

**NM1-10-B**

**C-138**

**Date: 2006**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
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: Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>		4. Generator: Red Willow Production Company
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: McElvain Compressor
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499		6. Transporter: ROVD JANSBY OIL CONS. DIV DIST. 3
7. Location of Material (Street Address or ULSTR) S- 25 , T- 33N , R- 08W		8. State: NM
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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: Mixture of sand/gravl/engine oil (15W40) from clean-up around engine and location. MSDS, RCRA8, TCLP, Chain of Custody forms attached

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

SIGNATURE James Hatcher TITLE: Senior Vice President DATE: 1/29/2007  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: James Hatcher TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jake43@qwest.net

(This space for State Use)

APPROVED BY: <u>BP</u>	TITLE: _____	DATE: <u>1-30-06</u>
APPROVED BY: _____	TITLE: _____	DATE: _____

Jan 29 07 04:00p

Industrial EcoSystems

5056321876

p.2



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

Joanna Prukop

Cabinet Secretary

**Mark Fesmire**

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address <i>Red Willow Production Company</i> <i>14933 Hwy 172</i> <i>Ignacio, CO 81137</i>	2. Destination Name: <i>J.F.J. Landfarm C/O Industrial Ecosystems Inc.</i> <i>#81 CR 3150</i> <i>Aztec, NM 87410</i> <i>Phone # 505-632-1782 Fax No# 505-334-1003</i>
3. Originating Site (name):  <i>McElvain Compressor Station</i>  <i>Attach list of originating sites as appropriate</i>	Location of the Waste (Street address &/or ULSTR):  <i>S- 25 T- 33 R- 08W or attach list</i> <i>Street Address: _____</i>
4. Source and Description of Waste  <i>Mixture of sand/gravel/engine oil (15W30) from clean up around engine and location.</i>	

I, Jonathan Sorrel representative for Red Willow Production 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  
characteristic

X NON-EXEMPT oilfield waste which is non-hazardous by

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):

X MSDS Information

X Other (description) TCLP

X RCRA Hazardous Waste Analysis

X 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]*

Phone Contact: 970-563-5193

Title: EHS Technician

P.O# / Pay key No: \_\_\_\_\_

Date: 30-Jan-07

MSDS Code: 776084  
Status: Final

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## MATERIAL SAFETY DATA SHEET

### Conoco HD Fleet Supreme Engine Oil

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Conoco HD Fleet Supreme Engine Oil  
**Product Code:** 46261  
**Intended Use:** Heavy Duty Diesel Engine Oil  
**Synonyms:** Conoco MSDS #MOTC0090  
Conoco HD Fleet Supreme Engine Oil (AP Region)  
Conoco HD Fleet Supreme Engine Oil 10W-30  
Conoco HD Fleet Supreme Engine Oil 15W-40  
Conoco HD Fleet Supreme Engine Oil 20W-50  
**Chemical Family:** Not Given

**Responsible Party:** Conoco Lubricants  
A Division of ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas  
77079-1175

**Customer Service:** 800-255-9556  
**Technical Information:** 800-255-9556

The intended use of this product is indicated above. If any additional use is known, please contact us at the Technical Information number listed.

#### EMERGENCY OVERVIEW

##### 24 Hour Emergency Telephone Numbers:

Spill, Leak, Fire or Accident Call CHEMTREC:  
North America: (800) 424-9300  
Others: (703) 527-3887 (collect)

California Poison Control System: (800) 356-3219

**Health Hazards/Precautionary Measures:** Causes eye and skin irritation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Keep away from all sources of ignition.

**Appearance:** Light brown  
**Physical Form:** Liquid  
**Odor:** Light petroleum

#### NFPA 704 Hazard Class:

**Health:** 1 (Slight)  
**Flammability:** 1 (Slight)  
**Instability:** 0 (Least)

#### HMIS Hazard Class:

**Health:** 1 (Slight)  
**Flammability:** 1 (Slight)  
**Physical Hazards:** 0 (Least)



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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### HAZARDOUS COMPONENTS

Component / CAS No:	Percent (%)	ACGIH:	OSHA:	NIOSH:	Other:
Zinc Compound PROPRIETARY	1 - 2	NE	NE	NE	

### NON-HAZARDOUS COMPONENTS

Component / CAS No:	Percent (%)	ACGIH:	OSHA:	NIOSH:	Other:
Lubricant Base Oil (Petroleum) VARIOUS	70 - 80	5mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> STEL	5 mg/m <sup>3</sup> TWA	2500 mg/m <sup>3</sup> IDLH	as Oil Mist, if Generated  5 mg/m <sup>3</sup> NOHSC TWA
Additives PROPRIETARY	20 - 30	NE	NE	NE	

All components are listed on the TSCA inventory.

The base oil for this product can be a mixture of any of the following highly refined petroleum streams: CAS 64741-88-4; CAS 64741-89-5; CAS 64741-98-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-82-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

NE=Not Established

## 3. HAZARDS IDENTIFICATION

### Potential Health Effects:

**Eye:** Eye Irritant. Contact may cause stinging, watering, redness, and swelling.

**Skin:** Skin irritant. Contact may cause redness, itching, burning, and skin damage. No harmful effects from skin absorption are expected.

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** No harmful effects expected from ingestion.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea, and, diarrhea.

**Cancer:** Inadequate evidence available to evaluate the cancer hazard of this material. See Section 11 for carcinogenicity information of individual components, if any.

**Target Organs:** No data available for this material.

**Developmental:** No data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders.

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#### 4. FIRST AID MEASURES

**Eye:** Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek medical attention. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

**Skin:** Wipe material from skin, remove contaminated shoes and clothing and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops, seek medical attention.

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

**Notes to Physician:** High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. Often these injuries require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury.

Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

#### 5. FIRE-FIGHTING MEASURES

##### Flammable Properties:

Flash Point:	380°F / 193°C
Test Method:	PM
OSHA Flammability Class:	Not applicable
LEL%:	No data
UEL%:	No data
Autolgnition Temperature:	No data

**Unusual Fire & Explosion Hazards:** This material may burn, but will not ignite readily. If water is applied to heated material, it can cause violent foaming and boilover. If container is not properly cooled, it can rupture in the heat of a fire.

**Extingulshing Media:** Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

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## 6. ACCIDENTAL RELEASE MEASURES

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. Notify appropriate federal, state, and local agencies.

## 7. HANDLING AND STORAGE

**Handling:** Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.148. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Storage temperatures above 113°F may lead to thermal decomposition, resulting in the generation of hydrogen sulfide and other sulfur containing gases. Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Use and store this material in cool, dry, well-ventilated areas. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required.

**Personal Protective Equipment (PPE):**

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**Respiratory:** Inhalation is not an expected route of exposure. However, a NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

<b>Appearance:</b>	Light brown
<b>Physical Form:</b>	Liquid
<b>Odor:</b>	Light petroleum
<b>Odor Threshold:</b>	No data
<b>pH:</b>	Not applicable
<b>Vapor Pressure (mm Hg):</b>	<1
<b>Vapor Density (air=1):</b>	>1
<b>Boiling Point:</b>	No data
<b>Melting/Freezing Point:</b>	No data
<b>Solubility in Water:</b>	No data
<b>Partition Coefficient (n-octanol/water):</b>	No data
<b>Specific Gravity:</b>	0.88
<b>Bulk Density:</b>	7.33
<b>Bulk Density Units</b>	lbs/gal
<b>Viscosity cSt @ 100°C:</b>	15.1
<b>Viscosity cSt @ 40°C:</b>	115
<b>Evaporation Rate (nBuAc=1):</b>	<1
<b>Flash Point:</b>	380°F / 193°C
<b>Test Method:</b>	PM
<b>Flammable/Explosive Limits:</b>	No data
<b>Decomposition Temperature:</b>	No data

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## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Conditions to avoid:** Can become unstable at elevated temperatures and pressures.

**Materials to Avoid (Incompatible Materials):** Avoid contact with acids and strong oxidizing agents.

**Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen, sulfur, phosphorus, and zinc oxides. Hydrogen sulfide and alkyl mercaptans may also be released. Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 113°F.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Lubricant Base Oil (Petroleum) - VARIOUS

**Carcinogenicity:** The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, hydrotreating, and dewaxing to remove aromatics and improve performance characteristics. None of the oils used are listed as a carcinogen by NTP, IARC, or OSHA.

#### Acute Data:

### Lubricant Base Oil (Petroleum) - VARIOUS

Dermal LD50 = >2 g/kg

LC50 = No information available

Oral LD50 = >5 g/kg

### Additives - PROPRIETARY

Dermal LD50 = No information available

LC50 = No information available

Oral LD50 = No information available

### Zinc Compound - PROPRIETARY

Dermal LD50 = No information available

LC50 = No information available

Oral LD50 = No information available

## 12. ECOLOGICAL INFORMATION

Not evaluated at this time.

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### 13. DISPOSAL CONSIDERATIONS

This material under most intended uses would become used oil due to contamination by physical or chemical impurities. RECYCLE ALL USED OIL. While being recycled, used oil is regulated by 40 CFR 279. Use resulting in chemical or physical change or contamination may also subject it to regulation as hazardous waste. Under federal regulations, used oil is a solid waste managed under 40 CFR 279. However, in California, used oil is managed as hazardous waste until tested to show it is not hazardous. Consult state and local regulations regarding the proper handling of used oil. In the case of used oil, the intent to discard it may cause the used oil to be regulated as hazardous waste.

Contents should be completely used and containers emptied prior to discard. Rinsate may be considered a RCRA hazardous waste and must be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or a drum reconditioner. To assure proper disposal of small empty containers, consult with state and local regulations and disposal authorities.

### 14. TRANSPORTATION INFORMATION

DOT Shipping Description: Not classified as hazardous

Note: Material is unregulated unless in container of 3500 gallons or more, then provisions of 49 CFR Part 130 apply for land shipment.

IMDG Shipping Description: Not regulated

ICAO/IATA Shipping Description: Not regulated

### 15. REGULATORY INFORMATION

#### U.S. Regulations:

##### EPA SARA 311/312 (Title III Hazard Categories)

Acute Health:	Yes
Chronic Health:	No
Fire Hazard:	No
Pressure Hazard:	No
Reactive Hazard:	No

##### SARA - Section 313 and 49 CFR 372:

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:  
Zinc Compound 1-2%

##### EPA (CERCLA) Reportable Quantity:

—None Known—

##### CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:  
— None Known —

##### California Proposition 65:

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):  
— None Known —

##### Carcinogen Identification:

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**Status:** Final

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**Date of Issue:** 06-May-2004

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This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

**TSCA:**

All components are listed on the TSCA inventory.

## 16. OTHER INFORMATION

<b>Issue/Revision Date:</b>	06-May-2004
<b>Previous Issue Date:</b>	5/13/2003
<b>Product Code:</b>	46261
<b>Reason for revision:</b>	Formulation Change. SEE SECTION 2.
<b>Previous Product Code:</b>	46261, 46260, 46272
<b>MSDS Code:</b>	776084

**Disclaimer of Expressed and Implied Warranties:**

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

612 E. Murray Drive  
Farmington, NM 87401

Off: (505) 327-1072  
Fax: (505) 327-1496

*iiná bá*

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

January 24, 2007

Joel Owens  
Industrial Ecosystems, Inc.  
#81 County Road 3150  
Aztec, NM 87410

TEL: (505) 632-1782

FAX: (505) 632-1876

RE: Red Willow / McElvain Compressor

Order No.: 0701018

Dear Joel Owens:

iiná bá received 1 sample on 1/12/2007 1:10:00 PM for the analyses presented in the following report.

This certificate of analysis includes the Analytical Report(s) for the sample(s) received by the laboratory. A Quality Control Summary Report, the Sample Receipt Checklist and an executed Chain of Custody are included as an addendum to this report.

Should you have any questions regarding this certificate of analysis, please contact the laboratory at your convenience.

Report Approved By: \_\_\_\_\_

Jeffrey L. Engels, Laboratory Manager

Edwina F. Aspaas, Quality Assurance Officer

ORELAP Laboratory No. 100002  
Arizona License No. AZ0691

**RECEIVED**  
BY *nm* / DATE *1/29/07*

This certificate of analysis and respective material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the person responsible for delivering this to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify the laboratory immediately at (505) 327-1072.



MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT



612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496



P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

**iiná bá**

**Date:** 24-Jan-07

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**CLIENT:** Industrial Ecosystems, Inc.  
**Project:** Red Willow / McElvain Compressor  
**Lab Order:** 0701018

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## **CASE NARRATIVE**

Samples were analyzed using the methods outlined in one or more of the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992.

Methods for the Determination of Metals in Environmental Samples, Supplement I, EPA-600/R-94/111,  
May 1994.

Any quality control and/or data qualifiers associated with this laboratory order will be flagged in the analytical result page(s), the quality control summary report(s) or the sample receipt checklist.

Barium and chromium were detected in the associated method blank. The analytes of interest in the sample are below the regulatory limits.

612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496



P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

## ANALYTICAL REPORT

Date: 24-Jan-07

<b>CLIENT:</b>	Industrial Ecosystems, Inc.	<b>Client Sample Info:</b>	Red Willow / McElvain Compres
<b>Work Order:</b>	0701018	<b>Client Sample ID:</b>	001MCEL
<b>Project:</b>	Red Willow / McElvain Compressor	<b>Collection Date:</b>	1/11/2007 1:00:00 PM
<b>Lab ID:</b>	0701018-001A	<b>Matrix:</b>	SOIL

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>MERCURY, TCLP LEACHED</b>						
Mercury	< 0.0020	0.0020		mg/L	1	1/23/2007
<b>ICP METALS, TCLP LEACHED</b>						
Arsenic	< 0.0180	0.0180		mg/L	1	1/23/2007 10:29:22 AM
Barium	1.90	0.0030	B	mg/L	1	1/23/2007 10:29:22 AM
Cadmium	0.0032	0.0030		mg/L	1	1/23/2007 10:29:22 AM
Chromium	0.0030	0.0030	B	mg/L	1	1/23/2007 10:29:22 AM
Lead	< 0.0050	0.0050		mg/L	1	1/23/2007 10:29:22 AM
Selenium	< 0.0110	0.0110		mg/L	1	1/23/2007 10:29:22 AM
Silver	< 0.0200	0.0200		mg/L	1	1/23/2007 10:29:22 AM

<b>Qualifiers:</b>	ND - Not Detected at the Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	R - RPD outside accepted precision limits
	B - Analyte detected in the associated Method Blank	E - Value above Upper Quantitation Limit - UQL
	* - Value exceeds Maximum Contaminant Level	

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MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

CLIENT: Industrial Ecosystems, Inc.  
 Work Order: 0701018  
 Project: Red Willow / McElvain Compressor

## ANALYTICAL QC SUMMARY REPORT

TestCode: 1311\_HG

Sample ID: MB_1556	SampType: MBLK	TestCode: 1311_HG	Units: mg/L	Prep Date: 1/23/2007	Run ID: AA_070123A						
Client ID: ZZZZZ	Batch ID: 1556	TestNo: SW7470	(SW7470)	Analysis Date: 1/23/2007	SeqNo: 124366						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	< 0.00200	0.00200									

Sample ID: LCS_1556	SampType: LCS	TestCode: 1311_HG	Units: mg/L	Prep Date: 1/23/2007	Run ID: AA_070123A						
Client ID: ZZZZZ	Batch ID: 1556	TestNo: SW7470	(SW7470)	Analysis Date: 1/23/2007	SeqNo: 124367						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01355	0.00200	0.0125	0	108	70	130	0	0		

Sample ID: LCSD_1556	SampType: LCSD	TestCode: 1311_HG	Units: mg/L	Prep Date: 1/23/2007	Run ID: AA_070123A						
Client ID: ZZZZZ	Batch ID: 1556	TestNo: SW7470	(SW7470)	Analysis Date: 1/23/2007	SeqNo: 124368						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01392	0.00200	0.0125	0	111	70	130	0.01355	2.73	20	

Sample ID: 0701018-001AMS	SampType: MS	TestCode: 1311_HG	Units: mg/L	Prep Date: 1/23/2007	Run ID: AA_070123A						
Client ID: 001MCEL	Batch ID: 1556	TestNo: SW7470	(SW7470)	Analysis Date: 1/23/2007	SeqNo: 124371						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01279	0.00200	0.0125	0	102	70	130	0	0		

Sample ID: 0701018-001AMSD	SampType: MSD	TestCode: 1311_HG	Units: mg/L	Prep Date: 1/23/2007	Run ID: AA_070123A						
Client ID: 001MCEL	Batch ID: 1556	TestNo: SW7470	(SW7470)	Analysis Date: 1/23/2007	SeqNo: 124372						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01305	0.00200	0.0125	0	104	70	130	0.01279	2.03	20	

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Industrial Ecosystems, Inc.  
 Work Order: 0701018  
 Project: Red Willow / McElvain Compressor

## ANALYTICAL QC SUMMARY REPORT

TestCode: 1311\_M

Sample ID: <b>MB_1551</b>	SampType: <b>MBLK</b>	TestCode: <b>1311_M</b>	Units: <b>mg/L</b>	Prep Date: <b>1/19/2007</b>	Run ID: <b>ICP_1_070123A</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>1551</b>	TestNo: <b>SW1311/6010 (SW3010A)</b>		Analysis Date: <b>1/23/2007</b>	SeqNo: <b>124353</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.01098	0.0180									J
Barium	0.03468	0.00300									
Cadmium	< 0.00300	0.00300									
Chromium	0.00398	0.00300									
Lead	0.003416	0.00500									J
Selenium	0.002394	0.0110									J
Silver	< 0.0200	0.0200									

Sample ID: LCS_1551	SampType: LCS	TestCode: 1311_M	Units: mg/L	Prep Date: 1/19/2007	Run ID: ICP_1_070123A						
Client ID: ZZZZZ	Batch ID: 1551	TestNo: SW1311/6010 (SW3010A)		Analysis Date: 1/23/2007	SeqNo: 124354						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	1.076	0.0180	1	0.01098	107	75	125	0	0		
Barium	1.004	0.00300	1	0.03468	96.9	75	125	0	0		B
Cadmium	1.156	0.00300	1	0	116	75	125	0	0		
Chromium	0.9768	0.00300	1	0.00398	97.3	75	125	0	0		B
Lead	1.011	0.00500	1	0.003416	101	75	125	0	0		
Selenium	1.109	0.0110	1	0.002394	111	75	125	0	0		
Silver	1.171	0.0200	1	0	117	75	125	0	0		

Sample ID: <b>LCSD_1551</b>	SampType: <b>LCSD</b>	TestCode: <b>1311_M</b>	Units: <b>mg/L</b>	Prep Date: <b>1/19/2007</b>	Run ID: <b>ICP_1_070123A</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>1551</b>	TestNo: <b>SW1311/6010 (SW3010A)</b>		Analysis Date: <b>1/23/2007</b>	SeqNo: <b>124355</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	1.09	0.0180	1	0.01098	108	75	125	1.076	1.26	20	
Barium	1.011	0.00300	1	0.03468	97.6	75	125	1.004	0.643	20	B
Cadmium	1.19	0.00300	1	0	119	75	125	1.156	2.92	20	
Chromium	1.001	0.00300	1	0.00398	99.7	75	125	0.9768	2.48	20	B
Lead	1.033	0.00500	1	0.003416	103	75	125	1.011	2.22	20	
Selenium	1.149	0.0110	1	0.002394	115	75	125	1.109	3.58	20	
Silver	1.189	0.0200	1	0	119	75	125	1.171	1.53	20	

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Industrial Ecosystems, Inc.  
**Work Order:** 0701018  
**Project:** Red Willow / McElvain Compressor

