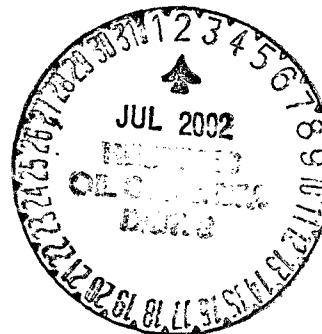
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <i>Red 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-T32N-R11W.</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 kero oil



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

SIGNATURE *David Bonawitz* TITLE: *Land Farm Manager* DATE: *7-1-02*
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: *David Bonawitz* TELEPHONE NO. *334-8894*

(This space for State Use)

APPROVED BY: *Denny Feunt* TITLE: *Enviro/Engl* DATE: *07/08/02*
APPROVED BY: *Martin Smith* TITLE: *Environmental Geologist* 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

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:
Address
Phone:

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

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 1, July 1992.

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

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-8016)	115	70 - 190

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

Reviewed By: HLG

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

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-H ₂ S	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: _____

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 1/3 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): 383(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

Legally required information is given in accordance with applicable
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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

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RECEIVED
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 020412

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]
Waste Management Facility Authorized Agent

TITLE: Land Farm manager DATE: 5-15-02

TYPE OR PRINT NAME: Jon G. Nobis

TELEPHONE NO. 334 8891

(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



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
GOVERNOR

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 396-8178 Fax (505) 374-6111

JENNIFER A. SALISBURY
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: <i>COMPRESSOR SYSTEMS INC 5995 US HWY 64 FARMINGTON N.M. 87401</i>	2. Destination Name: <i>TIERRA LAND FARM</i>
3. Originating Site (name): <i>KEY ENERGY SERVICES INC 17497 HWY 172 IGNACIO CO.</i>	Location of the Waste (Street address &/or ULST):
Attach list of originating sites as appropriate	
4. Source and Description of Waste <i>A NEW OIL STORAGE TANK LEAKED OUT OF DRAIN ONTO GROUND</i>	

I, PHILIP RAY representative for:
(Print Name)
COMPRESSOR SYSTEMS INC 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): Philip Ray

Title: LEAD SERVICE TECH

Date: 5-14-02

May, 23 2002 08:16AM P3

FAX NO. :

FROM :



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 Oil 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

FREEZING POINT: NDA

MELTING POINT: 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=NU 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

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

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

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	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	PEL - Permissible Exposure Limit
C - Ceiling Limit	CAS - Chemical Abstract Service Number
A1-5 - Appendix A Categories	() - Change Has Been Proposed
NDA - No Data Available	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

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RECEIVED

MAY 13 2002

Environmental Bureau
Oil Conservation Division

Form C-138
Revised March 17, 1999

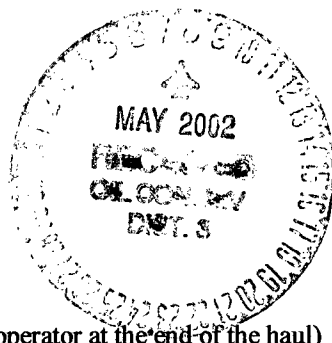
Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 62040

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 cedar Gathering</u> 5. Originating Site <u>Copate compressor Sta.</u>
2. Management Facility Destination <u>Tierra Land Farm</u>	6. Transporter <u>Riley</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>Sec: 33 T: 33N R: 9W</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:

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 yds cy

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

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): 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

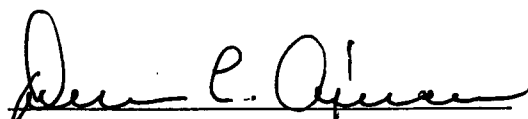
Client:	Red Cedar	Project #:	95031-019
Sample ID:	Units 4 + 6	Date Reported:	04-01-02
Laboratory Number:	22421	Date Sampled:	03-28-02
Chain of Custody No:	8974	Date Received:	03-28-02
Sample Matrix:	Soil	Date Extracted:	03-29-02
Preservative:	Cool	Date Analyzed:	04-01-02
Condition:	Cool and Intact	Analysis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

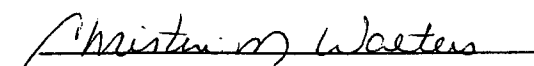
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.3	0.2
Diesel Range (C10 - C28)	47.3	0.1
Total Petroleum Hydrocarbons	48.6	0.2

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

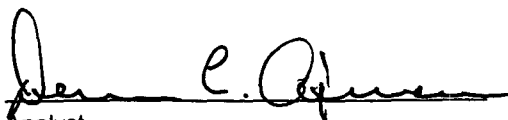
ND - Parameter not detected at the stated detection limit.