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 1311\_M

Sample ID: 0701018-001ADMS	SampType: MS	TestCode: 1311_M	Units: mg/L	Prep Date: 1/19/2007	Run ID: ICP_1_070123A						
Client ID: 001MCEL	Batch ID: 1551	TestNo: SW1311/6010 (SW3010A)		Analysis Date: 1/23/2007	SeqNo: 124358						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	1.091	0.0180	1	0	109	75	125	0	0		
Barium	2.963	0.00300	1	1.895	107	75	125	0	0		B
Cadmium	1.19	0.00300	1	0.003204	119	75	125	0	0		
Chromium	0.932	0.00300	1	0.003035	92.9	75	125	0	0		B
Lead	1.033	0.00500	1	0.00437	103	75	125	0	0		
Selenium	1.134	0.0110	1	0	113	75	125	0	0		
Silver	1.211	0.0200	1	0	121	75	125	0	0		

Sample ID: 0701018-001ADMSD	SampType: MSD	TestCode: 1311_M	Units: mg/L	Prep Date: 1/19/2007	Run ID: ICP_1_070123A						
Client ID: 001MCEL	Batch ID: 1551	TestNo: SW1311/6010 (SW3010A)		Analysis Date: 1/23/2007	SeqNo: 124359						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	1.094	0.0180	1	0	109	75	125	1.091	0.303	20	
Barium	2.855	0.00300	1	1.895	96	75	125	2.963	3.72	20	B
Cadmium	1.187	0.00300	1	0.003204	118	75	125	1.19	0.245	20	
Chromium	0.9346	0.00300	1	0.003035	93.2	75	125	0.932	0.275	20	B
Lead	1.023	0.00500	1	0.00437	102	75	125	1.033	0.951	20	
Selenium	1.12	0.0110	1	0	112	75	125	1.134	1.23	20	
Silver	1.208	0.0200	1	0	121	75	125	1.211	0.230	20	

Sample ID: 0701018-001AD	SampType: DUP	TestCode: 1311_M	Units: mg/L	Prep Date: 1/19/2007	Run ID: ICP_1_070123A						
Client ID: 001MCEL	Batch ID: 1551	TestNo: SW1311/6010 (SW3010A)		Analysis Date: 1/23/2007	SeqNo: 124357						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	< 0.0180	0.0180	0	0	0	0	0	0	0	20	
Barium	2.062	0.00300	0	0	0	0	0	1.895	8.44	20	B
Cadmium	0.003483	0.00300	0	0	0	0	0	0.003204	8.35	20	
Chromium	0.003705	0.00300	0	0	0	0	0	0.003035	19.9	20	B
Lead	0.004616	0.00500	0	0	0	0	0	0.00437	0	20	J
Selenium	< 0.0110	0.0110	0	0	0	0	0	0	0	20	
Silver	< 0.0200	0.0200	0	0	0	0	0	0	0	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

iiiná bá

### Sample Receipt Checklist

Client Name: **IND1003**

Date and Time Received:

**1/12/2007 1:10:00 PM**

Work Order Number: **0701018**

Received by: jle

Checklist completed by: J. Engle 1/12/07  
Signature Date

Reviewed by: jle 1/15/07  
Initials Date

Matrix:

Carrier name: Industrial Ecosystems

Shipping container/cooler in good condition?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	13°C
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Adjusted? \_\_\_\_\_ Checked by: \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted: \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: SAMPLE HAND CARRIED. HAD BEEN STORED IN A COOLER PRIOR TO DELIVERY.

Corrective Action: \_\_\_\_\_

QA / QC Package: ☐ Std ☐ Level 4 ☐ Other: \_\_\_\_\_

Project Name:

McEivain Compressor

Project #:

**Project Manager:**

Project Manager:  
Thomas Connell  
Hoei Davis.

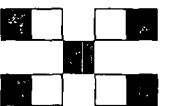
**Sampler:** →

0335

Sample Temperature:

	BTEX + MTBE + TMB's (8021)
	BTEX + MTBE + TPH (Gasoline Only)
	TPH Method 8015B (Gas/Diesel)
	TPH (Method 418.1)
	EDB (Method 504.1)
	EDC (Method 8021)
	8310 (PNA or PAH)
	RCRA 8 Metals
	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )
	8081 Pesticides / PCB's (8082)
	8260B (VOA)
	8270 (Semi-VOA)
X	TCLP Metals
07/07/00	
	Air Bubbles or Headspace (Y or N)

ANALYSIS REQUEST



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**  
4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87109  
Tel. 505.345.3975 Fax 505.345.4107  
www.hallenvironmental.com

112A GA # 07010718

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: BP America Production
Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>		5. Originating Site: Florance 27
2. Management Facility Destination: JFJ Landfarm L.L.C.		6. Transporter:
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499		8. State: NM
7. Location of Material (Street Address or ULSTR) UL,LS-26,T-29N,R-9W		
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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:** Unknown drums left on location. Had hazardous waste and pesticide/herbicide analysis done, results are non-hazardous & no pesticide/herbicide. Mixed with soil on location. Analysis performed: RCI8260, 8 RCRA Metals, 8260B, Pesticides/Herbicides

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

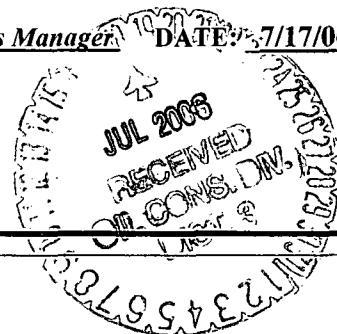
SIGNATURE Joel Owens  
Waste Management Facility Authorized Agent

TITLE: Operations Manager DATE: 7/17/06

TYPE OR PRINT NAME: Joel Owens

TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com



(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

DUPLICATE





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

 Joanna Prukop  
Cabinet Secretary

**Lori Wrotenbery**

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address BP America Production Company 200 Energy Court Farmington, NM 87401	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name):  Florange 27	Location of the Waste (Street address &/or ULSTR):  UL- <u>L</u> S- <u>26</u> T- <u>29N</u> R- <u>9W</u> or attach list
Attach list of originating sites as appropriate	Street Address:
4. Source and Description of Waste Unknown drums left on location. Had hazardous waste and pesticide/ herbicide analysis done, results are non-hazardous and no pesticide/ herbicide. Mixed with soil on location.	

I, Kevin Hanford representative for:  
Print Name

BP America 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) [Signature]

 Phone Contact: 505-326-9279

 Title: FEC

 P.O# / Pay key No: ZDWB07EMII

 Date: 7/17/06

# CHAIN OF CUSTODY RECORD

14928

Jul-17-2006 06:55am From-BP

Client / Project Name <b>BLALL/BP</b>			Project Location <b>FLORANCE 27</b>		ANALYSIS / PARAMETERS								
Sampler: <b>J.C. - Blgg</b>			Client No. <b>94034-010</b>		No. of Containers	RCI						Remarks	
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix									
<del>DRUM #1</del>	<del>6/17/05</del>	<del>1345</del>	<del>34688</del>	<del>LIQUID</del>	<del>1</del>	<del>X</del>						<del>GRAB SAMPLER</del>	
DRUM #2	"	1350	34689	"	1	X						"	
DRUM #3	"	1355	34690	"	1	X						"	
Relinquished by: (Signature) <b>J.C. - Blgg</b>			Date <b>10/18/05</b>	Time <b>0845</b>	Received by: (Signature) <b>Christine M. Walker</b>			Date <b>10/18/05</b>	Time <b>845</b>				
Relinquished by: (Signature)					Received by: (Signature)								
Relinquished by: (Signature)					Received by: (Signature)								
<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615										Sample Receipt			
											Y	N	N/A
										Received Intact	✓		
										Cool - Ice/Blue Ice	✓		

505-326-9262

T-324 P-002

F-500

## 14929

**Jul-17-2006 06:55am From-BF**

**505-326-8262**

T-324 P.003/020 F-500

san juan reproduction 578-129

Client: Envirotech

Other:

QA/QC Package: ☐

Blaug, B P Florence 27

Address: 5701 Hwy 147

Project #:

Farmington, N.M. 87410

94034-010

Email:

### Project Manager:

da.jemaneenvirotech-inc.com

~~Derivalement~~

Phone #: 505-632-0615

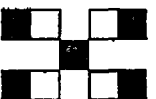
Sample: 5. Blass

Fax #: 505-632-1865

**Sample Temperature:**

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative		HEAL No.
					HgCl <sub>2</sub>	HNO <sub>3</sub>	
04/17/05	1345	Water	34684	1-500 $\mu$ L 2 ALQA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0510184
10/17/05	1350	1	34685	1-500 $\mu$ L 2 ALQA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
04/17/05	1355	1	34686	1-500 $\mu$ L 3 ALQA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3

						BTEX + MTBE + TMB's (8021)
						BTEX + MTBE + TPH (Gasoline Only)
						TPH Method 8015B (Gas/Diesel)
						TPH (Method 418.1)
						EDB (Method 504.1)
						EDC (Method 8021)
						8310 (PNA or PAH)
			<	<	<	RCRA 8 Metals
						Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )
						8081 Pesticides / PCB's (8082)
			<	<	<	8260B (VOA)
						8270 (Semi-VOA)
						Air Bubbles or Headspace (Y or N)



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**  
4901 Hawkins NE, Suite B7  
Albuquerque, New Mexico 87109  
Tel. 505.345.3975 Fax 505.345.4107  
[www.hallenvironmental.com](http://www.hallenvironmental.com)

## ANALYSIS REQUEST

Jul-17-2006 06:56am From-BP 505-326-9262 T-324 P.004/020 F-500

Refurnished By: (Sugumar)  
Date: 19/05  
Time: 9:20  
Attenuator: M. W. W. W.

Received By: Signature: \_\_\_\_\_

Prasanna:

21

1

## Delivered On Request

**Deutsche Bau (Neue)**

15

二

2000

162

Please email results, not fax

## Hall Environmental Analysis Laboratory

Date: 07-Nov-05

CLIENT: Envirotech  
 Lab Order: 0510188  
 Project: Blagg/BP Florance 27  
 Lab ID: 0510188-01A

Client Sample ID: 34684  
 Tag Number:  
 Collection Date: 10/17/2005 1:45:00 PM  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	ND	50		µg/L	50	10/24/2005
Toluene	ND	50		µg/L	50	10/24/2005
Ethylbenzene	ND	50		µg/L	50	10/24/2005
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	10/24/2005
1,2,4-Trimethylbenzene	ND	50		µg/L	50	10/24/2005
1,3,5-Trimethylbenzene	ND	50		µg/L	50	10/24/2005
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	10/24/2005
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	10/24/2005
Naphthalene	180	100		µg/L	50	10/24/2005
1-Methylnaphthalene	490	200		µg/L	50	10/24/2005
2-Methylnaphthalene	570	200		µg/L	50	10/24/2005
Acetone	ND	500		µg/L	50	10/24/2006
Bromobenzene	ND	50		µg/L	50	10/24/2005
Bromochloromethane	ND	50		µg/L	50	10/24/2005
Bromodichloromethane	ND	50		µg/L	50	10/24/2005
Bromoform	ND	50		µg/L	50	10/24/2005
Bromomethane	ND	100		µg/L	50	10/24/2005
2-Butanone	ND	500		µg/L	50	10/24/2005
Carbon disulfide	ND	500		µg/L	50	10/24/2005
Carbon Tetrachloride	ND	100		µg/L	50	10/24/2005
Chlorobenzene	ND	50		µg/L	50	10/24/2005
Chloromethane	ND	100		µg/L	50	10/24/2005
Chloroform	ND	50		µg/L	50	10/24/2005
Chloromethane	ND	50		µg/L	50	10/24/2005
2-Chlorotoluene	ND	50		µg/L	50	10/24/2005
4-Chlorotoluene	ND	50		µg/L	50	10/24/2005
cis-1,2-DCE	ND	50		µg/L	50	10/24/2005
cis-1,3-Dichloropropene	ND	50		µg/L	50	10/24/2005
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	10/24/2005
Dibromochloromethane	ND	50		µg/L	50	10/24/2005
Dibromomethane	ND	100		µg/L	50	10/24/2005
1,2-Dichlorobenzene	ND	50		µg/L	50	10/24/2005
1,3-Dichlorobenzene	ND	50		µg/L	50	10/24/2005
1,4-Dichlorobenzene	ND	50		µg/L	50	10/24/2005
Dichlorodifluoromethane	ND	50		µg/L	50	10/24/2005
1,1-Dichloroethane	ND	50		µg/L	50	10/24/2005
1,1-Dichloroethene	ND	50		µg/L	50	10/24/2005
1,2-Dichloropropane	ND	50		µg/L	50	10/24/2005
1,3-Dichloropropane	ND	50		µg/L	50	10/24/2005
2,2-Dichloropropane	ND	50		µg/L	50	10/24/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

**Hall Environmental Analysis Laboratory**

Date: 07-Nov-05

CLIENT: Envirotech  
 Lab Order: 0510188  
 Project: Blagg/BP Florance 27  
 Lab ID: 0510188-01A

Client Sample ID: 34684  
 Tag Number:  
 Collection Date: 10/17/2005 1:45:00 PM  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1-Dichloropropene	ND	50		µg/L	50	10/24/2005
Hexachlorobutadiene	ND	50		µg/L	50	10/24/2005
2-Hexanone	ND	500		µg/L	50	10/24/2005
Isopropylbenzene	ND	50		µg/L	50	10/24/2005
4-Isopropyltoluene	ND	50		µg/L	50	10/24/2005
4-Methyl-2-pentanone	ND	500		µg/L	50	10/24/2005
Methylene Chloride	ND	150		µg/L	50	10/24/2005
n-Butylbenzene	ND	50		µg/L	50	10/24/2005
n-Propylbenzene	ND	50		µg/L	50	10/24/2005
sec-Butylbenzene	ND	50		µg/L	50	10/24/2005
Styrene	ND	50		µg/L	50	10/24/2005
tert-Butylbenzene	ND	50		µg/L	50	10/24/2005
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	10/24/2005
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	10/24/2005
Tetrachloroethene (PCE)	ND	50		µg/L	50	10/24/2005
trans-1,2-DCE	ND	50		µg/L	50	10/24/2005
trans-1,3-Dichloropropene	ND	50		µg/L	50	10/24/2005
1,2,3-Trichlorobenzene	ND	50		µg/L	50	10/24/2005
1,2,4-Trichlorobenzene	ND	50		µg/L	50	10/24/2005
1,1,1-Trichloroethane	ND	50		µg/L	50	10/24/2005
1,1,2-Trichloroethane	ND	50		µg/L	50	10/24/2005
Trichloroethene (TCE)	ND	50		µg/L	50	10/24/2005
Trichlorofluoromethane	ND	50		µg/L	50	10/24/2005
1,2,3-Trichloropropane	ND	100		µg/L	50	10/24/2005
Vinyl chloride	ND	50		µg/L	50	10/24/2005
Xylenes, Total	ND	50		µg/L	50	10/24/2005
Sum: 1,2-Dichloroethane-d4	94.7	89.9-130		%REC	50	10/24/2005
Sum: 4-Bromofluorobenzene	98.5	71.2-123		%REC	50	10/24/2005
Sum: Dibromofluoromethane	93.1	73.9-134		%REC	50	10/24/2005
Sum: Toluene-d8	100	81.9-122		%REC	50	10/24/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

**Hall Environmental Analysis Laboratory**

Date: 07-Nov-05

CLIENT: Envirotech  
 Lab Order: 0510188  
 Project: Blagg/BP Florance 27  
 Lab ID: 0510188-018

Client Sample ID: 34684  
 Tag Number:  
 Collection Date: 10/17/2005 1:45:00 PM  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 245.1: MERCURY</b>						
Mercury	ND	0.00020		mg/L	1	Analyst: CMC 10/26/2005
<b>EPA 6010: TOTAL RECOVERABLE METALS</b>						
Arsenic	ND	0.020		mg/L	1	Analyst: NMO 10/24/2005 3:34:19 PM
Barium	0.061	0.020		mg/L	1	10/24/2005 3:34:19 PM
Cadmium	0.0060	0.0020		mg/L	1	10/24/2005 3:34:19 PM
Chromium	0.012	0.0060		mg/L	1	10/24/2005 3:34:19 PM
Lead	0.12	0.0050		mg/L	1	10/24/2005 3:34:19 PM
Selenium	ND	0.050		mg/L	1	10/24/2005 3:34:19 PM
Silver	ND	0.0050		mg/L	1	10/24/2005 3:34:19 PM

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

# ENVIROTECH LABS

**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****SUSPECTED HAZARDOUS  
WASTE ANALYSIS**

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	Drum #2	Date Reported:	10-18-06
Lab ID#:	34689	Date Sampled:	10-17-05
Sample Matrix:	Liquid	Date Received:	10-18-05
Preservative:	Cool	Date Analyzed:	10-18-05
Condition:	Cool and Intact	Chain of Custody:	14928

Parameter	Result
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IGNITABILITY:	Negative
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CORROSIVITY:	Negative	pH = 6.82
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REACTIVITY:	Negative
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**RCRA Hazardous Waste Criteria**

Parameter	Hazardous Waste Criterion
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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.)
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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)
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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)
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Reference:	40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.
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Comments:	Florance 27 Grab Sample.
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M Bruce  
Analyst

Christine M. Wooten  
Review



# ENVIROTECH LABS

**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****SUSPECTED HAZARDOUS  
WASTE ANALYSIS**

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	Drum #3	Date Reported:	10-18-06
Lab ID#:	34690	Date Sampled:	10-17-05
Sample Matrix:	Liquid	Date Received:	10-18-05
Preservative:	Cool	Date Analyzed:	10-18-05
Condition:	Cool and Intact	Chain of Custody:	14928

Parameter	Result
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**IGNITABILITY:** Negative**CORROSIVITY:** Negative pH = 5.26**REACTIVITY:** Negative**RCRA Hazardous Waste Criteria**

Parameter	Hazardous Waste Criterion
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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.)
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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)
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Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Florance 27 Grab Sample.

May Bruce  
Analyst

Christine M. Woodley  
Review

## Hall Environmental Analysis Laboratory

Date: 07-Nov-05

CLIENT: Envirotech  
 Lab Order: 0510188  
 Project: Blagg/BP Florence 27  
 Lab ID: 0510188-02A

Client Sample ID: 34685  
 Tag Number:  
 Collection Date: 10/17/2005 1:50:00 PM  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	ND	10		µg/L	10	10/25/2005
Toluene	ND	10		µg/L	10	10/25/2005
Ethylbenzene	ND	10		µg/L	10	10/25/2005
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	10/25/2005
1,2,4-Trimethylbenzene	ND	10		µg/L	10	10/25/2005
1,3,5-Trimethylbenzene	ND	10		µg/L	10	10/25/2005
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	10/25/2005
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	10/25/2005
Naphthalene	ND	20		µg/L	10	10/25/2005
1-Methylnaphthalene	ND	40		µg/L	10	10/25/2005
2-Methylnaphthalene	ND	40		µg/L	10	10/25/2005
Acetone	ND	100		µg/L	10	10/25/2005
Bromobenzene	ND	10		µg/L	10	10/25/2005
Bromochloromethane	ND	10		µg/L	10	10/25/2005
Bromodichloromethane	ND	10		µg/L	10	10/25/2005
Bromoform	ND	10		µg/L	10	10/25/2005
Bromomethane	ND	20		µg/L	10	10/25/2005
2-Butanone	ND	100		µg/L	10	10/25/2005
Carbon disulfide	ND	100		µg/L	10	10/25/2005
Carbon Tetrachloride	ND	20		µg/L	10	10/25/2005
Chlorobenzene	ND	10		µg/L	10	10/25/2005
Chloroethane	ND	20		µg/L	10	10/25/2005
Chloroform	ND	10		µg/L	10	10/25/2005
Chloromethane	ND	10		µg/L	10	10/25/2005
2-Chlorotoluene	ND	10		µg/L	10	10/25/2005
4-Chlorotoluene	ND	10		µg/L	10	10/25/2005
cis-1,2-DCE	ND	10		µg/L	10	10/25/2005
cis-1,3-Dichloropropene	ND	10		µg/L	10	10/25/2005
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	10/25/2005
Dibromochloromethane	ND	10		µg/L	10	10/25/2005
Dibromomethane	ND	20		µg/L	10	10/25/2005
1,2-Dichlorobenzene	ND	10		µg/L	10	10/25/2005
1,3-Dichlorobenzene	ND	10		µg/L	10	10/25/2005
1,4-Dichlorobenzene	ND	10		µg/L	10	10/25/2005
Dichlorodifluoromethane	ND	10		µg/L	10	10/25/2005
1,1-Dichloroethane	ND	10		µg/L	10	10/25/2005
1,1-Dichloroethene	ND	10		µg/L	10	10/25/2005
1,2-Dichloropropane	ND	10		µg/L	10	10/25/2005
1,3-Dichloropropane	ND	10		µg/L	10	10/25/2005
2,2-Dichloropropane	ND	10		µg/L	10	10/25/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

## Hall Environmental Analysis Laboratory

Date: 07-Nov-05

CLIENT: Envirotech  
 Lab Order: 0510188  
 Project: Blagg/BP Florance 27  
 Lab ID: 0510188-02A

Client Sample ID: 34685  
 Tag Number:  
 Collection Date: 10/17/2005 1:50:00 PM  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1-Dichloropropene	ND	10		µg/L	10	10/25/2005
Hexachlorobutadiene	ND	10		µg/L	10	10/25/2005
2-Hexanone	ND	100		µg/L	10	10/25/2005
Isopropylbenzene	ND	10		µg/L	10	10/25/2005
4-Isopropyltoluene	ND	10		µg/L	10	10/25/2005
4-Methyl-2-pentanone	ND	100		µg/L	10	10/25/2005
Methylene Chloride	ND	30		µg/L	10	10/25/2005
n-Butylbenzene	ND	10		µg/L	10	10/25/2005
n-Propylbenzene	ND	10		µg/L	10	10/25/2005
sec-Butylbenzene	ND	10		µg/L	10	10/25/2005
Styrene	ND	10		µg/L	10	10/25/2005
tert-Butylbenzene	ND	10		µg/L	10	10/25/2005
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	10/25/2005
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	10/25/2005
Tetrachloroethene (PCE)	ND	10		µg/L	10	10/25/2005
trans-1,2-DCE	ND	10		µg/L	10	10/25/2005
trans-1,3-Dichloropropene	ND	10		µg/L	10	10/25/2005
1,2,3-Trichlorobenzene	ND	10		µg/L	10	10/25/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	10	10/25/2005
1,1,1-Trichloroethane	ND	10		µg/L	10	10/25/2005
1,1,2-Trichloroethane	ND	10		µg/L	10	10/25/2005
Trichloroethene (TCE)	ND	10		µg/L	10	10/25/2005
Trichlorofluoromethane	ND	10		µg/L	10	10/25/2005
1,2,3-Trichloropropane	ND	20		µg/L	10	10/25/2005
Vinyl chloride	ND	10		µg/L	10	10/25/2005
Xylenes, Total	ND	10		µg/L	10	10/25/2005
Sum: 1,2-Dichloroethane-d4	106	69.9-130		%REC	10	10/25/2005
Sum: 4-Bromofluorobenzene	109	71.2-123		%REC	10	10/25/2005
Sum: Dibromofluoromethane	103	73.9-134		%REC	10	10/25/2005
Sum: Toluene-d8	98.7	81.9-122		%REC	10	10/25/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

**Hall Environmental Analysis Laboratory**

Date: 07-Nov-05

CLIENT: Envirotech

Client Sample ID: 34685

Lab Order: 0510188

Tag Number:

Project: Blagg/BP Florance 27

Collection Date: 10/17/2005 1:50:00 PM

Lab ID: 0510188-02B

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 245.1: MERCURY</b>						
Mercury	ND	0.00020		mg/L	1	Analyst: CMC 10/26/2005
<b>EPA 6010: TOTAL RECOVERABLE METALS</b>						
Arsenic	ND	0.020		mg/L	1	Analyst: NMO 10/24/2005 3:38:21 PM
Barium	0.023	0.020		mg/L	1	10/24/2005 3:38:21 PM
Cadmium	ND	0.0020		mg/L	1	10/24/2005 3:38:21 PM
Chromium	0.031	0.0060		mg/L	1	10/24/2005 3:38:21 PM
Lead	0.019	0.0050		mg/L	1	10/24/2005 3:38:21 PM
Selenium	ND	0.050		mg/L	1	10/24/2005 3:38:21 PM
Silver	ND	0.0050		mg/L	1	10/24/2005 3:38:21 PM

**Qualifiers:**

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

\* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

## Hall Environmental Analysis Laboratory

Date: 07-Nov-05

CLIENT: Envirotech  
 Lab Order: 0510188  
 Project: Blagg/BP Florance 27  
 Lab ID: 0510188-03A

Client Sample ID: 34686  
 Tag Number:  
 Collection Date: 10/17/2005 1:55:00 PM  
 Matrix: OIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	24		mg/Kg	10	10/26/2005
Toluene	ND	24		mg/Kg	10	10/26/2005
Ethylbenzene	ND	24		mg/Kg	10	10/26/2005
Methyl tert-butyl ether (MTBE)	ND	24		mg/Kg	10	10/26/2005
1,2,4-Trimethylbenzene	ND	24		mg/Kg	10	10/26/2005
1,3,5-Trimethylbenzene	ND	24		mg/Kg	10	10/26/2005
1,2-Dichloroethane (EDC)	ND	24		mg/Kg	10	10/26/2005
1,2-Dibromoethane (EDB)	ND	24		mg/Kg	10	10/26/2005
Naphthalene	ND	48		mg/Kg	10	10/26/2005
1-Methylnaphthalene	ND	96		mg/Kg	10	10/26/2005
2-Methylnaphthalene	ND	96		mg/Kg	10	10/26/2005
Acetone	ND	240		mg/Kg	10	10/26/2005
Bromobenzene	ND	24		mg/Kg	10	10/26/2005
Bromochloromethane	ND	24		mg/Kg	10	10/26/2005
Bromodichloromethane	ND	24		mg/Kg	10	10/26/2005
Bromoform	ND	24		mg/Kg	10	10/26/2005
Bromomethane	ND	24		mg/Kg	10	10/26/2005
2-Butanone	ND	240		mg/Kg	10	10/26/2005
Carbon disulfide	ND	240		mg/Kg	10	10/26/2005
Carbon Tetrachloride	ND	24		mg/Kg	10	10/26/2005
Chlorobenzene	ND	48		mg/Kg	10	10/26/2005
Chloroethane	ND	24		mg/Kg	10	10/26/2005
Chloroform	ND	24		mg/Kg	10	10/26/2005
Chloromethane	ND	24		mg/Kg	10	10/26/2005
2-Chlorotoluene	ND	24		mg/Kg	10	10/26/2005
4-Chlorotoluene	ND	24		mg/Kg	10	10/26/2005
cis-1,2-DCE	ND	24		mg/Kg	10	10/26/2005
cis-1,3-Dichloropropane	ND	24		mg/Kg	10	10/26/2005
1,2-Dibromo-3-chloropropane	ND	48		mg/Kg	10	10/26/2005
Dibromochloromethane	ND	48		mg/Kg	10	10/26/2005
Dibromomethane	ND	24		mg/Kg	10	10/26/2005
1,2-Dichlorobenzene	ND	24		mg/Kg	10	10/26/2005
1,3-Dichlorobenzene	ND	24		mg/Kg	10	10/26/2005
1,4-Dichlorobenzene	ND	24		mg/Kg	10	10/26/2005
Dichlorodifluoromethane	ND	24		mg/Kg	10	10/26/2005
1,1-Dichloroethane	ND	24		mg/Kg	10	10/26/2005
1,1-Dichloroethene	ND	24		mg/Kg	10	10/26/2005
1,2-Dichloropropane	ND	24		mg/Kg	10	10/26/2005
1,3-Dichloropropane	ND	24		mg/Kg	10	10/26/2005
2,2-Dichloropropane	ND	24		mg/Kg	10	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantization limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantization range

**Hall Environmental Analysis Laboratory**

Date: 07-Nov-05

CLIENT: Envirotech  
 Lab Order: 0510188  
 Project: Blagg/BP Florence 27  
 Lab ID: 0510188-03A

Client Sample ID: 34686  
 Tag Number:  
 Collection Date: 10/17/2005 1:55:00 PM  
 Matrix: OIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1-Dichloropropene	ND	24		mg/Kg	10	10/26/2005
Hexachlorobutadiene	ND	24		mg/Kg	10	10/26/2005
2-Hexanone	ND	240		mg/Kg	10	10/26/2005
Isopropylbenzene	ND	24		mg/Kg	10	10/26/2005
4-Isopropyltoluene	ND	24		mg/Kg	10	10/26/2005
4-Methyl-2-pentanone	ND	240		mg/Kg	10	10/26/2005
Methylene Chloride	ND	72		mg/Kg	10	10/26/2005
n-Butylbenzene	ND	24		mg/Kg	10	10/26/2005
n-Propylbenzene	ND	24		mg/Kg	10	10/26/2005
sec-Butylbenzene	ND	24		mg/Kg	10	10/26/2005
Styrene	ND	24		mg/Kg	10	10/26/2005
tert-Butylbenzene	ND	24		mg/Kg	10	10/26/2005
1,1,1,2-Tetrachloroethane	ND	24		mg/Kg	10	10/26/2005
1,1,2,2-Tetrachloroethane	ND	24		mg/Kg	10	10/26/2005
Tetrachloroethene (PCE)	ND	24		mg/Kg	10	10/26/2005
trans-1,2-DCE	ND	24		mg/Kg	10	10/26/2005
trans-1,3-Dichloropropene	ND	24		mg/Kg	10	10/26/2005
1,2,3-Trichlorobenzene	ND	24		mg/Kg	10	10/26/2005
1,2,4-Trichlorobenzene	ND	24		mg/Kg	10	10/26/2005
1,1,1-Trichloroethane	ND	24		mg/Kg	10	10/26/2005
1,1,2-Trichloroethane	ND	24		mg/Kg	10	10/26/2005
Trichloroethene (TCE)	ND	24		mg/Kg	10	10/26/2005
Trichlorofluoromethane	ND	24		mg/Kg	10	10/26/2005
1,2,3-Trichloropropane	ND	48		mg/Kg	10	10/26/2005
Vinyl chloride	ND	24		mg/Kg	10	10/26/2005
Xylenes, Total	ND	24		mg/Kg	10	10/26/2005
Sum: 1,2-Dichloroethane-d4	99.8	80-120		%REC	10	10/26/2005
Sum: 4-Bromofluorobenzene	110	80-120		%REC	10	10/26/2005
Sum: Dibromofluoromethane	105	80-120		%REC	10	10/26/2005
Sum: Toluene-d8	99.6	80-120		%REC	10	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 \* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range

**Hall Environmental Analysis Laboratory**

Date: 07-Nov-05

CLIENT: Envirotech

Client Sample ID: 34686

Lab Order: 0510188

Tag Number:

Project: Blagg/BP Florence 27

Collection Date: 10/17/2005 1:55:00 PM

Lab ID: 0510188-03B

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 245.1: MERCURY</b>						
Mercury	ND	0.00020		mg/L	1	Analyst: CMC 10/28/2005
<b>EPA 6010: TOTAL RECOVERABLE METALS</b>						
Arsenic	ND	0.020		mg/L	1	Analyst: NMO 10/24/2005 3:41:17 PM
Barium	ND	0.020		mg/L	1	10/24/2005 3:41:17 PM
Cadmium	ND	0.0020		mg/L	1	10/24/2005 3:41:17 PM
Chromium	ND	0.0060		mg/L	1	10/24/2005 3:41:17 PM
Lead	ND	0.0050		mg/L	1	10/24/2005 3:41:17 PM
Selenium	ND	0.050		mg/L	1	10/24/2005 3:41:17 PM
Silver	ND	0.0050		mg/L	1	10/24/2005 3:41:17 PM

**Qualifiers:**

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

\* - Value exceeds Maximum Contaminant Level 10/18

Page 9 of 9

# CHAIN OF CUSTODY RECORD

15434

Jul-17-2006 06:59am From-BP

Client / Project Name <b>BLAGG</b>			Project Location <b>BP-FLORANCE 27</b>		ANALYSIS / PARAMETERS										
Sampler: <b>J.C. Blagg</b>			Client No. <b>94034-010</b>		No. of Containers <b>1</b>	Pesticides + Herbicides <b>X</b>						Remarks			
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix											
<b>SOIL STOCKPILE</b>	<b>1/26/06</b>	<b>1141</b>	<b>35912</b>	<b>SOIL</b>								<b>5-Point Composite</b>			
Relinquished by: (Signature) <b>J.C. Blagg</b>			Date <b>1/26/06</b>	Time <b>1320</b>	Received by: (Signature) <b>Demetrius E. Aprian</b>			Date <b>1/26/06</b>	Time <b>1320</b>						
Relinquished by: (Signature)					Received by: (Signature)										
Relinquished by: (Signature)					Received by: (Signature)										
<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615												Sample Receipt			
													Y	N	N/A
												Received Intact	<b>L</b>		
												Cool - Ice/Blue Ice	<b>✓</b>		

505-326-8262

T-324 P 017/020 F-500



## Hall Environmental Analysis Laboratory

Date: 21-Feb-06

CLIENT: Envirotech  
 Lab Order: 0601282  
 Project: Blagg  
 Lab ID: 0601282-01

Client Sample ID: 35912/Soil Sample  
 Collection Date: 1/26/2006 11:41:00 AM  
 Date Received: 1/27/2006  
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8081: PESTICIDES						Analyst: BL
4,4'-DDD	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
4,4'-DDE	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
4,4'-DDT	ND	0.0040		mg/Kg	1	2/7/2006 10:35:29 PM
Aldrin	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
alpha-BHC	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
beta-BHC	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Chlordane	ND	0.25		mg/Kg	1	2/7/2006 10:35:29 PM
delta-BHC	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Dieldrin	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Endosulfan I	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Endosulfan II	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Endosulfan sulfate	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Endrin	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Endrin aldehyde	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
gamma-BHC	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Heptachlor	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Heptachlor epoxide	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Methoxychlor	ND	0.0020		mg/Kg	1	2/7/2006 10:35:29 PM
Toxaphene	ND	0.25		mg/Kg	1	2/7/2006 10:35:29 PM
Surr, Decachlorobiphenyl	84.0	56.9-154		%REC	1	2/7/2006 10:35:29 PM
Surr, Tetrachloro-m-xylene	106	51.5-116		%REC	1	2/7/2006 10:35:29 PM

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit



ENERGY LABORATORIES, INC. • P.O. Box 30916 • 1120 South 27th Street • Billings, MT 59107-0916  
800-735-4489 • 406-252-6325 • 406-252-6069 fax • [el@energylab.com](mailto:el@energylab.com)

## LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque

Project: 0601282

Lab ID: B06020166-001

Client Sample ID: 0601282-01A

Report Date: 02/10/06

Collection Date: 01/26/06 11:41

Date Received: 02/02/06

Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL CHARACTERISTICS							
Moisture	14	wt%		0.01		SW3550A	02/07/06 09:37 / sms
HERBICIDES, CHLORINATED							
2,4,5-T	ND	mg/kg		0.0040		SW8151A	02/07/06 22:10 / jkh
2,4,5-TP (Silvex)	ND	mg/kg		0.0040		SW8151A	02/07/06 22:10 / jkh
2,4-D	ND	mg/kg		0.020		SW8151A	02/07/06 22:10 / jkh
2,4-DB	ND	mg/kg		0.050		SW8151A	02/07/06 22:10 / jkh
3,5-Dichlorobenzoic Acid	ND	mg/kg		0.010		SW8151A	02/07/06 22:10 / jkh
4-Nitrophenol	ND	mg/kg		0.010		SW8151A	02/07/06 22:10 / jkh
Aclfluorfen	ND	mg/kg		0.010		SW8151A	02/07/06 22:10 / jkh
Bentazon	ND	mg/kg		0.050		SW8151A	02/07/06 22:10 / jkh
Chloramben	ND	mg/kg		0.010		SW8151A	02/07/06 22:10 / jkh
Dacihal	ND	mg/kg		0.020		SW8151A	02/07/06 22:10 / jkh
Dalapon	ND	mg/kg		0.050		SW8151A	02/07/06 22:10 / jkh
Dicamba	ND	mg/kg		0.0050		SW8151A	02/07/06 22:10 / jkh
Dichlorprop	ND	mg/kg		0.020		SW8151A	02/07/06 22:10 / jkh
Dinoseb	ND	mg/kg		0.020		SW8151A	02/07/06 22:10 / jkh
MCPA	ND	mg/kg		4.0		SW8151A	02/07/06 22:10 / jkh
MCPP	ND	mg/kg		4.0		SW8151A	02/07/06 22:10 / jkh
Pentachlorophenol	ND	mg/kg		0.0020		SW8151A	02/07/06 22:10 / jkh
Picloram	ND	mg/kg		0.010		SW8151A	02/07/06 22:10 / jkh
Sum: DCAA	72.8	%REC			45-130	SW8151A	02/07/06 22:10 / jkh

Report: RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

# CHAIN-OF-CUSTODY RECORD

Client: Envirotek Inc

QA/QC Package:  
Std ☐ Level 4 ☐

Other:

Project Name:

Blag9

Address: 5796 US Hwy 14

Project #:

94034-010

Farmingdale NM

87401

Project Manager:

Dennis Ataman

Phone #: 505 632 0615

Sampler:

Jeff Blag9

Fax #: 505 632 1845

Sample Temperature:

17

Date: 1/24/06 Time: 1141 Matrix: Soil Sample I.D. No.:

Number/Volume

Preservative  
HCl, HNO<sub>3</sub>

HEAL No.

35912

1-Hz

06012821

Date: 1/27/06 Time: 900 Relinquished By: (Signature)

Received By: (Signature)

1/27/06

Date: 1/27/06 Time: 900 Relinquished By: (Signature)

Received By: (Signature)

Remarks:

Ref PO # 4141

Comments: 5 point Composite

## ANALYSIS REQUEST



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**  
4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87108  
Tel. 505.345.3975 Fax 505.345.4107  
www.hallenvironmental.com

<input type="checkbox"/>	BTEX + MTBE + TMB's (8021)
<input type="checkbox"/>	BTEX + MTBE + TPH (Gasoline Only)
<input type="checkbox"/>	TPH Method 8015B (Gas/Diesel)
<input type="checkbox"/>	TPH (Method 418.1)
<input type="checkbox"/>	EDB (Method 504.1)
<input type="checkbox"/>	EDC (Method 8021)
<input type="checkbox"/>	8310 (PNA or PAH)
<input type="checkbox"/>	HCRA 8 Metals
<input type="checkbox"/>	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )
<input checked="" type="checkbox"/>	8081 Pesticides, PCB's (8082)
<input type="checkbox"/>	8260B (VOA)
<input type="checkbox"/>	8270 (Semi-VOA)
<input checked="" type="checkbox"/>	8151 Herbicides
<input type="checkbox"/>	Air Bubbles or Headspace (Y or N)

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: X      Non-Exempt: <input type="checkbox"/>  Verbal Approval Received:      Yes <input type="checkbox"/> No: X	4. Generator: Largo Tank & Equipment, Inc.
2. Management Facility Destination: JFJ Landfarm L.L.C.	5. Originating Site: Largo Tank & Equipment, Inc.
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499	6. Transporter: Inland Trucking
7. Location of Material (Street Address or ULSTR) 5720 US Hwy 64, Farmington, New Mexico, 87401	8. State: NM
9. <u>Circle One</u> :  A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <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:** Hydrocarbon Impacted Soil from Old Earthen Pit. Pit used to Contain Rinsate from Steam Cleaning of Crude Oil Transport Trailers.