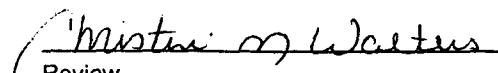
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

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	

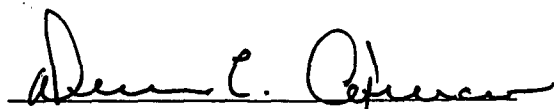
ND - Parameter not detected at the stated detection limit.

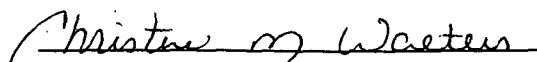
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99 %
	1,4-difluorobenzene	99 %
	Bromochlorobenzene	99 %

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
-----------	---------------------------

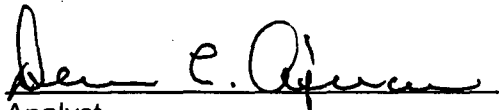
IGNITABILITY: Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21.
(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)

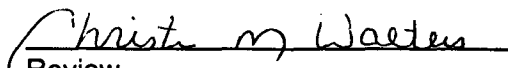
CORROSIVITY: Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22.
(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)

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"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator US EPA 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. 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:

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

1-20804a



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

1. Generator Name and Address: U.S. EPA 10625 Fallstone Houston, TX 77083 Attn: Warren Zehner	2. Destination Name: TIERRA / Crouch Mesa Land Farm 420 cnty Rd. 3100 Aztec, NM 87410
3. Originating Site (name): Beeline Refinery / General Crude / Mesa Petroleum Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): 8201 E. Main (St. Hwy 516) Farmington, NM
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	

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
☒ 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 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.

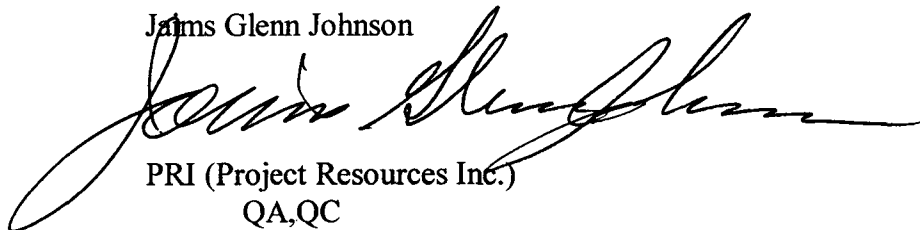
1&1' For
TCLP VOC
TCLP Semi-VOC
TCLP metals
Ph

&

2&2' For
Reactive Sulfides
Reactive Cyanides

These are for the impacted soils waste stream.

James Glenn Johnson



PRI (Project Resources Inc.)
QA, QC

S I M A L A B S

INTERNATIONAL

SAMPLE *soil*

2 AND 2'

Customer: Project Resources Inc.

Project No.: 030206.001

Source: GENERAL CRUDE

Location:

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: 6 su

Prep. Method: EPA 1311/EPA 3010A

Lab Sample ID.: L4293-1

Date Sampled: 23-MAR-02

Date Received: 26-MAR-02

Date Digested: 27-MAR-02

Date Analyzed: 28-MAR-02

SAMPLE RESULTS

ANALYTICAL METHOD	ANALYTE	MDL (mg/l)	R L (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

INTERNATIONAL

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

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

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

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.