Estimated Volume 300 cu. Yds.      Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE       TITLE: Operations Manager      DATE: 5/17/06  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: JOEL OWENS      TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY:       TITLE: Enviro/spec      DATE: 5/17/06  
APPROVED BY: \_\_\_\_\_      TITLE: \_\_\_\_\_      DATE: \_\_\_\_\_



**COPY**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. <u>Generator Name and Address</u> Largo Tank & Equipment, Inc. 5720 US Hwy 64 Farmington, NM 87401	2. <u>Destination Name:</u> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. <u>Originating Site (name):</u> Largo Tank & Equipment, Inc.  Attach list of originating sites as appropriate	<u>Location of the Waste (Street address &amp;/or U.L.STR):</u>  UL- ___ S- ___ T- ___ R- ___ or attach list Street Address: 5720 US N Hwy. 64, Farmington
4. <u>Source and Description of Waste</u>  Hydrocarbon impacted soil <sup>from</sup> old earthen pit. Pit used to contain rinsate from steam cleaning of Crude oil transport trailers	

I, David Wagoner representative for:  
Print Name

Largo Tank & Equip't, 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): David Wagoner

Phone Contact: (505) 327-6281

Title: President

P.O# / Pay key No: \_\_\_\_\_

Date: 5/15/06

**Souder, Miller & Associates****Scientists & Engineers**

P.O. Box 2606

Farmington, NM 87499-2606

612 East Murray Drive

Farmington, NM 87401-6624

Phone (505) 325-5667

Fax (505) 327-1496

www.soudermiller.com

**Facsimile Transmittal Form**

To: Joel  
At: IEI  
Fax: 632-1876  
Date: May 12, 2006

From: Walter Gage *WG*  
At: Souder, Miller & Associates  
Fax: (505) 327-1496  
Pages: 12

**Re: Largo Tank Non-Exempt Soil Disposal**

Comments: Here are the analytical results for the excavated soil at Largo Tank and Equipment, 5720 US Hwy 64, Farmington, NM. We anticipate 350 to 400 yds<sup>3</sup> of soil to be disposed at your facility as non-exempt oilfield waste. The soil was analyzed for total petroleum hydrocarbons as gasoline, diesel, and motor oil by EPA method 8015; volatiles by EPA Method 8260; and the RCRA metals As, Ba, Cd, Cr, Pb, Se, and Ag by EPA method 6010 and Hg by EPA Method 7471.

<input type="checkbox"/> For Your Information	<input type="checkbox"/> As Requested	<input type="checkbox"/> For Approval	<input type="checkbox"/> Approved	<input type="checkbox"/> For Record
<input type="checkbox"/> Please Call to Discuss	<input type="checkbox"/> Please Follow Up	<input type="checkbox"/> Please Return Signed	<input type="checkbox"/> Please Retain	<input type="checkbox"/> No Original to Follow

**If you did not receive all pages listed or if pages are not legible,  
please immediately notify the sender by telephone.**

**If this has been sent to you in error, please destroy.**

**COPY**

612 E. Murray Drive  
Farmington, NM 87401

Off: (505) 327-1072  
Fax: (505) 327-1496

*iina' ba'*

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

May 12, 2006

Walter Gage  
Souder, Miller & Associates  
612 E. Murray Dr  
Farmington, NM 87401

TEL: (505) 325-5667  
FAX (505) 327-1496

RE: Largo Tank Yard- Near OWS

Order No.: 0604042

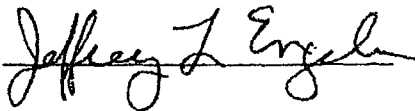
Dear Walter Gage:

iina' ba' received 1 sample on 4/28/2006 5:10:00 PM for the analyses presented in the following report.

This is a preliminary report that contains incomplete data or data that has not been fully validated. Caution should be exercised in the use of any data presented as final reported results may not reflect the values presented.

Should you have any questions regarding this certificate of analysis, please contact the laboratory at your convenience.

Report Approved By:



Jeffrey Engels  
Laboratory Director

Edwina Aspaas  
Quality Assurance Officer

This certificate of analysis and respective material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the person responsible for delivering this to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify the laboratory immediately at 505-327-1072.



**COPY**

MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

P.O. Box 2606  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496

*iina' ba'*

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

**iina' ba'**

Date: 12-May-06

---

**CLIENT:** Souder, Miller & Associates  
**Project:** Largo Tank Yard- Near OWS  
**Lab Order:** 0604042

---

**CASE NARRATIVE**

Samples were analyzed using the methods outlined in one or more of the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992.

Methods for the Determination of Metals in Environmental Samples, Supplement I, EPA-600/R-94/111,

May 1994.

Any quality control and/or data qualifiers associated with this laboratory order will be flagged in the analytical result page(s), the quality control summary report(s) or the sample receipt checklist.

Hall Environmental analyzed for EPA Method 8260 volatiles. Their report is attached.



P.O. Box 2606  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496

# iina' ba'

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

## ANALYTICAL REPORT

Date: 12-May-06

<b>CLIENT:</b>	Souder, Miller & Associates	<b>Client Sample Info:</b>	Largo Tank Yard- Near OWS
<b>Work Order:</b>	0604042	<b>Client Sample ID:</b>	Largo Tank I
<b>Project:</b>	Largo Tank Yard- Near OWS	<b>Collection Date:</b>	4/28/2006 4:30:00 PM
<b>Lab ID:</b>	0604042-001B	<b>Matrix:</b>	SOIL

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL AND OIL RANGE ORGANICS</b>		<b>SW8015B</b>		Analyst: jem		
T/R Hydrocarbons: C10-C22	9030	500		mg/Kg	20	5/8/2006
T/R Hydrocarbons: C22-C36	5890	1000		mg/Kg	20	5/8/2006
Surr: o-Terphenyl	178	46-148	S	%REC	20	5/8/2006
<b>GASOLINE RANGE ORGANICS</b>		<b>SW8015B (SW5035A)</b>		Analyst: jem		
T/R Hydrocarbons: C6-C10	164	2.50		mg/Kg	25	5/2/2006
Surr: Trifluorotoluene	78.4	70-130		%REC	25	5/2/2006
<b>ICP METALS, TOTAL</b>		<b>SW6010B (SW3050B)</b>		Analyst: Jle		
Arsenic	< 1.10	1.10		mg/Kg	1	5/9/2006 2:44:32 PM
Barium	83.0	0.255		mg/Kg	1	5/9/2006 12:06:39 PM
Cadmium	< 0.0849	0.0849		mg/Kg	1	5/9/2006 12:06:39 PM
Chromium	5.67	0.722		mg/Kg	1	5/9/2006 12:06:39 PM
Lead	9.97	0.722		mg/Kg	1	5/9/2006 12:06:39 PM
Selenium	< 1.36	1.36		mg/Kg	1	5/9/2006 2:44:32 PM
Silver	< 0.297	0.297		mg/Kg	1	5/9/2006 2:44:32 PM
<b>MERCURY, TOTAL</b>		<b>SW7471 (SW7471)</b>		Analyst: jem		
Mercury	< 0.199	0.199		mg/Kg	1	5/2/2006

Qualifiers: ND - Not Detected at the Practical Quantitation Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below Practical Quantitation Limit R - PB outside accepted precision limits  
B - Analyte detected in the associated Method Blank V - Value above upper Quantitation Limit - UQL  
H - Parameter exceeded Maximum Allowable Holding Time

Page 1 of 1

MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

CLIENT: Souder, Miller & Associates  
 Work Order: 0604042  
 Project: Largo Tank Yard- Near OWS

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B\_S

Sample ID 0604036-002APDS	SampType: PDS	TestCode: 6010B_S	Units: mg/Kg	Prep Date:	Run ID: ICP_1_060509A						
Client ID: ZZZZZ	Batch ID: 1260	TestNo: SW6010B	(SW3050B)	Analysis Date: 5/9/2006	SeqNo: 113220						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Barium	620.3	2.61	434.7	205.4	95.4	75	125	0	0		
--------	-------	------	-------	-------	------	----	-----	---	---	--	--

Sample ID	0604036-002APDS	SampType:	PDS	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:		Run ID:	ICP_1_060509B		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B		(SW3050B)	Analysis Date:	5/9/2006	SeqNo:	113454		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	397.7	11.3	434.7	0	91.5	75	125	0	0		
---------	-------	------	-------	---	------	----	-----	---	---	--	--

Sample ID	MB_1260	SampType:	MBLK	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509A		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B		(SW3050B)	Analysis Date:	5/9/2006	SeqNo:	113210		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Barium	0.07259	0.300									J
Cadmium	< 0.100	0.100									
Chromium	0.2757	0.851									J
Lead	0.2944	0.851									J

Sample ID	MB_1260	SampType:	MBLK	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509B		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/9/2006	SeqNo:	113446		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.5353	1.30									J
Selenium	0.3774	1.60									J

Sample ID	MB_1260	SampType:	MBLK	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060512A		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/12/2006	SeqNo:	113461		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Silver	0.1815	0.350									J
--------	--------	-------	--	--	--	--	--	--	--	--	---

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0604042  
**Project:** Largo Tank Yard- Near OWS

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_S

Sample ID	LCS_1260	SampType:	LCS	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509A
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/9/2006	SeqNo:	113211
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	48.14	0.300	49.93	0.07259	96.3	75	125	0	0		
Cadmium	51.2	0.0999	49.93	0	103	75	125	0	0		
Chromium	49.02	0.849	49.93	0.2757	97.6	75	125	0	0		
Lead	50	0.849	49.93	0.2944	99.5	75	125	0	0		

Sample ID	LCS_1260	SampType:	LCS	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509B
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/9/2006	SeqNo:	113447
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	48.28	1.30	49.93	0.5353	95.6	75	125	0	0		
Selenium	47.7	1.60	49.93	0.3774	94.8	75	125	0	0		

Sample ID	LCS_1260	SampType:	LCS	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060512A
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/12/2006	SeqNo:	113462
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	47.91	0.350	49.93	0.1815	95.6	75	125	0	0		

Sample ID	LCSD_1260	SampType:	LCSD	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509A
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/9/2006	SeqNo:	113212
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	46.07	0.290	48.41	0.07259	95	75	125	48.14	4.39	20	
Cadmium	48.48	0.0968	48.41	0	100	75	125	51.2	5.46	20	
Chromium	46.48	0.823	48.41	0.2757	95.4	75	125	49.02	5.32	20	
Lead	47.64	0.823	48.41	0.2944	97.8	75	125	50	4.84	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0604042  
**Project:** Largo Tank Yard- Near OWS

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_S

Sample ID	LCSD_1260	SampType:	LCSD	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509B		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/9/2006	SeqNo:	113448		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic		45.78		1.26	48.41	0.5353		93.5	75	125	48.28	5.31	20	
Selenium		44.24		1.55	48.41	0.3774		90.6	75	125	47.7	7.53	20	

Sample ID	LCSD_1260	SampType:	LCSD	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060512A		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/12/2006	SeqNo:	113463		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Silver		45.84		0.339	48.41	0.1815		94.3	75	125	47.91	4.42	20	
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Sample ID	0604036-002AMS	SampType:	MS	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509A		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/9/2006	SeqNo:	113215		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cadmium		40.52		0.0840	42	0		96.5	75	125	0	0		
Chromium		50.72		0.714	42	11.66		93	75	125	0	0		
Lead		119		0.714	42	82.72		86.4	75	125	0	0		

Sample ID	0604036-002AMS	SampType:	MS	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060509B		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/9/2006	SeqNo:	113450		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Selenium		36.77		1.34	42	0		87.5	75	125	0	0		
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Sample ID	0604036-002AMS	SampType:	MS	TestCode:	6010B_S	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	ICP_1_060512A		
Client ID:	ZZZZZ	Batch ID:	1260	TestNo:	SW6010B	(SW3050B)		Analysis Date:	5/12/2006	SeqNo:	113466		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Silver		40.73		0.294	42	0		97	75	125	0	0		
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**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0604042  
**Project:** Largo Tank Yard- Near OWS

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 6010B\_S

Sample ID	0604036-002AMSD	SampType: MSD	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 5/2/2006	Run ID: ICP_1_060509A					
Client ID: ZZZZZ	Batch ID: 1260	TestNo: SW6010B	(SW3050B)	Analysis Date: 5/9/2006	SeqNo: 113216						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	243	0.251	41.87	192.8	120	75	125	219.1	10.3	20	
Cadmium	40.8	0.0837	41.87	0	97.5	75	125	40.52	0.695	20	
Chromium	51.69	0.712	41.87	11.66	95.6	75	125	50.72	1.89	20	
Lead	126.2	0.712	41.87	82.72	104	75	125	119	5.89	20	

Sample ID	0604036-002AMSD	SampType: MSD	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 5/2/2006	Run ID: ICP_1_060509B					
Client ID: ZZZZZ	Batch ID: 1260	TestNo: SW6010B	(SW3050B)	Analysis Date: 5/9/2006	SeqNo: 113451						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	36.02	1.34	41.87	0	86	75	125	36.77	2.07	20	

Sample ID	0604036-002AMSD	SampType: MSD	TestCode: 6010B_S	Units: mg/Kg	Prep Date: 5/2/2006	Run ID: ICP_1_060512A					
Client ID: ZZZZZ	Batch ID: 1260	TestNo: SW6010B	(SW3050B)	Analysis Date: 5/12/2006	SeqNo: 113467						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	40.34	0.293	41.87	0	96.4	75	125	40.73	0.945	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0604042  
**Project:** Largo Tank Yard- Near OWS

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8015DO\_S

Sample ID	MBLK_060508A	SampType:	MBLK	TestCode:	8015DO_S	Units:	mg/Kg	Prep Date:	5/1/2006	Run ID:	GC-2_060508A
Client ID:	ZZZZZ	Batch ID:	R8094	TestNo:	SW8015B			Analysis Date:	5/8/2006	SeqNo:	113229
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

T/R Hydrocarbons: C10-C22

ND

25.0

T/R Hydrocarbons: C22-C36

ND

50.0

Surr: o-Terphenyl

27.65

0

40

0

69.1

46

148

0

0

Sample ID	LCS_060508A	SampType:	LCS	TestCode:	8015DO_S	Units:	mg/Kg	Prep Date:	5/1/2006	Run ID:	GC-2_060508A
Client ID:	ZZZZZ	Batch ID:	R8094	TestNo:	SW8015B			Analysis Date:	5/8/2006	SeqNo:	113231
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

T/R Hydrocarbons: C10-C22

489.4

25.0

501

0

97.7

70

130

0

0

T/R Hydrocarbons: C22-C36

446

50.0

502

0

88.8

70

130

0

0

Surr: o-Terphenyl

31.6

0

40

0

79

46

148

0

0

Sample ID	0604042-001BPS	SampType:	MS	TestCode:	8015DO_S	Units:	mg/Kg	Prep Date:		Run ID:	GC-2_060508A
Client ID:	Largo Tank I	Batch ID:	R8094	TestNo:	SW8015B			Analysis Date:	5/8/2006	SeqNo:	113237
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

T/R Hydrocarbons: C10-C22

566.7

25.0

602

0

94.1

70

130

0

0

T/R Hydrocarbons: C22-C36

487.8

50.0

523

0

93.3

70

130

0

0

Surr: o-Terphenyl

21.62

0

21

0

103

46

148

0

0

Sample ID	0604042-001BD	SampType:	DUP	TestCode:	8015DO_S	Units:	mg/Kg	Prep Date:	5/1/2006	Run ID:	GC-2_060508A
Client ID:	Largo Tank I	Batch ID:	R8094	TestNo:	SW8015B			Analysis Date:	5/8/2006	SeqNo:	113235
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

T/R Hydrocarbons: C10-C22

10710

500

0

0

0

0

0

9030

17.0

20

T/R Hydrocarbons: C22-C36

5714

1000

0

0

0

0

0

5889

3.01

20

Surr: o-Terphenyl

72.17

0

40

0

180

46

148

0

0

0

S

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0604042  
**Project:** Largo Tank Yard- Near OWS

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8015GRO\_S

Sample ID	MBLK_1259	SampType:	MBLK	TestCode:	8015GRO_S	Units:	mg/Kg	Prep Date:	5/1/2006	Run ID:	GC-1B_060502A	
Client ID:	ZZZZZ	Batch ID:	1259	TestNo:	SW8015B	(SW5035A)		Analysis Date:	5/2/2006	SeqNo:	113136	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C10		0.3733	0.500									J
Surr: Trifluorotoluene		0.3968	0	0.5	0	79.4	70	130	0	0		

Sample ID	LCS_1259	SampType:	LCS	TestCode:	8015GRO_S	Units:	mg/Kg	Prep Date:	5/1/2006	Run ID:	GC-1B_060502A	
Client ID:	ZZZZZ	Batch ID:	1259	TestNo:	SW8015B	(SW5035A)		Analysis Date:	5/2/2006	SeqNo:	113137	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C10		5.523	0.500	5	0.3733	103	80	120	0	0		
Surr: Trifluorotoluene		0.4325	0	0.5	0	86.5	70	130	0	0		

Sample ID	0604042-001BMSD	SampType:	MSD	TestCode:	8015GRO_S	Units:	mg/Kg	Prep Date:		Run ID:	GC-1B_060502A	
Client ID:	Largo Tank I	Batch ID:	1259	TestNo:	SW8015B	(SW5035A)		Analysis Date:	5/2/2006	SeqNo:	113140	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C10		196.8	2.50	45	164.4	72.2	70	130	0	0		
Surr: Trifluorotoluene		2.082	0	2.5	0	83.3	70	130	0	0		

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0604042  
**Project:** Largo Tank Yard- Near OWS

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** HG\_CTS

Sample ID	MB_1263	SampType:	MBLK	TestCode:	HG_CTS	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	AA_060502A		
Client ID:	ZZZZZ	Batch ID:	1263	TestNo:	SW7471	(SW7471)		Analysis Date:	5/2/2006	SeqNo:	113045		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury < 0.199 0.199

Sample ID	LCS_1263	SampType:	LCS	TestCode:	HG_CTS	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	AA_060502A		
Client ID:	ZZZZZ	Batch ID:	1263	TestNo:	SW7471	(SW7471)		Analysis Date:	5/2/2006	SeqNo:	113052		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.9564 0.199 0.9962 0 96 70 130 0 0

Sample ID	LCSD_1263	SampType:	LCSD	TestCode:	HG_CTS	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	AA_060502A		
Client ID:	ZZZZZ	Batch ID:	1263	TestNo:	SW7471	(SW7471)		Analysis Date:	5/2/2006	SeqNo:	113053		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 1.069 0.200 0.999 0 107 70 130 0.9564 11.1 20

Sample ID	0604042-001BMS	SampType:	MS	TestCode:	HG_CTS	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	AA_060502A	
Client ID:	Largo Tank I	Batch ID:	1263	TestNo:	SW7471	(SW7471)		Analysis Date:	5/2/2006	SeqNo:	113055	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.8216 0.200 1.002 0 82 70 130 0 0

Sample ID	0604042-001BMSD	SampType:	MSD	TestCode:	HG_CTS	Units:	mg/Kg	Prep Date:	5/2/2006	Run ID:	AA_060502A		
Client ID:	Largo Tank I	Batch ID:	1263	TestNo:	SW7471	(SW7471)		Analysis Date:	5/2/2006	SeqNo:	113056		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.8904 0.200 1 0 89 70 130 0.8216 8.03 20

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



iiná bá

612 E. Murray Drive  
Farmington, NM 87401  
(505) 327-1072

CHA -OF-C IS II Y RECOR I

Page 1 of 1

Subcontractor:

Hall Environmental Analysis Laboratory  
4901 Hawkins NE Suite D  
Albuquerque, NM 87109

TEL: (505) 345-3975  
FAX: (505) 345-4107

Acct #:

01-May-06

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests						
				SW8260B						
0604042-001A	Soil	4/28/2006 4:30:00 PM	4OZG	1						

Comments: Please analyze 1 (one) soil sample for 8260 full list. Thank you.

	Date/Time		Date/Time
Relinquished by: <u>Jul Moore</u>	<u>5/1/06 11:25</u>	Received by: _____	
Relinquished by: _____		Received by: _____	

iiná bá

## Sample Receipt Checklist

Client Name: SMA1005

Date and Time Received: 4/28/2006 5:10:00 PM

Work Order Number: 0604042

Received by: jem

Checklist completed by:

Signature

4/28/06

Date

Reviewed by:

Initials

5/1/06

Date

Matrix:

Carrier name: Walter Gage

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

13.5° on ice within 1 hr of sampling

Soil

Adjusted? \_\_\_\_\_ Checked by: \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted: \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action: \_\_\_\_\_



## COVER LETTER

Wednesday, May 10, 2006

Judy Moore  
iina ba, Ltd  
612 E. Murray Drive  
Farmington, NM 87401

TEL: (505) 327-1072  
FAX (505) 327-1496

RE: 0604042

Order No.: 0605006

Dear Judy Moore:


Hall Environmental Analysis Laboratory received 1 sample(s) on 5/1/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman, Business Manager  
Nancy McDuffie, Laboratory Manager

AZ license # AZ0682  
ORELAP Lab # NM100001



4901 Hawkins NE Suite D Albuquerque, NM 87109  
505.345.3975 Fax 505.345.4107  
www.hallenvironmental.com

## Hall Environmental Analysis Laboratory

Date: 10-May-06

CLIENT: iina ba, Ltd

Client Sample ID: 0604042-001A

Lab Order: 0605006

Collection Date: 4/28/2006 4:30:00 PM

Project: 0604042

Date Received: 5/1/2006

Lab ID: 0605006-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	ND	0.50		mg/Kg	10	5/9/2006
Toluene	ND	0.50		mg/Kg	10	5/9/2006
Ethylbenzene	ND	0.50		mg/Kg	10	5/9/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	5/9/2006
1,2,4-Trimethylbenzene	ND	0.50		mg/Kg	10	5/9/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	5/9/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	5/9/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	5/9/2006
Naphthalene	ND	1.0		mg/Kg	10	5/9/2006
1-Methylnaphthalene	2.0	2.0		mg/Kg	10	5/9/2006
2-Methylnaphthalene	ND	2.0		mg/Kg	10	5/9/2006
Acetone	ND	7.5		mg/Kg	10	5/9/2006
Bromobenzene	ND	0.50		mg/Kg	10	5/9/2006
Bromochloromethane	ND	0.50		mg/Kg	10	5/9/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	5/9/2006
Bromoform	ND	0.50		mg/Kg	10	5/9/2006
Bromomethane	ND	1.0		mg/Kg	10	5/9/2006
2-Butanone	ND	5.0		mg/Kg	10	5/9/2006
Carbon disulfide	ND	5.0		mg/Kg	10	5/9/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	5/9/2006
Chlorobenzene	ND	0.50		mg/Kg	10	5/9/2006
Chloroethane	ND	1.0		mg/Kg	10	5/9/2006
Chloroform	ND	0.50		mg/Kg	10	5/9/2006
Chloromethane	ND	0.50		mg/Kg	10	5/9/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	5/9/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	5/9/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	5/9/2006
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	5/9/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	5/9/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	5/9/2006
Dibromomethane	ND	1.0		mg/Kg	10	5/9/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	5/9/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	5/9/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	5/9/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	5/9/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	5/9/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	5/9/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	5/9/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	5/9/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	5/9/2006

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

## Hall Environmental Analysis Laboratory

Date: 10-May-06

CLIENT: iina ba, Ltd

Client Sample ID: 0604042-001A

Lab Order: 0605006

Collection Date: 4/28/2006 4:30:00 PM

Project: 0604042

Date Received: 5/1/2006

Lab ID: 0605006-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						Analyst: KTM
1,1-Dichloropropene	ND	0.50		mg/Kg	10	5/9/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	5/9/2006
2-Hexanone	ND	5.0		mg/Kg	10	5/9/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	5/9/2006
4-Isopropyltoluene	ND	0.50		mg/Kg	10	5/9/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	5/9/2006
Methylene chloride	ND	1.5		mg/Kg	10	5/9/2006
n-Butylbenzene	0.53	0.50		mg/Kg	10	5/9/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	5/9/2006
sec-Butylbenzene	0.50	0.50		mg/Kg	10	5/9/2006
Styrene	ND	0.50		mg/Kg	10	5/9/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	5/9/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	5/9/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	5/9/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	5/9/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	5/9/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	5/9/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	5/9/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	5/9/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	5/9/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	5/9/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	5/9/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	5/9/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	5/9/2006
Vinyl chloride	ND	0.50		mg/Kg	10	5/9/2006
Xylenes, Total	ND	0.50		mg/Kg	10	5/9/2006
Surr: 1,2-Dichloroethane-d4	110	74.2-135		%REC	10	5/9/2006
Surr: 4-Bromofluorobenzene	100	75.2-127		%REC	10	5/9/2006
Surr: Dibromofluoromethane	101	76.9-138		%REC	10	5/9/2006
Surr: Toluene-d8	96.4	74-119		%REC	10	5/9/2006

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

## Hall Environmental Analysis Laboratory

Date: 10-May-06

## QA/QC SUMMARY REPORT

Client: iina ba, Ltd

Project: 0604042

Work Order: 0605006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B			Batch ID: 10305						
Sample ID: mb-10305		MBLK		Analysis Date: 5/8/2006					
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
1-Methylnaphthalene	ND	mg/Kg	0.20						
2-Methylnaphthalene	ND	mg/Kg	0.20						
Acetone	ND	mg/Kg	0.75						
Bromobenzene	ND	mg/Kg	0.050						
Bromochloromethane	ND	mg/Kg	0.050						
Bromodichloromethane	ND	mg/Kg	0.050						
Bromoform	ND	mg/Kg	0.050						
Bromomethane	ND	mg/Kg	0.10						
2-Butanone	ND	mg/Kg	0.50						
Carbon disulfide	ND	mg/Kg	0.50						
Carbon tetrachloride	ND	mg/Kg	0.10						
Chlorobenzene	ND	mg/Kg	0.050						
Chloroethane	ND	mg/Kg	0.10						
Chloroform	ND	mg/Kg	0.050						
Chloromethane	ND	mg/Kg	0.050						
2-Chlorotoluene	ND	mg/Kg	0.050						
4-Chlorotoluene	ND	mg/Kg	0.050						
cis-1,2-DCE	ND	mg/Kg	0.050						
cis-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
Dibromochloromethane	ND	mg/Kg	0.050						
Dibromomethane	ND	mg/Kg	0.10						
1,2-Dichlorobenzene	ND	mg/Kg	0.050						
1,3-Dichlorobenzene	ND	mg/Kg	0.050						
1,4-Dichlorobenzene	ND	mg/Kg	0.050						
Dichlorodifluoromethane	ND	mg/Kg	0.050						
1,1-Dichloroethane	ND	mg/Kg	0.10						
1,1-Dichloroethene	ND	mg/Kg	0.050						
1,2-Dichloropropane	ND	mg/Kg	0.050						
1,3-Dichloropropane	ND	mg/Kg	0.050						
2,2-Dichloropropane	ND	mg/Kg	0.10						
1,1-Dichloropropene	ND	mg/Kg	0.050						
Hexachlorobutadiene	ND	mg/Kg	0.10						
2-Hexanone	ND	mg/Kg	0.50						
Isopropylbenzene	ND	mg/Kg	0.050						

## Qualifiers:

E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

Page 1

## Hall Environmental Analysis Laboratory

Date: 10-May-06

## QA/QC SUMMARY REPORT

Client: iina ba, Ltd  
Project: 0604042

Work Order: 0605006

Analyte	Result	Units	POL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B			Batch ID: 10305						
Sample ID: mb-10305			Analysis Date: 5/9/2006						
MBLK									
4-Isopropyltoluene	ND	mg/Kg	0.050						
4-Methyl-2-pentanone	ND	mg/Kg	0.50						
Methylene chloride	ND	mg/Kg	0.15						
n-Butylbenzene	ND	mg/Kg	0.050						
n-Propylbenzene	ND	mg/Kg	0.050						
sec-Butylbenzene	ND	mg/Kg	0.050						
Styrene	ND	mg/Kg	0.050						
tert-Butylbenzene	ND	mg/Kg	0.050						
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
Tetrachloroethene (PCE)	ND	mg/Kg	0.050						
trans-1,2-DCE	ND	mg/Kg	0.050						
trans-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10						
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050						
1,1,1-Trichloroethane	ND	mg/Kg	0.050						
1,1,2-Trichloroethane	ND	mg/Kg	0.050						
Trichloroethene (TCE)	ND	mg/Kg	0.050						
Trichlorofluoromethane	ND	mg/Kg	0.050						
1,2,3-Trichloropropane	ND	mg/Kg	0.10						
Vinyl chloride	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.050						
Sample ID: lcs-10305			Analysis Date: 5/9/2006						
LCS									
Benzene	0.9153	mg/Kg	0.050	91.5	80.8	132			
Toluene	0.9829	mg/Kg	0.050	98.3	72.1	126			
Chlorobenzene	1.078	mg/Kg	0.050	108	75.4	140			
1,1-Dichloroethene	0.9721	mg/Kg	0.050	97.2	59	147			
Trichloroethene (TCE)	0.9665	mg/Kg	0.050	96.6	77.2	123			
Sample ID: lcsd-10305			Analysis Date: 5/9/2006						
LCSD									
Benzene	0.9004	mg/Kg	0.050	90.0	80.8	132	1.64	20	
Toluene	0.9877	mg/Kg	0.050	98.8	72.1	126	0.487	20	
Chlorobenzene	1.111	mg/Kg	0.050	111	75.4	140	2.96	20	
1,1-Dichloroethene	0.9854	mg/Kg	0.050	98.5	59	147	1.36	20	
Trichloroethene (TCE)	0.9299	mg/Kg	0.050	93.0	77.2	123	3.86	20	

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spil 4/5 very outside accepted recovery limits

## Hall Environmental Analysis Laboratory

## Sample Receipt Checklist

Client Name IINA

Date and Time Received:

5/1/2006

Work Order Number 0605006

Received by GLS

Checklist completed by

Signature

Date

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/> Not Shipped <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Container/Temp Blank temperature?	2°	4° C ± 2 Acceptable If given sufficient time to cool.	

COMMENTS:

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Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

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Corrective Action \_\_\_\_\_

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san juan reproduction-1

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised March 17, 1999

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

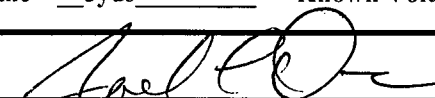
## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: X      Non-Exempt: <input type="checkbox"/>  Verbal Approval Received:      Yes <input type="checkbox"/> No: X	4. Generator: M&G Drilling  5. Originating Site: Schlosser # 16  6. Transporter: L&L Trucking  8. State: NM
2. Management Facility Destination:    JFJ Landfarm L.L.C.	
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499	
7. Location of Material (Street Address or ULSTR) SE, SE Sect TY0-S27N-R11N	
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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>	

**BRIEF DESCRIPTION OF MATERIAL:** Motor Oil Leaks on soil from Pump Jacks and Compressors

Estimated Volume    5yds      Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE

  
Waste Management Facility Authorized Agent

TITLE: Operations Manager

DATE: 5/17/06

TYPE OR PRINT NAME: JOEL OWENS

TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY:



TITLE:

Enviro/spec

DATE:

5/17/06

APPROVED BY:

TITLE:

DATE:



**COPY**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

## CERTIFICATE OF WASTE STATUS

<b>1. Generator Name and Address</b> M&G Drilling P.O. Box 5940 Farmington, NM 87499	<b>2. Destination Name:</b> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
<b>3. Originating Site (name):</b> Schlosser # 16  Attach list of originating sites as appropriate	<b>Location of the Waste (Street address &amp;/or ULSTR):</b> SE, SE Sec. YT0S27N, R11N UL- ____ S- ____ T- ____ R- ____ or attach list Street Address: _____
<b>4. Source and Description of Waste</b> Motor oil leaks on soil from pump vacks and compressors	

I, David Hinson representative for:  
**Print Name**

M&G Drilling 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 characteristic X **NON-EXEMPT** oilfield waste which is non-hazardous by

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): David Hinson

Phone Contact: 505-330-7107

Title: General Manager

P.O# / Pay key No: \_\_\_\_\_

Date: 5-17-06

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: X      Non-Exempt: <input type="checkbox"/>  Verbal Approval Received:      Yes <input type="checkbox"/> No: X	4. Generator: M&G Drilling  5. Originating Site: Schlosser # 95  6. Transporter: L&L Trucking  8. State: NM
2. Management Facility Destination:    JFJ Landfarm L.L.C.	
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499	
7. Location of Material (Street Address or ULSTR) SW, SW UL-MS-33T-27NR-11W	
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: Motor Oil Leaks on soil from Pump Jacks and Compressors

Estimated Volume    5yds      Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE   
Waste Management Facility Authorized Agent

TITLE: Operations Manager

DATE: 5/17/06

TYPE OR PRINT NAME: JOEL OWENS

TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: _____	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____

COPY



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. <u>Generator Name and Address</u> MFG Drilling PO BOX 5940 Farmington NM 87479	2. <u>Destination Name:</u> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. <u>Originating Site (name):</u> Schlosser #95 Schlosser #16 Attach list of originating sites as appropriate	<u>Location of the Waste (Street address &amp;/or ULSTR):</u> SW SW 1 UL-M S-33 T-27N R-11W or attach list Street Address: San Juan City <del>SE SE 34 10 27 N 11 W</del>
4. <u>Source and Description of Waste</u> motor oil leaks on soil from pump tanks and compressors	

I, David Hinson representative for:  
Print Name

MFG Drilling 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): David Hinson  
Title: General Manager  
Date: 5-1-06

Phone Contact: 505-330-7107  
P.O.# / Pay key No: \_\_\_\_\_  
Office 505-325-5797

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

May 4, 2006

Mr. Vince Scott  
M & G Drilling  
3104 N Sullivan Ave  
Farmington, NM 87401

Phone: (505) 327-4573

Client No.: 04033-002

Dear Mr. Scott,

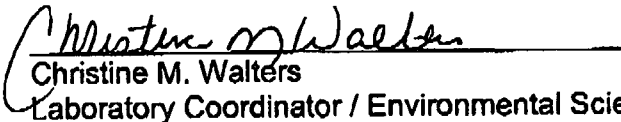
Enclosed are the analytical results for the soil samples collected from the location designated as "Schlosser 16 & 95". Two soil samples were collected by M & G Drilling personnel on 5/02/06, and received by the Envirotech laboratory on 5/02/06 for RCRA 8 List Metals.

The samples were documented on Envirotech Chain of Custody No. 15868 and assigned Laboratory Nos. 37003 (Schlosser 16) and 37004 (Schlosser 95) for tracking purposes.

The samples were analyzed on 5/03/06 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,  
**Envirotech, Inc.**

  
Christine M. Walters  
Laboratory Coordinator / Environmental Scientist

enc.

CMW/cmw

C:/files/labreports/burl.wpd

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## TRACE METAL ANALYSIS

Client:	M & G Drilling	Project #:	04033-002
Sample ID:	Schlosser 16	Date Reported:	05-03-06
Laboratory Number:	37003	Date Sampled:	05-02-06
Chain of Custody:	15868	Date Received:	05-02-06
Sample Matrix:	Soil	Date Analyzed:	05-03-06
Preservative:	N/A	Date Digested:	05-02-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.096	0.001	5.0
Barium	24.09	0.001	100
Cadmium	0.009	0.001	1.0
Chromium	0.835	0.001	5.0
Lead	0.599	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	0.008	0.001	5.0

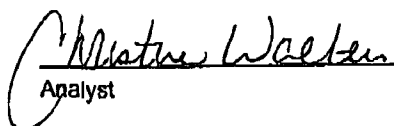
ND - Parameter not detected at the stated detection limit.

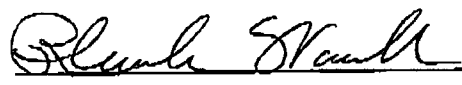
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: Schlosser 16 & 95 Clean Up Stock Pile.

  
Analyst

  
Review

**ENVIROTECH LABS****PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****TRACE METAL ANALYSIS**

Client: M & G Drilling  
 Sample ID: Schlosser 95  
 Laboratory Number: 37004  
 Chain of Custody: 15868  
 Sample Matrix: Soil  
 Preservative: N/A  
 Condition: Intact

Project #: 04033-002  
 Date Reported: 05-03-06  
 Date Sampled: 05-02-06  
 Date Received: 05-02-06  
 Date Analyzed: 05-03-06  
 Date Digested: 05-02-06  
 Analysis Needed: Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.095	0.001	5.0
Barium	10.53	0.001	100
Cadmium	0.039	0.001	1.0
Chromium	0.532	0.001	5.0
Lead	3.763	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	0.008	0.001	5.0

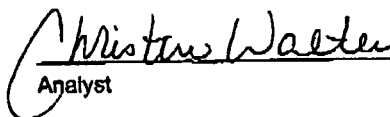
ND - Parameter not detected at the stated detection limit.

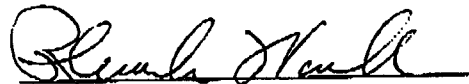
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
 SW-846, USEPA, December 1996.

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: Schlosser 16 & 95.

  
 Analyst

  
 Review



**ENVIROTECH LABS****PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****TRACE METAL ANALYSIS  
Quality Control /  
Quality Assurance Report**

Client:	QA/QC	Project #:	QA/QC
Sample ID:	05-03 TM QA/AC	Date Reported:	05-03-06
Laboratory Number:	37003	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	05-03-06
Condition:	N/A	Date Digested:	05-02-06

Blank & Duplicate Conc. (mg/Kg)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff	Acceptance Range
Arsenic	ND	ND	0.001	0.096	0.097	0.6%	0% - 30%
Barium	ND	ND	0.001	24.09	24.07	0.1%	0% - 30%
Cadmium	ND	ND	0.001	0.009	0.009	2.2%	0% - 30%
Chromium	ND	ND	0.001	0.835	0.846	1.3%	0% - 30%
Lead	ND	ND	0.001	0.599	0.600	0.2%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	0.008	0.008	0.0%	0% - 30%

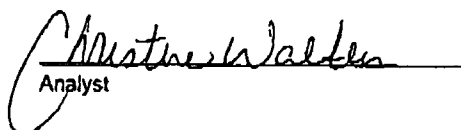
Spike Conc. (mg/Kg)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.096	0.633	106.2%	80% - 120%
Barium	0.500	24.09	24.4	99.2%	80% - 120%
Cadmium	0.500	0.009	0.558	109.6%	80% - 120%
Chromium	0.500	0.835	1.307	97.9%	80% - 120%
Lead	0.500	0.599	1.06	96.5%	80% - 120%
Mercury	0.500	ND	0.498	99.6%	80% - 120%
Selenium	0.500	ND	0.497	99.4%	80% - 120%
Silver	0.500	0.008	0.502	98.8%	80% - 120%

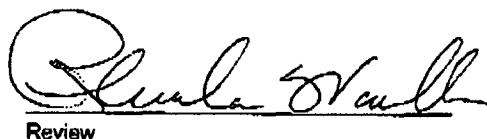
ND - Parameter not detected at the stated detection limit.

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.

Comments: QA/QC for Sample 37003 - 37004 and 37006.