S I M A L A B S

INTERNATIONAL

SAMPLE

2 AND 2'

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

Location: _____

Analysis: PSA HG METALSInstrument Batch: WG9456,Preparation Batch: WG9450Matrix: LeachateLab Notebook No: 1323, P.22-24,Initial Cal. ID.: WG9456,Final Volume: 100 mlInitial Volume: 100 mlPrep. Method: EPA 1311/ EPA 7470ApH: 5.50Lab Sample ID.: L4293-1Date Sampled: 23-MAR-02Date Received: 26-MAR-02Date Digested: 27-MAR-02Date Analyzed: 27-MAR-02

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

Post Digest Spike Recovery: Mercury-102%

Comments: _____



INTERNATIONAL

ANALYTICAL RESULTS

Date: Monday, April 01, 2002

Client:	Simalabs International of Ohio	Client Project:	L4293
		Work Order:	ME0204003
Client Sample ID:	L4293-1	SIMALABS ID:	ME0204003-01B
Sample Description:	2 & 2 (Acid)		
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
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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 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 S - Value above quantitation range

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

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: 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' oil/slug		Oil	> 200	

19MAR-28-02
HPD 3/28/02

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' soil	Soil		N/A	4.0	12.0	--	U
L4293-3	4 AND 4' oil/slug	Oil		N/A	4.0	12.0	--	U

0/11/02 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 (ug)	TEMP (Deg. C)	FLAG
L4293-1	2 AND 2' oil		Soil	7.3	20	

Comments:

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

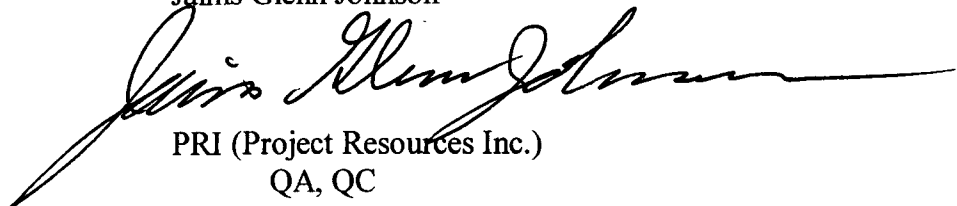


Project Resources Inc.

**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 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 LPH 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 was 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 MP Date 3-28-02

Level 2 Initial X Date 3-28-02

SIMALABS INTERNATIONAL

CASE NARRATIVE GC/MS Organic Analysis

Project No.: L4293-3
Customer Name: PRI/EQM
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 (F3/28/2)**
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 CJA Date 3-28-02

SIMALABS International

FAXED
3280

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: PRI/EQM
Description: BNAT0327
Prep Work Group: WG9445

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

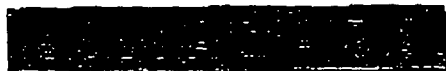
1. QC Package for this Prep. Batch is from this Project? **YES.**
2. Analysis by **TOTAL ION CHROM, (GC/MS#1)**
3. MSD DFTPP TUNE EVALUATION: **Passed.**
4. CALIBRATION: Initial calibration date: **Passed 02.13.02**; ICV from second source: **Passed.**
Continuing calibration: **Passed**; SPCC: **N/A.**
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 3.28.2
Level 2 Initial PF Date 3/28/02



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

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).

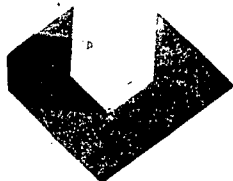
SIMALABS International is an accredited laboratory under the requirements of the National Environmental Laboratory Accreditation Program (IL EPA lab #100435). All data included has been reviewed for and meets all project specific and Quality Control requirements of this accreditation, unless otherwise 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.

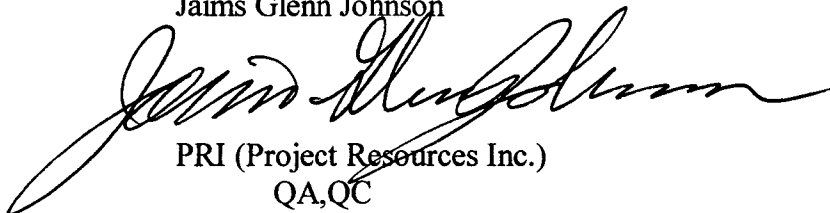
3&3' For
TCLP VOC
TCLP Semi-VOC
TCLP metals
Ph

&

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**I N T E R N A T I O N A L**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.: 030206.001

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.: L4293-4

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: 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

*3-28-02**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.

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

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

oil/sediment

SAMPLE

4 AND 4'

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

Location: _____

Analysis: PSA HG METALSInstrument Batch: WG9456,Preparation Batch: WG9450Matrix: LeachateLab Notebook No: 1323, P.22-24,Initial Cal. ID.: WG9456,Final Volume: 100 mlInitial Volume: 100 mlPrep. Method: EPA 1311/ EPA 7470ApH: 6 suLab Sample ID.: L4293-3Date Sampled: 23-MAR-02Date Received: 26-MAR-02Date Digested: 27-MAR-02Date Analyzed: 27-MAR-02

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: _____

SLIM ALABS

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: 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

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

oil obdys

Comments:

*GH 3/26/02
 CMA 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

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

SAMPLE RESULTS

LAB ID.	CUSTOMER SAMPLE NO. & LOCATION	MATRIX	DILUTION	% SOLIDS	MDL (mg/kg)	RL (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' oil/shale	Oil		N/A	4.0	12.0	--	U

6/1/02 3-28-02

Comments:

RL - Reporting Limit
 U - Below MDL

MDL - Method Detection Limit

SIMALLABS

INTERNATIONAL

Customer:
Source:
Analysis:
Method:
Prep Method:
Lab Notebook No:
Initial Cal ID:

Project Resources Inc.
GENERAL CRUDE
Flashpoint
EPA Method 1010
EPA 1010
1263
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'	oil	Soil	> 200	
L4293-3	4 AND 4'	oil/slug	Oil	> 200	

Comments:

L4293-28-02
KOD 5/25/02

INTERNATIONAL

ANALYTICAL RESULTS

Date: Monday, April 01, 2002

Client: Simalabs International of Ohio Client Project: L4293
Work Order: ME0204003
SIMALABS ID: ME0204003-02B
Client Sample ID: L4293-3
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)
Qual: ND - Not Detected at the Reporting Limit
B - Detected in the associated Method Blank
* - Exceeds Maximum Contaminant Level
DF - Dilution Factor
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

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



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: U.S. EPA 10625 Fallstone Houston, TX 77083 Atten: Warren Zehner	2. Destination Name: Tierra / Crouch Mesa Land Farm 420 cnty Rd. 3100 Aztec, NM 87410
3. Originating Site (name): Beeline Refinery / General Crude / Mesa Petroleum Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): 8201 E. Main (St. Hwy 516) Farmington, NM
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	

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
☒ 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 3.1 subpart 1403.C and D.

Name (Original Signature): Warren Zehner for USEPA

Title: Sr. On Scene Coordinator

April 1, 2007

District I
1625 N. French Rr., 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"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>Key Energy</u> 5. Originating Site <u>Sims yard</u>
2. Management Facility Destination <u>Tierra Landfarm</u>	6. Transporter <u>Key</u>
3. Address of Facility Operator <u>420 CR 3100</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>CR 527 and Casa Road Rio Arriba</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. 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 [Signature] TITLE: Landfarm manager DATE: 3-19-02
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: 03/25/02
APPROVED BY: [Signature] TITLE: Environmental Geologist DATE: 03/11/02

040102-1



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

1. Generator Name and Address: <i>Key Energy Services</i> <i>6451 U.S.-64</i> <i>FARMINGTON, N.M. 87429</i>	2. Destination Name: <i>TIERCE LAND FARM.</i>
3. Originating Site (name): <i>Sims yard</i> <small>Attach list of originating sites as appropriate</small>	Location of the Waste (Street address &/or ULSTR): <i>CL 527 and Casa Road</i> <i>Rio Arriba.</i>
4. Source and Description of Waste <i>CL 527 diesel fuel and dirt</i>	

I, Claude L. Coburn 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. Coburn

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 SynonymsDiesel 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

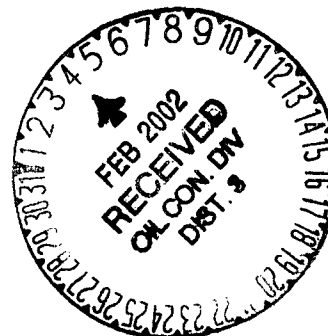
REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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. 5. Originating Site Shiprock Station
2. Management Facility Destination Tierra Landfarm	6. Transporter Various
3. Address of Facility Operator 420 CR 3100 Aztec, NM 87410	8. State NM
7. Location of Material (Street Address or ULSTR) T30N R18W (4 Mi. S of Shiprock)	
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 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

Waste Management Facility Authorized Agent

TITLE: Environmental Specialist

DATE: 2/4/02

TYPE OR PRINT NAME:

Jeremy J. Bath

TELEPHONE NO.