  
Analyst

  
Review

# CHAIN OF CUSTODY RECORD

15868

Client / Project Name <i>David Hinson M&amp;G Drilling</i>			Project Location <i>Schlosser 16 + 95</i>		ANALYSIS / PARAMETERS									
Sampler: <i>David Hinson</i>			Client No. <i>04033-002</i>		No. of Containers <i>8</i>	RECEIVED <i>MEANS</i>								Remarks
Sample No. / Identification	Sample Date	Sample Time	Lab Number	Sample Matrix										
<i>SCHLOSSER 16</i>	<i>5/2/06</i>	<i>12:46</i>	<i>37003</i>	<i>SOIL</i>	<i>1</i>	<i>✓</i>								<i>CLEAN UP STOCK PILE</i>
<i>SCHLOSSER 95</i>	<i>5/2/06</i>	<i>12:37</i>	<i>37004</i>	<i>SOIL</i>	<i>1</i>	<i>✓</i>								
Relinquished by: (Signature) <i>David Hinson</i>			Date <i>5-2-06</i>	Time <i>1:50P</i>	Received by: (Signature) <i>Glenn Vail</i>			Date <i>5/2/06</i>	Time <i>1350</i>					
Relinquished by: (Signature)					Received by: (Signature)									
Relinquished by: (Signature)					Received by: (Signature)									
FAX TO: VINCE SCOTT 505-632-1876			<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615								Sample Receipt			
												Y	N	N/A
											Received Intact	<i>✓</i>		
											Cool - Ice/Blue Ice			

MATERIAL SAFETY DATA SHEET  
Review Date: 06/04/2004

---

SECTION 1            PRODUCT AND COMPANY IDENTIFICATION

---

PRODUCT:    Rotella® T Oil 30W

MSDS NUMBER:    60130E - 13  
PRODUCT CODE(S):    54103

MANUFACTURER ADDRESS:    SOPUS Products, P.O. Box 4427, Houston, TX.    77210-4427

TELEPHONE NUMBERS

Spill Information: (877) 242-7400  
Health Information: (877) 504-9351  
MSDS Assistance Number: (877) 276-7285

---

SECTION 2            PRODUCT/INGREDIENTS

---

CAS#	CONCENTRATION	INGREDIENTS
		Heavy Duty Motor Oil
Mixture	90 - 98.99 %weight	Highly refined petroleum oils
Mixture	1 - 2.99 %weight	Proprietary Additives
68649-42-3	1 - 2.99 %weight	Zinc Dialkyldithiophosphate

---

SECTION 3            HAZARDS IDENTIFICATION

---

EMERGENCY OVERVIEW

Appearance & Odor:    Dark amber liquid. Slight Hydrocarbon Odor.

Health Hazards: No known immediate health hazards.

Physical Hazards: No known physical hazards.

NFPA Rating (Health, Fire, Reactivity):    0, 1, 0

Hazard Rating:        Least - 0        Slight - 1        Moderate - 2        High - 3

Extreme - 4

Inhalation:

Inhalation of vapors (generated at high temperatures only) or oil mist may cause mild irritation of the nose, throat, and respiratory tract.

Eye Irritation:

Lubricating oils are generally considered no more than minimally irritating to the eyes.

Skin Contact:

May cause slight irritation of the skin. If irritation occurs, a temporary burning sensation and minor redness and/or swelling may result. Other adverse effects not expected from brief skin contact.

Ingestion:

Lubricating oils are generally no more than slightly toxic if swallowed.

Other Health Effects:

The International Agency for Research on Cancer (IARC) has determined there is sufficient evidence for the carcinogenicity in experimental animals of used gasoline motor oils. Handling procedures and safety precautions in the MSDS should be followed to minimize exposure to the used product.

Material may release hydrogen sulfide (H<sub>2</sub>S), a highly toxic and extremely flammable gas, when heated to 180 Degrees F or higher. H<sub>2</sub>S can cause irritation of the eyes and respiratory tract, headache, dizziness, nausea, vomiting, diarrhea, and pulmonary edema. The odor ("rotten egg") threshold is 0.02 ppm. Do not depend on sense of smell for warning; H<sub>2</sub>S rapidly deadens the sense of smell.

Signs and Symptoms:

Irritation as noted above.

Aggravated Medical Conditions:

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

For additional health information, refer to section 11.

---

SECTION 4 FIRST AID MEASURES

---

Inhalation:

If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Skin:

Remove contaminated clothing and shoes and wipe excess from skin. Flush skin with water, then wash with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Eye:

Flush eyes with large amounts of water for at least 15 minutes. If redness, burning, blurred vision or swelling persist, transport to nearest medical facility for additional treatment.

Ingestion:

Do not induce vomiting. In general, no treatment is necessary unless large quantities of product are ingested. However, get medical attention. Have victim rinse mouth out with water, then drink sips of water to remove taste from mouth. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Note to Physician:

In general, emesis induction is unnecessary in high viscosity, low volatility products such as oils and greases.

---

SECTION 5 FIRE FIGHTING MEASURES

Flash Point [Method]: >400 °F/>204.44 °C [ Cleveland Open Cup]

Extinguishing Media:

This material is non-flammable. Material will float and can be re-ignited on surface of water. Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use a direct stream of water.

Fire Fighting Instructions:

Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus. This material is non-flammable.

Unusual Fire Hazards:

Material may ignite when preheated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures:

May burn although not readily ignitable.

Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8.

Spill Management:

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

Place in container for proper disposal.

Reporting:

CERCLA: Product is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) petroleum exclusion. Releases to air, land, or water are not reportable under CERCLA (Superfund).

CWA: This product is an oil as defined under Section 311 of EPA's Clean Water Act (CWA). Spills into or leading to surface waters that cause a sheen must be reported to the National Response Center, 1-800-424-8802.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures:

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet. Launder contaminated clothing before reuse. Properly dispose of contaminated leather articles such as shoes or belts that cannot be decontaminated. Avoid heat, open flames, including pilot lights, and strong

oxidizing agents. Use explosion-proof ventilation to prevent vapor accumulation. Ground all handling equipment to prevent sparking. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Material may release hydrogen sulfide (H<sub>2</sub>S), a highly toxic and extremely flammable gas, when heated to 180 Degrees F or higher. H<sub>2</sub>S may collect in the headspace of the container.

#### Storage:

Do not store in open or unlabeled containers. Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures.

#### Container Warnings:

Keep containers closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

---

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

---

Oil mist, mineral ACGIH TLV TWA: 5 mg/m<sup>3</sup> STEL: 10 mg/m<sup>3</sup>  
Oil mist, mineral OSHA PEL TWA: 5 mg/m<sup>3</sup>

Hydrogen sulfide ACGIH - TLV TWA: 10 ppm STEL: 15 ppm  
Hydrogen sulfide OSHA - PEL IS TWA: 10 ppm STEL: 15 ppm  
Hydrogen sulfide Elevated Temperatures > 180 Degrees F.

#### EXPOSURE CONTROLS

Provide adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

#### PERSONAL PROTECTION

Personal protective equipment (PPE) selections vary based on potential exposure conditions such as handling practices, concentration and ventilation. Information on the selection of eye, skin and respiratory protection for use with this material is provided below.

##### Eye Protection:

Chemical Goggles, or Safety glasses with side shields

##### Skin Protection:

Use protective clothing which is chemically resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection(s) should take into account such factors as job task, type of exposure and durability requirements.

Published literature, test data and/or glove and clothing manufacturers indicate the best protection is provided by:

Neoprene, or Nitrile Rubber

##### Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Types of respirator(s) to be considered in the selection process include:  
For Mist: Air Purifying, R or P style NIOSH approved respirator.  
For Vapors: Air Purifying, R or P style prefilter & organic cartridge,  
NIOSH approved respirator. Self-contained breathing apparatus for use in  
environments with unknown concentrations or emergency situations.

---

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

---

Appearance & Odor: Dark amber liquid. Slight Hydrocarbon Odor.  
Substance Chemical Family: Lubricants  
Appearance: Dark amber liquid.

Flash Point: > 400 °F [Cleveland Open Cup]

Physical State: Liquid

Pour Point: -40 °F - 10 °F

Specific Gravity: 0.873

Viscosity: 38 cSt - 210 cSt @ 40 °C

---

## SECTION 10 REACTIVITY AND STABILITY

---

Stability:  
Material is stable under normal conditions.

Conditions to Avoid:  
Avoid heat and open flames.

Materials to Avoid:  
Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products:

Thermal decomposition products are highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases will evolve when this material undergoes pyrolysis or combustion. Carbon Monoxide, Carbon Dioxide, Hydrogen Sulfide, Nitrogen Oxides and other unidentified organic compounds may be formed upon combustion.

---

## SECTION 11 TOXICOLOGICAL INFORMATION

---

### Acute Toxicity

Dermal LD50 >5.0 g/kg (Rabbit) OSHA: Non-Toxic Based on components(s)  
Oral LD50 >5.0 g/kg (Rat) OSHA: Non-Toxic Based on components(s)

## Carcinogenicity Classification

Heavy Duty Motor Oil

NTP: No IARC: Not Reviewed ACGIH: No OSHA: No  
Sensitization

Contact with skin may cause allergic skin reaction.

-----  
SECTION 12 ECOLOGICAL INFORMATION  
-----

## Environmental Impact Summary:

There is no ecological data available for this product. However, this product is an oil. It is persistent and does not readily biodegrade. However, it does not bioaccumulate.

-----  
SECTION 13 DISPOSAL CONSIDERATIONS  
-----

## RCRA Information:

Under RCRA, it is the responsibility of the user of the material to determine, at the time of the disposal, whether the material meets RCRA criteria for hazardous waste. This is because material uses, transformations, mixtures, processes, etc. may affect the classification. Refer to the latest EPA, state and local regulations regarding proper disposal.

-----  
SECTION 14 TRANSPORT INFORMATION  
-----

## US Department of Transportation Classification

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

Oil: This product is an oil under 49CFR (DOT) Part 130. If shipped by rail or highway in a tank with a capacity of 3500 gallons or more, it is subject to these requirements. Mixtures or solutions containing 10% or more of this product may also be subject to this rule.

## International Air Transport Association

Not regulated under IATA rules.

## International Maritime Organization Classification

Not regulated under International Maritime Organization rules.

-----  
SECTION 15 REGULATORY INFORMATION  
-----



## FEDERAL REGULATORY STATUS

## OSHA Classification:

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## Ozone Depleting Substances (40 CFR 82 Clean Air Act):

This material does not contain nor was it directly manufactured with any Class I or Class II ozone depleting substances.

## Superfund Amendment &amp; Reauthorization Act (SARA) Title III:

There are no components in this product on the SARA 302 list.

## SARA Hazard Categories (311/312):

Immediate Health:NO    Delayed Health:NO    Fire:NO    Pressure:NO  
Reactivity:NO

## SARA Toxic Release Inventory (TRI) (313):

Zinc compounds

## Toxic Substances Control Act (TSCA) Status:

All component(s) of this material is(are) listed on the EPA/TSCA Inventory of Chemical Substances.

## Other Chemical Inventories:

Component(s) of this material is (are) listed on the Australian AICS, Canadian DSL, Chinese Inventory, European EINECS, Korean Inventory, Philippines PICCS,

## State Regulation

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

---

SECTION 16            OTHER INFORMATION

---

Revision#: 13

Review Date: 06/04/2004

Revision Date: 06/04/2004

Revisions since last change (discussion): This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-1998). We encourage you to take the opportunity to read the MSDS and review the information contained therein.

---

SECTION 17            LABEL INFORMATION

---

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT. THIS LABEL COMPLIES WITH THE REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FOR USE IN THE WORKPLACE. THIS LABEL IS NOT INTENDED TO BE USED WITH PACKAGING INTENDED FOR SALE TO CONSUMERS AND

MAY NOT CONFORM WITH THE REQUIREMENTS OF THE CONSUMER PRODUCT SAFETY ACT OR OTHER RELATED REGULATORY REQUIREMENTS.

PRODUCT CODE(S): 54103

Rotella® T Oil 30W

CAUTION!

MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE OIL ACNE OR DERMATITIS. USED GASOLINE ENGINE OIL HAS BEEN SHOWN TO CAUSE CANCER IN LABORATORY ANIMALS.

Precautionary Measures:

Avoid prolonged or repeated contact with eyes, skin and clothing. Avoid breathing of vapors, fumes, or mist. Use only with adequate ventilation. Wash thoroughly after handling.

FIRST AID

Inhalation: If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Skin Contact: Remove contaminated clothing and shoes and wipe excess from skin. Flush skin with water, then wash with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Eye Contact: Flush with water. If irritation occurs, get medical attention. If redness, burning, blurred vision or swelling persist, transport to nearest medical facility for additional treatment.

Ingestion: Do not induce vomiting. In general, no treatment is necessary unless large quantities of product are ingested. However, get medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Have victim rinse mouth out with water, then drink sips of water to remove taste from mouth.

FIRE

In case of fire, Use water fog, 'alcohol foam', dry chemical or carbon dioxide (CO2) to extinguish flames. Do not use a direct stream of water. Material will float and can be re-ignited on surface of water.

SPILL OR LEAK

Dike and contain spill.

FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.

FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

CONTAINS: Highly refined petroleum oils, Mixture; Proprietary Additives, Mixture; Zinc Dialkyldithiophosphate, 68649-42-3

NFPA Rating (Health, Fire, Reactivity): 0, 1, 0

TRANSPORTATION

US Department of Transportation Classification

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

Oil: This product is an oil under 49CFR (DOT) Part 130. If shipped by rail or highway in a tank with a capacity of 3500 gallons or more, it is subject to these requirements. Mixtures or solutions containing 10% or more of this product may also be subject to this rule.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).  
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flames or heat. Keep container closed and drum bungs in place.

Name and Address

SOPUS Products  
P.O. Box 4427  
Houston, TX 77210-4427

ADMINISTRATIVE INFORMATION

MANUFACTURER ADDRESS: SOPUS Products, P.O. Box 4427, Houston, TX. 77210-4427

THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT : IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, YOU SHOULD CONSULT WITH YOUR LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. WE WILL NOT PROVIDE ADVICE ON SUCH MATTERS, OR BE RESPONSIBLE FOR ANY INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN. THE UNDERLYING DATA, AND THE INFORMATION PROVIDED HEREIN AS A RESULT OF THAT DATA, IS THE PROPERTY OF SOPUS PRODUCTS AND IS NOT TO BE THE SUBJECT OF SALE OR EXCHANGE WITHOUT THE EXPRESS WRITTEN CONSENT OF SOPUS PRODUCTS.

44084-11434-100R-03/16/2005

**ExxonMobil****Material Safety Data Sheets**[New Search](#)[Get This Document](#)

605782-00 MOBIL PEGASUS 1  
MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL PEGASUS 1  
SUPPLIER: EXXONMOBIL OIL CORPORATION  
3225 GALLOWS RD.  
FAIRFAX, VA 22037

24 - Hour Health and Safety Emergency (call collect): 609-737-4411

24 - Hour Transportation Emergency:  
CHEMTREC: 800-424-9300 202-483-7616  
LUBES AND FUELS: 281-834-3296

Product and Technical Information:  
Lubricants and Specialties: 800-662-4525 800-443-9966  
Fuels Products: 800-947-9147  
MSDS Fax on Demand: 713-613-3661  
MSDS Internet Website: <http://www.exxon.com>, <http://www.mobil.com>

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SYN. HYDROCARBONS AND ADDITIVES

GLOBALLY REPORTABLE MSDS INGREDIENTS:

None.

OTHER INGREDIENTS:

Substance Name Approx. Wt%

POLY BUTENYL SUCCINIMIDE 5-15

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

Under normal conditions of use, this product is not considered hazardous according to regulatory guidelines (See section 15).

EMERGENCY OVERVIEW: Amber Liquid. DOT ERG No. : NA

POTENTIAL HEALTH EFFECTS: Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation.

For further health effects/toxicological data, see Section 11.

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#### 4. FIRST AID MEASURES

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

SKIN CONTACT: Wash contact areas with soap and water. Remove and clean oil soaked clothing daily and wash affected area. (See Section 16 - Injection Injury)

INHALATION: Not expected to be a problem. However, if respiratory irritation, dizziness, nausea, or unconsciousness occurs due to excessive vapor or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or mouth-to-mouth resuscitation.

INGESTION: Not expected to be a problem. Seek medical attention if discomfort occurs. Do not induce vomiting.

---

#### 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.

COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

Flash Point C(F): > 204(400) (ASTM D-92).

Flammable Limits (approx.% vol.in air) - LEL: 0.9%, UEL: 7.0%

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

---

#### 6. ACCIDENTAL RELEASE MEASURES

---

NOTIFICATION PROCEDURES: Report spills/releases as required to appropriate authorities. U.S. Coast Guard and EPA regulations require immediate reporting of spills/releases that could reach any waterway including intermittent dry creeks. Report spill/release to Coast Guard National Response Center 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:

LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping or contain spilled material with sand or other suitable absorbent and remove mechanically into containers. If necessary,

dispose of adsorbed residues as directed in Section 13.

WATER SPILL: Confine the spill immediately with booms. Warn other ships in the vicinity. Notify port and other relevant authorities. Remove from the surface by skimming or with suitable absorbents. If permitted by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.

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: Keep containers closed when not in use. Do not store in open or unlabelled containers. Store away from strong oxidizing agents and combustible materials. Do not store near heat, sparks, flame or strong oxidants.

SPECIAL PRECAUTIONS: Prevent small spills and leakages to avoid slip hazard.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

### OCCUPATIONAL EXPOSURE LIMITS:

When mists/aerosols can occur, the following are recommended: 5 mg/m<sup>3</sup> (as oil mist) - ACGIH Threshold Limit Value (TLV), 10 mg/m<sup>3</sup> (as oil mist) - ACGIH Short Term Exposure Limit (STEL), 5 mg/m<sup>3</sup> (as oil mist) - OSHA Permissible Exposure Limit (PEL)

VENTILATION: If mists are generated, use adequate ventilation, local exhaust or enclosures to control below exposure limits.

RESPIRATORY PROTECTION: If mists are generated, and/or when ventilation is not adequate, wear approved respirator.

EYE PROTECTION: If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn.

SKIN PROTECTION: Not normally required. When splashing or liquid contact can occur frequently, wear oil resistant gloves and/or other protective clothing. Good personal hygiene practices should always be followed.

---

## 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: NA  
BOILING POINT C(F): > 316(600)  
MELTING POINT C(F): NA  
FLASH POINT C(F): > 204(400) (ASTM D-92)  
FLAMMABILITY (solids): NE  
AUTO FLAMMABILITY C(F): NA  
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: 0.846  
SOLUBILITY IN WATER: Negligible  
PARTITION COEFFICIENT: > 3.5  
VISCOSITY AT 40 C, cSt: 93.8  
VISCOSITY AT 100 C, cSt: 13.0  
POUR POINT C(F): < -48(-54)  
FREEZING POINT C(F): NE  
VOC: < 5.00 (Wt. %); 0.358 lbs/gal  
DMSO EXTRACT, IP-346 (WT.%): <3, for mineral oil only  
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 and high energy sources of ignition.  
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.  
HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures.  
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: Although an acute inhalation study was not performed with this product, a variety of mineral and synthetic oils, such as those in this product, have been tested. These samples had virtually no effect other than a nonspecific inflammatory response in the lung to the aerosolized mineral oil. The presence of additives in other tested formulations (in approximately the same amounts as in the present formulation) did not alter the observed effects.

---SUBCHRONIC TOXICOLOGY (SUMMARY)---

No significant adverse effects were found in studies using repeated dermal applications of similar formulations to the skin of laboratory animals for 13 weeks at doses significantly higher than those expected during normal industrial exposure. The animals were evaluated extensively for effects of exposure (hematology, serum chemistry, urinalysis, organ weights, microscopic examination of tissues etc.).

---REPRODUCTIVE TOXICOLOGY (SUMMARY)---

No teratogenic effects would be expected from dermal exposure, based on laboratory developmental toxicity studies of major components in this formulation and/or materials of similar composition.

---CHRONIC TOXICOLOGY (SUMMARY)---

Repeated and/or prolonged exposure may cause irritation to the skin, eyes or respiratory tract. Overexposure to oil mist may result in oil droplet deposition and/or granuloma formation. For mineral base oils: 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 Modified Ames Test, IP-346, and/or other analytical methods. For synthetic base oils: The base oils in this product have been tested in the Ames assay and other tests of mutagenicity with negative results. These base oils are not expected to be carcinogenic with chronic dermal exposures.

---SENSITIZATION (SUMMARY)---

Not expected to be sensitizing based on tests of this product, components, or similar products.

-----  
12. ECOLOGICAL INFORMATION  
-----

ENVIRONMENTAL FATE AND EFFECTS:

In the absence of specific environmental data for this product, this assessment is based on information for representative products.

ECOTOXICITY: Available ectotoxicity data (LL50 >1000 mg/L) indicates that adverse effects to aquatic organisms are not expected from this product.



MOBILITY: When released into the environment, adsorption to sediment and soil will be the predominant behavior.

PERSISTENCE AND DEGRADABILITY: This product is expected to be inherently biodegradable.

BIOACCUMULATIVE POTENTIAL: Bioaccumulation is unlikely due to the very low water solubility of this product, therefore bioavailability to aquatic organisms is minimal.

---

### 13. DISPOSAL CONSIDERATIONS

---

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value. 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. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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### 14. TRANSPORT INFORMATION

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USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

STATIC ACCUMULATOR (50 picosiemens or less): YES

---

### 15. REGULATORY INFORMATION

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US OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this product is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

EU Labeling: Product is not dangerous as defined by the European Union Dangerous Substances/Preparations Directives. EU labeling not required.

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

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) (<0.06%) 7440-66-6 22  
PHOSPHORODITHOIC ACID, O,O-DI 68649-42-3 22  
C1-14-ALKYL ESTERS, ZINC SALTS (2:  
1) (ZDDP) (0.48%)

--- 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

\* EPA recently added new chemical substances to its TSCA Section 4 test rules. Please contact the supplier to confirm whether the ingredients in this product currently appear on a TSCA 4 or TSCA 12b list.

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.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

INDUSTRIAL LABEL

Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. First Aid: Wash skin with soap and water. Flush eyes with water. If overcome by fumes or vapor, remove to fresh air. If ingested do not induce vomiting. If symptoms persist seek medical assistance. Read and understand the MSDS before using this product.

\*\*\*\*\*  
For Internal Use Only: MHC: 1\* 1\* 1\* 1\* 1\*, MPPEC: A, TRN: 605782-00,  
ELIS: 400306, CMCS97: 970275, REQ: US - MARKETING, SAFE USE: L  
EHS Approval Date: 06DEC2001  
\*\*\*\*\*

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 license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, republication or retransmission of this document, in whole or in part, is not permitted. Exxon Mobil Corporation and its affiliated companies assume no responsibility for accuracy of information unless the document is the most current available from an official ExxonMobil distribution system. Exxon Mobil Corporation and its affiliated companies neither represent nor warrant 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.

Prepared by: ExxonMobil Oil Corporation  
Environmental Health and Safety Department, Clinton, USA

Emergency Numbers

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P

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> <i>From Brandon Powell - OCD-District III - 1/12/2007</i>		4. Generator: Riley Industrial  5. Originating Site: 2615 San Juan Blvd.  6. Transporter: Riley Industrial  8. State: New Mexico  9. County: San Juan
2. Management Facility Destination: JFJ Landfarm L.L.C.		
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		
7. Location of Material (Street Address or ULSTR) 2615 San Juan Blvd. Farmington, New Mexico		
9. <u>Circle One</u> :  A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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:** Road Base (sand, clay, gravel) mixed with approximately 500 gallons of No. 2 Diesel Fuel resulting from vandalism/sabotage to the diesel storage tank located in the Riley Industrial yard. Attached: MSDS for No. 2 Diesel Fuel.

Estimated Volume 24 cubic yards Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE  TITLE: Operations Manager DATE: 1/12/2007  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)

APPROVED BY: _____	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

Joanna Prukop  
Cabinet Secretary

**Mark Fesmire**

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: <b>Riley Industrial Services, Inc.</b> 2615 San Juan Blvd Farmington, NM 87499	2. Destination Name: <b>J.F.J. Landfarm C/O Industrial Ecosystems Inc.</b> #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name):  2615 San Juan Blvd  Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR):  Street Address: 2615 San Juan Blvd.
4. Source and Description of Waste <b>Road Base (sand, clay, gravel) mixed with approximately 500 gallons of No. 2 Diesel Fuel resulting from vandalism/sabotage to the diesel storage tank located in the Riley Industrial yard. Attached: MSDS for No. 2 Diesel Fuel.</b>	

I, G.W. Riley representative for: Riley Industrial Services, 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):

G.W. Riley

Phone Contact:

327-4947

Title:

Superintendent

P.O# / Pay key No:

Date:

1-12-07

MSDS Code: 001847

Status: Final

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## MATERIAL SAFETY DATA SHEET

### No. 2 Diesel Fuel

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** No. 2 Diesel Fuel  
**Synonyms:** CARB Diesel TF3; CARB Diesel; CARB Diesel 10%  
CARB Diesel Ultra Low Sulfur - Dyed and Undyed  
EPA Low Sulfur Diesel Fuel - Dyed and Undyed  
EPA Off Road High Sulfur Diesel - Dyed  
High Sulfur Diesel Fuel; Low Sulfur Diesel Fuel  
No. 2 Diesel Fuel Oil  
No. 2 High Sulfur Diesel - Dyed  
No. 2 Low Sulfur Diesel - Dyed; No. 2 Low Sulfur Diesel - Undyed  
No. 2 Low Sulfur Distillate  
No. 2 Ultra Low Sulfur Diesel - Dyed; No. 2 Ultra Low Sulfur Diesel - Undyed  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel; No. 2 Distillate  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel

**Intended Use:** Fuel  
**Chemical Family:** Petroleum Hydrocarbon

**Responsible Party:** ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas 77079-1175

**MSDS Information:** 800-762-0942  
MSDS@conocophillips.com

**Customer Service:** 800-527-5476  
**Technical Information:** 800-527-5476

#### Emergency Overview

**24 Hour Emergency Telephone Numbers:**  
Spill, Leak, Fire or Accident Call CHEMTREC:  
North America: (800) 424-9300  
Others: (703) 527-3887 (collect)

California Poison Control System: (800) 356-3219

**Health Hazards/Precautionary Measures:** Causes skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use with ventilation adequate to keep exposure below recommended limits, if any. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Flammable liquid and vapor. Keep away from heat, sparks, flames, static electricity or other sources of ignition.

**Appearance:** Straw colored to dyed red  
**Physical Form:** Liquid  
**Odor:** Diesel fuel

**NFPA 704 Hazard Class:**  
**Health:** 1 (Slight)  
**Flammability:** 2 (Moderate)  
**Instability:** 0 (Least)

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS					
Component / CAS No:	Concentration (wt %)	ACGIH:	OSHA:	NIOSH:	Other:
Diesel Fuel No. 2 68476-34-6	100	100 mg/m <sup>3</sup> TWA- SKIN	NE	NE	—
Naphthalene 91-20-3	<1	10 ppm TWA 52 mg/m <sup>3</sup> TWA 15 ppm STEL 79 mg/m <sup>3</sup> STEL	10 ppm TWA 50 mg/m <sup>3</sup> TWA	250 ppm IDLH	—

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

NE=Not Established

## 3. HAZARDS IDENTIFICATION

### Potential Health Effects

**Eye:** Contact may cause mild eye irritation including stinging, watering, and redness.

**Skin:** Mild to moderate skin irritant. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact may cause drying and cracking of the skin, dermatitis (inflammation), burns, and severe skin damage. No harmful effects from skin absorption have been reported.

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** Low degree of toxicity by ingestion. **ASPIRATION HAZARD** - This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

**Signs and Symptoms:** Effects of overexposure may include irritation of the respiratory tract, irritation of the digestive tract, nausea, diarrhea, transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

**Cancer:** There is inadequate information to evaluate the cancer hazard of this material. See Section 11 for information on the individual components, if any.

**Target Organs:** Inadequate evidence available for this material. See Section 11 for target-organ toxicity information of individual components, if any.

**Developmental:** Inadequate data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders.

## 4. FIRST AID MEASURES

**Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin:** Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention.

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**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** Aspiration hazard. Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

## 5. FIRE-FIGHTING MEASURES

### Flammable Properties:

Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
OSHA Flammability Class:	Combustible liquid
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

**Unusual Fire & Explosion Hazards:** This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

## 6. ACCIDENTAL RELEASE MEASURES

**Flammable.** Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).



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## 7. HANDLING AND STORAGE

**Handling:** Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

### Personal Protective Equipment (PPE):

**Respiratory:** A NIOSH certified air purifying respirator with an organic vapor cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage. Examples of approved materials are nitrile or Viton® (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

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Status: Final

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Straw colored to dyed red
Physical Form:	Liquid
Odor:	Diesel fuel
Odor Threshold:	No data
pH:	Not applicable
Vapor Pressure (mm Hg):	0.40
Vapor Density (air=1):	> 3
Boiling Point:	300-690°F / 149-366°C
Solubility in Water:	Negligible
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	0.81-0.88@ 60°F (15.6°C)
Bulk Density:	7.08 lbs/gal
Viscosity cSt @ 40°C:	1.7-4.1
Percent Volatile:	Negligible@ ambient conditions
Evaporation Rate (nBuAc=1):	<1
Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Flammable liquid and vapor. Vapor can cause flash fire.

**Conditions to Avoid:** Avoid all possible sources of ignition (see Sections 5 and 7).

**Materials to Avoid (Incompatible Materials):** Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

**Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen and sulfur oxides. The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. See Section 11 for additional information on hazards of engine exhaust. IARC has classified Diesel exhaust as probably carcinogenic in humans.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Chronic Data:

#### **Diesel Fuel No. 2 (58476-34-6)**

**Carcinogenicity:** Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation. Animal studies have also shown that washing the skin with soap and water can reduce the tumor response. Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as a carcinogen by NTP, IARC or OSHA.

**Target Organs:** Limited evidence of renal impairment has been noted from a few older case reports involving excessive exposure to diesel fuel No. 2. However, renal toxicity has not been demonstrated to be a consistent finding of diesel fuel exposure.

#### **Naphthalene (91-20-3)**

**Carcinogenicity:** Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

MSDS Code: 001847

Status: Final

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Date of Issue: 21-Feb-2006

**14. TRANSPORT INFORMATION**

Labels: Flammable

Placards/Marking (Bulk): Flammable/1202

Packaging - Non-Bulk: P001, LP01

EMS: F-E, S-E

**ICAO/IATA**

UNID #: UN1202

Proper Shipping Name: Diesel fuel

Hazard Class/Division: 3

Packing Group: III

Subsidiary risk: None

Non-Bulk Package Marking: Diesel fuel, UN1202

Labels: Flammable

	LTD. QTY.	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	Y309	309	310
Max. Net Qty. Per Package:	10 L	60 L	220 L

**15. REGULATORY INFORMATION****U.S. Regulations:****EPA SARA 311/312 (Title III Hazard Categories)**

Acute Health: Yes

Chronic Health: No

Fire Hazard: Yes

Pressure Hazard: No

Reactive Hazard: No

**SARA - Section 313 and 40 CFR 372:**

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

Naphthalene.....91-20-3.....&lt;1%

**EPA (CERCLA) Reportable Quantity (In pounds):**

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

**CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPOs (In pounds):**

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:

- None Known -

**California Proposition 65:**

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health &amp; Safety Code Section 25249.5):

Benzene - Cancer, Developmental and Reproductive Toxicant

Naphthalene - Cancer

Toluene - Developmental Toxicant

Diesel engine exhaust, while not a component of this material, is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

**Carcinogen Identification:**

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

Diesel exhaust is a probable cancer hazard based on tests in laboratory animals. It has been identified as a carcinogen by IARC.

**TSCA:**

All components are listed on the TSCA inventory.

**MSDS Code:** 001847**Status:** Final**Page 8/8****Date of Issue:** 21-Feb-2006

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**International Regulations:****Canadian Regulations:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**Domestic Substances List:** Listed**WHMIS Hazard Class:**

B2 - Flammable Liquids

D2B - Materials Causing Other Toxic Effects - Toxic Material

**16. OTHER INFORMATION****Issue Date:**

21-Feb-2006

**Previous Issue Date:**

13-Feb-2003

**Product Code:**

Multiple

**Previous Product Code:**

Multiple

**Revised Sections or Basis for Revision:**

Product Name / Synonyms (Section 1)

**MSDS Code:**

001847

**Disclaimer of Expressed and implied Warranties:**

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

**MSDS Code:** 001847  
**Status:** Final

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**Date of Issue:** 21-Feb-2006

#### Acute Data:

**Diesel Fuel No. 2 (68476-34-6)**

*Dermal LD50*= >5ml/kg (Rabbit)

*LC50*= No data available

*Oral LD50*= 9 ml/kg (Rat)

**Naphthalene (81-20-3)**

*Dermal LD50*= >2.5 g/kg (rat)

*LC50*= >340 mg/m<sup>3</sup>/1H (rat)

*Oral LD50*= 490 mg/kg; 2.6 g/kg (rat)

## 12. ECOLOGICAL INFORMATION

When middle distillate hydrocarbons escape into the environment due to leaks or spills, most of their constituent hydrocarbons will evaporate and be photodegraded by reaction with hydroxyl radicals in the atmosphere. The half-lives in air for many of the individual hydrocarbons is less than one day. Less volatile hydrocarbons can persist in the aqueous environment for longer periods. They remain floating on the surface of the water; those that reach soil or sediment biodegrade relatively slowly. Soil contaminated with middle distillates can develop adapted microbial species able to use the fuel as a carbon source; soil aeration and nutrient supplementation can enhance this biodegradation.

Reported LC50/EC50 values for water-soluble fractions of middle distillates are usually in the range of 10 to 100 mg/liter. Adverse effects on the gills, pseudobranch, kidney and nasal mucosa have been reported in fish involved in spills of middle distillates. Juvenile clams may be particularly sensitive to marine sediments contaminated as a result of spilled material. Direct toxicity and fouling of sea birds can occur if birds dive through floating layers of spilled material.

Phytotoxic effects of middle distillate hydrocarbons have been reported following exposure of plants to sprays or vapors. Lack of seed germination and inhibition of seedling growth may also occur. There is evidence for moderate bioaccumulation of the water-soluble hydrocarbons present in middle distillates.

## 13. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for ignitability (D001) and benzene (D018) prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

## 14. TRANSPORT INFORMATION

### DOT

**Shipping Description:** Diesel Fuel, Combustible liquid, NA1993, III

**Non-Bulk Package Marking:** Not regulated in non-bulk quantities

**Non-Bulk Package Labeling:** Not regulated in non-bulk quantities

**Bulk Package/Placard Marking:** Combustible/1993

**Packaging - References (Exceptions, Non-Bulk, Bulk):** 49 CFR 173.150(f), 173.203, 173.241

**Hazardous Substance:** None

**Emergency Response Guide:** 128

**Note:** This product has been reclassified as a Combustible Liquid for domestic land transportation using 49 CFR 173.150(f).

### IMDG

**Shipping Description:** UN1202, Diesel fuel, 3, III (52°C)

**Non-Bulk Package Marking:** Diesel fuel, UN1202

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>	4. Generator: Aztec Well Services  5. Originating Site: 5 miles up Snakehill Rd. off of Hwy 64
2. Management Facility Destination: JFJ Landfarm L.L.C.	6. Transporter: Underground Specialties Construction
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	8. State: NM
7. Location of Material (Street Address or ULSTR) 5 miles up Snakehill Road off of Hwy. 64 @ mile marker 96	
9. <u>Circle One</u> :  A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>	

**BRIEF DESCRIPTION OF MATERIAL:** Approximately 5-6 yards of soil impacted with 2 buckets of unused EZ-Mud and 7 sacks of unused Quik-Gel (both products are used to keep gas downhole and bring up dirt).

MSDS attached.

Estimated Volume 5-6 cy Known Volume      cyds (to be entered by the operator at the end of the haul)

SIGNATURE Marcella Marquez TITLE: Administrative Officer DATE: 2/1/2007  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Marcella Marquez TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: marcella@industrialecosystems.com

(This space for State Use)		
APPROVED BY: _____	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____

DUPLICATE



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
Joanna Prukop  
Cabinet Secretary

**Mark Fesaire**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

<b>1. Generator Name and Address</b> Aztec Well Service 900 S. Main Street Aztec, NM 87410	<b>2. Destination Name:</b> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
<b>3. Originating Site (name):</b>  5 miles up Snakehill Road off of Hwy. 64 @ mile marker 96  Attach list of originating sites as appropriate	<b>Location of the Waste (Street address &amp;/or ULSR):</b>  L- S- T- R- or attach list Street Address: 5 miles up Snakehill Road off of Hwy. 64 @ mile marker 96
<b>4. Source and Description of Waste</b>  Clean up of soil impacted with 2 buckets of unused EZ-mud & 7 sacks of Quik-Gel (both products are used to keep gas downhole and bring up the dirt)	

I, Jeremy Mead representative for Aztec Well Service 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]

Phone Contact: 505-320-6466

Title: HSE Supervisor

P.O# / Pay key No: \_\_\_\_\_

Date: 1/30/2007

Oil Conservation Division \* 1000 Rio Brazos Road \* Aztec, New Mexico 87410  
Phone: (505) 334-6178 \* Fax (505) 334-6170 \* <http://www.emnrd.state.nm.us>

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **EZ-MUD®**

Revision Date: 16-Feb-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: EZ-MUD®  
Synonyms: None  
Chemical Family: Blend  
Application: Shale Inhibitor

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Hydrotreated light petroleum distillate	64742-47-8	10 - 30%	200 mg/m <sup>3</sup>	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed.

### 4. FIRST AID MEASURES

**Inhalation**: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

**Skin**: Wash with soap and water. Get medical attention if irritation persists. Remove contaminated shoes and discard.

**Eyes**: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion**: Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

**Notes to Physician**: Not Applicable



## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	> 200Min: > 200
Flash Point/Range (C):	Not DeterminedMin: > 93
Flash Point Method:	PMCC
Autoignition Temperature (F):	> 392
Autoignition Temperature (C):	> 200
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Decomposition in fire may produce toxic gases. Use water spray to cool fire exposed surfaces.

Special Protective Equipment for Fire-Fighters Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

NFPA Ratings: Health 2, Flammability 1, Reactivity 0  
HMIS Ratings: Flammability 1, Reactivity 0, Health 2

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment.

Environmental Precautionary Measures Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning / Absorption Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

Storage Information Store away from oxidizers. Keep container closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls A well ventilated area to control dust levels. Local exhaust ventilation should be used in areas without good cross ventilation.