334-8894

(This space for State Use)

APPROVED BY:

TITLE:

DATE:

APPROVED BY:

TITLE:

DATE:



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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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

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01/31/2002 14:05
 01/31/2002 09:24
 01/31/2002 09:01
 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
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 01/30/2002 18:30

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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



Mountain States Analytical, Inc.

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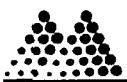


Sample Summary

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



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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
-----------	--------	-----	-----	-------	----	---------------	---------

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



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
-----------	--------	-----	-----	-------	----	---------------	---------

Mercury	U	1	5	µg/L	1	01/25/02 15:49	LC
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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



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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

2,4,6-Tribromophenol

59.9

Recovery Range

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



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: 0201237-02A
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



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: 0201237-02A
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

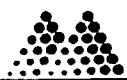
S - Results outside normal recovery limits

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



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: 0201237-02B
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



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: 0201237-02C
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
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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



Mountain States Analytical, Inc.

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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

12



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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_020125O

Analysis Date: 01/25/02

Prep Batch ID: WC_020125O

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_020125O

Analysis Date: 01/25/02

Prep Batch ID: WC_020125O

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_020125O

Analysis Date: 01/25/02

Prep Batch ID: WC_020125O

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

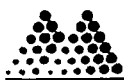
S - Results outside normal recovery limits

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



Mountain States Analytical, Inc.

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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

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

14



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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 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 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



Mountain States Analytical, Inc.

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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

Parameter	Result	Spike Parent	True Value	Percent Recovery	Low Limit	High Limit	Duplicate Parent	RPD RPD Limit
Arsenic	U						U	NC 20
Barium	0.575						0.564	1.9 20
Cadmium	U						U	NC 20
Chromium	0.318						0.322	1.4 20
Lead	0.049 JR(3a)						0.060 J	20 20
Selenium	0.058 J						U	NC 20
Silver	0.0038 J						0.0046 J	20 20

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

Parameter	Result	Spike Parent	True Value	Percent Recovery	Low Limit	High Limit	Duplicate Parent	RPD RPD Limit
Arsenic	1.09	U	1.00	109	75	125		
Barium	0.773	0.564	0.200	105	75	125		
Cadmium	0.0989	U	0.100	98.9	75	125		
Chromium	0.736	0.322	0.400	103	75	125		
Lead	1.02	0.060 J	1.00	96.2	75	125		
Selenium	1.12	U	1.00	112	75	125		
Silver	0.105	0.0046 J	0.100	100	75	125		

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

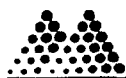
S - Results outside normal recovery limits

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



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: 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 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 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

17



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: 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 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 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

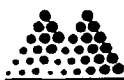
S - Results outside normal recovery limits

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



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: 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	0.0051 J	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



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

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

20

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 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 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 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 RPD Limit
Mercury	53.9	U	50.0	108	85	115		

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

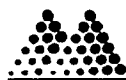
S - Results outside normal recovery limits

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



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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	%D 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

B - Analyte detected in the associated Method Blank

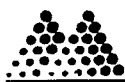
S - Results outside normal recovery limits

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



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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

23



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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



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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

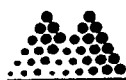
S - Results outside normal recovery limits

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



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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 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

26



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

Parameter	Result	Spike Parent	True Value	Percent Recovery	Low Limit	High Limit	Duplicate Parent	RPD RPD Limit
2,4-Dinitrotoluene	U	0	0	0		2		
Hexachlorobenzene	U	0	0	0		1		
Hexachlorobutadiene	U	0	0	0		2		
Hexachloroethane	U	0	0	0		2		
2-Methylphenol (o-Cresol)	U	0	0	0		3		
3 and 4- Methylphenol (m+p cresol)	U	0	0	0		3		
Nitrobenzene	U	0	0	0		2		
Pentachlorophenol	U	0	0	0		3		
Pyridine	U	0	0	0		3		
2,4,5-Trichlorophenol	U	0	0	0		3		
2,4,6-Trichlorophenol	U	0	0	0		2		
Surrogates								
2,4,6-Tribromophenol	172	0	200	86.2	14	173		
2-Fluorophenol	101	0	200	50.6	2	114		
2-Fluorobiphenyl	79.2	0	100	79.2	22	152		
Nitrobenzene-d5	81.2	0	100	81.2	17	158		
Phenol-d6	64.4	0	200	32.2	1	95		
Terphenyl-d14	106	0	100	106	30	180		

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

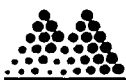
S - Results outside normal recovery limits

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: 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

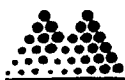
S - Results outside normal recovery limits

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 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.

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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 Limit	RPD
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

30

26077

Sample Chain of Custody

[illegible]

1645 West 2200 South, Salt Lake City, Utah 84119 (801) 973-0050 FAX (801) 972-6278

White Copy - Original Retain by Lab Yellow Copy - Return to Customer Pink Copy - Retain by Sampler

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 Jeremy J. Bath 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: Denny Fent TITLE: Enviro/Engl DATE: 01/15/02
APPROVED BY: Matthew J. Jilly TITLE: Environmental Geologist DATE: 01/22/02

FROM: Jan. 7. 2002 12:32PM

FAX NO:

No. 4858 P. 3/25

Jan. 07 2002 09:17AM P2



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
GOVERNOR

OIL CONSERVATION DIVISION
ATTORNEY GENERAL'S OFFICE
1000 GND FLOOR, SUITE 100
ALBUQUERQUE, NEW MEXICO 87102
(505) 241-4119 Fax (505) 241-4124

JENNIFER A. SALAS
CABINET SECRETARY

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Shell Oil Company P.O. Box 2648 Houston, TX 77252	2. Destination Name: TUTOR Environmental Co. 420 County Road 3100 Acker, NM 87410
3. Originating Site (name): Standing Rock Station 522, T19N, R15W McKinley County, New Mexico Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSM): SAME AS ORIGINATING
4. Source and Description of Waste: Contaminated SOIL FROM SPILL REPORTEDLY OCCURRED IN 1981 (Crude OIL From transportation line)	

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



AUSTIN | DALLAS | HOUSTON | MIDLAND

BNC Environmental Services, Inc.
BNC Engineering, LLC

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
3876 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 TraceAnalysis, 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

Continued ...

... Continued

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

Continued ...

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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

Continued ...

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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

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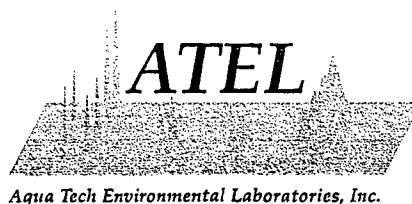
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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
1,1-Dichloroethene		mg/L	100	99	99	80 - 120	12/31/00
Methyl ethyl ketone		mg/L	100	106	106	80 - 120	12/31/00
Chloroform		mg/L	100	80	80	80 - 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-

Attn: Nell Green

Phone: (806) 794-1296 Ext:

FAX: (806) 794-1298

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)	4 %R *	20	150
		Low surrogate recovery			
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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Your Sample ID: 161337

Lab Number MEL01-00147



- 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 -

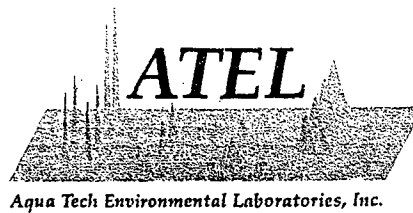
--- Surrogate Recoveries ---

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-
Attn: Nell Green

Report Date: 05-Jan-01

Phone: (806) 794-1296 Ext:
FAX: (806) 794-1298

Our Lab #: MAR00-32744 Your Sample ID: 161337
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

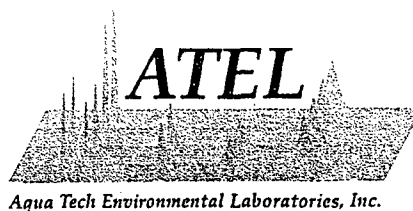
Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
TCLP-S	1311	TCLP Semivolatile/Pesticide Extraction	--		1/3/01	MDO	24023

End of Report

Report Approved By: _____

Deborah K. Johnson

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- CERTIFICATE OF ANALYSIS -

Client #: I2565

Report Date: 05-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 #: 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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