Respiratory Protection Organic vapor respirator with a dust/mist filter. In high concentrations, supplied air respirator or a self-contained breathing apparatus.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	White to gray
Odor:	Mild hydrocarbon
pH:	6-8

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity @ 20 C (Water=1):	1.0
Density @ 20 C (lbs./gallon):	8.3
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	347
Boiling Point/Range (C):	175
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	0.002
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	70
Evaporation Rate (Butyl Acetate=1):	< 1
Solubility in Water (g/100ml):	Partially soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Keep away from heat, sparks and flame.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Ammonia. Oxides of nitrogen. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
Skin Contact	May cause skin irritation.
Eye Contact	May cause severe eye irritation.
Ingestion	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.
Aggravated Medical Conditions	Lung disorders.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	

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Page 3 of 6

<b>Oral Toxicity:</b>	Not determined
<b>Dermal Toxicity:</b>	Not determined
<b>Inhalation Toxicity:</b>	Not determined
<b>Primary Irritation Effect:</b>	Not determined
<b>Carcinogenicity</b>	Not determined
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## 12. ECOLOGICAL INFORMATION

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	BOD(28 Day): 40% of COD
<b>Bio-accumulation</b>	Not Determined

### Ecotoxicological Information

<b>Acute Fish Toxicity:</b>	TLM96: >1000 mg/l (Pimephales promelas)
<b>Acute Crustaceans Toxicity:</b>	TLM48: 98 mg/l (Acartia tonsa)
<b>Acute Algae Toxicity:</b>	EC50: 16.70 mg/l (Skeletonema costatum)

<b>Chemical Fate Information</b>	Not determined
<b>Other Information</b>	Not applicable

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Method</b>	Disposal should be made in accordance with federal, state, and local regulations.
<b>Contaminated Packaging</b>	Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR** Not restricted

### Air Transportation

ICAO/IATA Not restricted

### Sea Transportation

IMDG Not restricted

## Other Shipping Information

Labels: None

### 15. REGULATORY INFORMATION

#### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	Acute Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.
<b>Canadian Regulations</b>	
Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	D2B Toxic Materials

### 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement** This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

EZ-MUD®  
Page 5 of 6

FROM : TRIPLE S TRKG WTR DEPT

PHONE NO. : 505 334 3137

Jan. 30 2007 03:06PM P8

EZ-MUD@  
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\*\*\*END OF MSDS\*\*\*

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **QUIK-GEL®**

Revision Date: 10-Jun-2005

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: QUIK-GEL®

Synonyms: None

Chemical Family: Mineral

Application: Viscosifier

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-680-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Crystalline silica, cristobalite	14464-46-1	0 - 1%	0.025 mg/m <sup>3</sup>	1/2 x 10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Crystalline silica, tridymite	15468-32-3	0 - 1%	0.05 mg/m <sup>3</sup>	1/2 x 10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Crystalline silica, quartz	14808-60-7	1 - 5%	0.025 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Bentonite	1302-78-9	50 - 100%	Not applicable	Not applicable

More restrictive exposure limits may be enforced by some states, agencies, or other authorities.

### 3. HAZARDS IDENTIFICATION

### 3. HAZARDS IDENTIFICATION

#### Hazard Overview

#### CAUTION! - ACUTE HEALTH HAZARD

May cause eye and respiratory irritation.

#### DANGER! - CHRONIC HEALTH HAZARD

Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposures below recommended exposure limits. Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Review the Material Safety Data Sheet (MSDS) for this product, which has been provided to your employer.

### 4. FIRST AID MEASURES

#### Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

#### Skin

Wash with soap and water. Get medical attention if irritation persists.

#### Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

#### Ingestion

Under normal conditions, first aid procedures are not required.

#### Notes to Physician

Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):

Not Determined

Flash Point/Range (C):

Not Determined

Flash Point Method:

Not Determined

Autoignition Temperature (F):

Not Determined

Autoignition Temperature (C):

Not Determined

Flammability Limits in Air - Lower (%):

Not Determined

Flammability Limits in Air - Upper (%):

Not Determined

Fire Extinguishing Media

All standard firefighting media.

Special Exposure Hazards

Not applicable.

Special Protective Equipment for Fire-Fighters

Not applicable.

NFPA Ratings:

Health 0, Flammability 0, Reactivity 0

HMIS Ratings:

Flammability 0, Reactivity 0, Health 0\*

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment. Avoid creating and breathing dust.

**Environmental Precautionary Measures**

None known.

**Procedure for Cleaning / Absorption**

Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

QUIK-GEL®  
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## 7. HANDLING AND STORAGE

### Handling Precautions

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Material is slippery when wet.

### Storage Information

Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Keep from excessive heat. Do not reuse empty container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits listed in Section 2.

### Respiratory Protection

Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product.

### Hand Protection

Normal work gloves.

### Skin Protection

Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

### Eye Protection

Wear safety glasses or goggles to protect against exposure.

### Other Precautions

None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical State:

Powder

### Color:

Various

### Odor:

Mild earthy

### pH:

8-10

### Specific Gravity @ 20 C (Water=1):

2.6

### Density @ 20 C (lbs./gallon):

Not Determined

### Bulk Density @ 20 C (lbs./ft<sup>3</sup>):

47.6-72.1

### Boiling Point/Range (F):

Not Determined

### Boiling Point/Range (C):

Not Determined

### Freezing Point/Range (F):

Not Determined

### Freezing Point/Range (C):

Not Determined

### Vapor Pressure @ 20 C (mmHg):

Not Determined

### Vapor Density (Air=1):

Not Determined

### Percent Volatiles:

Not Determined

### Evaporation Rate (Butyl Acetate=1):

Not Determined

### Solubility in Water (g/100ml):

Slightly soluble

### Solubility in Solvents (g/100ml):

Not Determined

### VOCs (lbs./gallon):

Not Determined

### Viscosity, Dynamic @ 20 C (centipoise):

Not Determined

### Viscosity, Kinematic @ 20 C (centistokes):

Not Determined

### Partition Coefficient/n-Octanol/Water:

Not Determined

### Molecular Weight (g/mole):

Not Determined



## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Hydrofluoric acid.
Hazardous Decomposition Products	Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	<p>Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 2A).</p> <p>Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).</p>
Skin Contact	May cause mechanical skin irritation.
Eye Contact	May cause eye irritation.
Ingestion	None known
Aggravated Medical Conditions	Individuals with respiratory disease, including but not limited to asthma and bronchitis, or subject to eye irritation, should not be exposed to quartz dust.

**Chronic Effects/Carcinogenicity** Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

Cancer Status: The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1 - carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A - possible carcinogen to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.

**Other Information** For further information consult "Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, pages 761-768 (1997).

#### Toxicity Tests

Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined
Carcinogenicity	Refer to <u>IARC Monograph 68, Silica, Some Silicates and Organic Fibres</u> (June 1997).
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not determined
Bio-accumulation	Not Determined

#### Ecotoxicological Information

Acute Fish Toxicity:	TLM96: 10000 ppm ( <i>Oncorhynchus mykiss</i> )
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined

QUIK-GEL®  
Page 5 of 7

Chemical Fate Information Not determined

Other Information Not applicable

### 13. DISPOSAL CONSIDERATIONS

Disposal Method Bury in a licensed landfill according to federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

### 14. TRANSPORT INFORMATION

#### Land Transportation

DOT

Not restricted

Canadian TDG

Not restricted

ADR Not restricted

#### Air Transportation

ICAO/IATA Not restricted

#### Sea Transportation

IMDG Not restricted

#### Other Shipping Information

Labels: None

### 15. REGULATORY INFORMATION

#### US Regulations

US TSCA Inventory All components listed on inventory.

EPA SARA Title III Extremely Hazardous Substances Not applicable

EPA SARA (311,312) Hazard Class Acute Health Hazard  
Chronic Health Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity For This Product Not applicable.

EPA RCRA Hazardous Waste Classification If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65 The California Proposition 65 regulations apply to this product.

QUIK-GEL®  
Page 6 of 7

<b>MA Right-to-Know Law</b>	One or more components listed.
<b>NJ Right-to-Know Law</b>	One or more components listed.
<b>PA Right-to-Know Law</b>	One or more components listed.
<b>Canadian Regulations</b>	
<b>Canadian DSL Inventory</b>	All components listed on inventory.
<b>WHMIS Hazard Class</b>	D2A Very Toxic Materials Crystalline silica

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>		4. Generator: Aztec Well Services
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: 5 miles up Snakehill Rd. off of Hwy 64
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		6. Transporter: Underground Specialties Construction
7. Location of Material (Street Address or ULSTR) 5 miles up Snakehill Road off of Hwy. 64 @ mile marker 96		8. State: NM
9. <u>Circle One</u> :  A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>		

**BRIEF DESCRIPTION OF MATERIAL:** Approximately 5-6 yards of soil impacted with 2 buckets of unused EZ-Mud and 7 sacks of unused Quik-Gel (both products are used to keep gas downhole and bring up dirt).

MSDS attached.

Estimated Volume 5-6 cy Known Volume        cyds (to be entered by the operator at the end of the haul)

SIGNATURE Marcella Marquez TITLE: Administrative Officer DATE: 2/1/2007  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Marcella Marquez TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: marcella@industrialecosystems.com

(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor  
Jonna Prukop  
Cabinet Secretary

**Mark Fesmire**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

<b>1. Generator Name and Address</b> Aztec Well Service 900 S. Main Street Aztec, NM 87410	<b>2. Destination Name:</b> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
<b>3. Originating Site (name):</b>  5 miles up Snakehill Road off of Hwy. 64 @ mile marker 96  Attach list of originating sites as appropriate	<b>Location of the Waste (Street address &amp;/or U.S. Hwy.):</b>  L- S- T- R- or attach list Street Address: 5 miles up Snakehill Road off of Hwy. 64 @ mile marker 96
<b>4. Source and Description of Waste</b>  Clean up of soil impacted with 2 buckets of unused EZ-mud & 7 sacks of Quik-Gel (both products are used to keep gas downhole and bring up the dirt)	

I, Jeremy Mead representative for Aztec Well Service 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): [Signature]

Phone Contact: 505-320-6466

Title: HSE Supervisor

P.O# / Pay key No: \_\_\_\_\_

Date: 1/30/2007

Oil Conservation Division \* 1000 Rio Brazos Road \* Aztec, New Mexico 87410  
Phone: (505) 334-6178 \* Fax (505) 334-6170 \* <http://www.enmrd.state.nm.us>

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **EZ-MUD®**

Revision Date: 16-Feb-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: EZ-MUD®  
Synonyms: None  
Chemical Family: Blend  
Application: Shale Inhibitor

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1875  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Hydrotreated light petroleum distillate	64742-47-8	10 - 30%	200 mg/m <sup>3</sup>	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed.

### 4. FIRST AID MEASURES

**Inhalation**: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

**Skin**: Wash with soap and water. Get medical attention if irritation persists. Remove contaminated shoes and discard.

**Eyes**: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion**: Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

**Notes to Physician**: Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	> 200Min: > 200
Flash Point/Range (C):	Not DeterminedMin: > 93
Flash Point Method:	PMCC
Autoignition Temperature (F):	> 392
Autoignition Temperature (C):	> 200
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Decomposition in fire may produce toxic gases. Use water spray to cool fire exposed surfaces.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 2, Flammability 1, Reactivity 0  
**HMIS Ratings:** Flammability 1, Reactivity 0, Health 2

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

**Storage Information** Store away from oxidizers. Keep container closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** A well ventilated area to control dust levels. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection** Organic vapor respirator with a dust/mist filter. In high concentrations, supplied air respirator or a self-contained breathing apparatus.

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Rubber apron.

**Eye Protection** Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions** Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	White to gray
Odor:	Mild hydrocarbon
pH:	6-8

EZ-MUD®  
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity @ 20 C (Water=1):	1.0
Density @ 20 C (lbs./gallon):	8.3
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	347
Boiling Point/Range (C):	175
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	0.002
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	70
Evaporation Rate (Butyl Acetate=1):	< 1
Solubility in Water (g/100ml):	Partially soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Keep away from heat, sparks and flame.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Ammonia. Oxides of nitrogen. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
Skin Contact	May cause skin irritation.
Eye Contact	May cause severe eye irritation.
Ingestion	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.
Aggravated Medical Conditions	Lung disorders.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	

<b>Oral Toxicity:</b>	Not determined
<b>Dermal Toxicity:</b>	Not determined
<b>Inhalation Toxicity:</b>	Not determined
<b>Primary Irritation Effect:</b>	Not determined
<b>Carcinogenicity</b>	Not determined
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## 12. ECOLOGICAL INFORMATION

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	BOD(28 Day): 40% of COD
<b>Bio-accumulation</b>	Not Determined

### Ecotoxicological Information

<b>Acute Fish Toxicity:</b>	TLM96: >1000 mg/l (Pimephales promelas)
<b>Acute Crustaceans Toxicity:</b>	TLM48: 98 mg/l (Acartia tonsa)
<b>Acute Algae Toxicity:</b>	EC50: 16.70 mg/l (Skeletonema costatum)

<b>Chemical Fate Information</b>	Not determined
<b>Other Information</b>	Not applicable

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Method</b>	Disposal should be made in accordance with federal, state, and local regulations.
<b>Contaminated Packaging</b>	Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR** Not restricted

### Air Transportation

**ICAO/IATA** Not restricted

### Sea Transportation

IMDG Not restricted

## Other Shipping Information

Labels: None

## 15. REGULATORY INFORMATION

### US Regulations

US TSCA Inventory All components listed on inventory.

EPA SARA Title III Extremely Hazardous Substances Not applicable

EPA SARA (311,312) Hazard Class Acute Health Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity For This Product Not applicable.

EPA RCRA Hazardous Waste Classification If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law Does not apply.

PA Right-to-Know Law Does not apply.

### Canadian Regulations

Canadian DSL Inventory All components listed on inventory.

WHMIS Hazard Class D2B Toxic Materials

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

Additional Information For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

FROM : TRIPLE S TRKG WTR DEPT

PHONE NO. : 505 334 3137

Jan. 30 2007 03:06PM P8

EZ-MUD®  
Page 6 of 6

FROM : TRIPLE S TRKG WTR DEPT

PHONE NO. : 505 334 3137

DEPT :  
ADDRESS :

\*\*\*END OF MSDS\*\*\*

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **QUIK-GEL®**

Revision Date: 10-Jun-2005

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: QUIK-GEL®

Synonyms: None

Chemical Family: Mineral

Application: Viscosifier

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-680-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Crystalline silica, cristobalite	14464-46-1	0 - 1%	0.025 mg/m <sup>3</sup>	1/2 x 10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Crystalline silica, tridymite	15468-32-3	0 - 1%	0.05 mg/m <sup>3</sup>	1/2 x 10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Crystalline silica, quartz	14808-60-7	1 - 5%	0.025 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Bentonite	1302-78-9	60 - 100%	Not applicable	Not applicable

More restrictive exposure limits may be enforced by some states, agencies, or other authorities.

### 3. HAZARDS IDENTIFICATION

### 3. HAZARDS IDENTIFICATION

#### Hazard Overview

#### CAUTION! - ACUTE HEALTH HAZARD

May cause eye and respiratory irritation.

#### DANGER! - CHRONIC HEALTH HAZARD

Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposures below recommended exposure limits. Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Review the Material Safety Data Sheet (MSDS) for this product, which has been provided to your employer.

### 4. FIRST AID MEASURES

#### Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

#### Skin

Wash with soap and water. Get medical attention if irritation persists.

#### Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

#### Ingestion

Under normal conditions, first aid procedures are not required.

#### Notes to Physician

Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):

Not Determined

Flash Point/Range (C):

Not Determined

Flash Point Method:

Not Determined

Autoignition Temperature (F):

Not Determined

Autoignition Temperature (C):

Not Determined

Flammability Limits in Air - Lower (%):

Not Determined

Flammability Limits in Air - Upper (%):

Not Determined

Fire Extinguishing Media

All standard firefighting media.

Special Exposure Hazards

Not applicable.

Special Protective Equipment for Fire-Fighters

Not applicable.

NFPA Ratings:

Health 0, Flammability 0, Reactivity 0

HMIS Ratings:

Flammability 0, Reactivity 0, Health 0\*

### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary Measures

None known.

Procedure for Cleaning / Absorption

Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

QUIK-GEL®

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## 7. HANDLING AND STORAGE

### Handling Precautions

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard En 149, or equivalent respirator when using this product. Material is slippery when wet.

### Storage Information

Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Keep from excessive heat. Do not reuse empty container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits listed in Section 2.

### Respiratory Protection

Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product.

### Hand Protection

Normal work gloves.

### Skin Protection

Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

### Eye Protection

Wear safety glasses or goggles to protect against exposure.

### Other Precautions

None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical State:

Powder

### Color:

Various

### Odor:

Mild earthy

### pH:

8-10

### Specific Gravity @ 20 C (Water=1):

2.6

### Density @ 20 C (lbs./gallon):

Not Determined

### Bulk Density @ 20 C (lbs./ft<sup>3</sup>):

47.6-72.1

### Boiling Point/Range (F):

Not Determined

### Boiling Point/Range (C):

Not Determined

### Freezing Point/Range (F):

Not Determined

### Freezing Point/Range (C):

Not Determined

### Vapor Pressure @ 20 C (mmHg):

Not Determined

### Vapor Density (Air=1):

Not Determined

### Percent Volatiles:

Not Determined

### Evaporation Rate (Butyl Acetate=1):

Not Determined

### Solubility in Water (g/100ml):

Slightly soluble

### Solubility in Solvents (g/100ml):

Not Determined

### VOCs (lbs./gallon):

Not Determined

### Viscosity, Dynamic @ 20 C (centipoise):

Not Determined

### Viscosity, Kinematic @ 20 C (centistokes):

Not Determined

### Partition Coefficient/n-Octanol/Water:

Not Determined

### Molecular Weight (g/mole):

Not Determined

## 10. STABILITY AND REACTIVITY

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None anticipated
<b>Incompatibility (Materials to Avoid)</b>	Hydrofluoric acid.
<b>Hazardous Decomposition Products</b>	Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

<b>Principle Route of Exposure</b>	Eye or skin contact, inhalation.
<b>Inhalation</b>	<p>Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 2A).</p> <p>Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).</p>
<b>Skin Contact</b>	May cause mechanical skin irritation.
<b>Eye Contact</b>	May cause eye irritation.
<b>Ingestion</b>	None known
<b>Aggravated Medical Conditions</b>	Individuals with respiratory disease, including but not limited to asthma and bronchitis, or subject to eye irritation, should not be exposed to quartz dust.



**Chronic Effects/Carcinogenicity** Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

**Cancer Status:** The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1 - carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A - possible carcinogen to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.

#### Other Information

For further information consult "Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, pages 761-768 (1997).

#### Toxicity Tests

<b>Oral Toxicity:</b>	Not determined
<b>Dermal Toxicity:</b>	Not determined
<b>Inhalation Toxicity:</b>	Not determined
<b>Primary Irritation Effect:</b>	Not determined
<b>Carcinogenicity</b>	Refer to <u>IARC Monograph 68, Silica, Some Silicates and Organic Fibres</u> (June 1997).
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## 12. ECOLOGICAL INFORMATION

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	Not determined
<b>Bio-accumulation</b>	Not Determined

#### Ecotoxicological Information

<b>Acute Fish Toxicity:</b>	TLM98: 10000 ppm ( <i>Oncorhynchus mykiss</i> )
<b>Acute Crustaceans Toxicity:</b>	Not determined
<b>Acute Algae Toxicity:</b>	Not determined

QUICK-GEL®  
Page 5 of 7

Chemical Fate Information Not determined

Other Information Not applicable

### 13. DISPOSAL CONSIDERATIONS

Disposal Method Bury in a licensed landfill according to federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

### 14. TRANSPORT INFORMATION

#### Land Transportation

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

#### Air Transportation

ICAO/IATA Not restricted

#### Sea Transportation

IMDG Not restricted

#### Other Shipping Information

Labels: None No additional labels apply to this product.

### 15. REGULATORY INFORMATION

#### US Regulations

US TSCA Inventory All components listed on inventory.

EPA SARA Title III Extremely  
Hazardous Substances Not applicable

EPA SARA (311,312) Hazard  
Class Acute Health Hazard  
Chronic Health Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund  
Reportable Spill Quantity For This  
Product Not applicable.

EPA RCRA Hazardous Waste  
Classification If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65 The California Proposition 65 regulations apply to this product.

QUIK-GEL®  
Page 6 of 7

<b>MA Right-to-Know Law</b>	One or more components listed.
<b>NJ Right-to-Know Law</b>	One or more components listed.
<b>PA Right-to-Know Law</b>	One or more components listed.
<b>Canadian Regulations</b>	
<b>Canadian DSL Inventory</b>	All components listed on inventory.
<b>WHMIS Hazard Class</b>	D2A Very Toxic Materials Crystalline silica

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

### Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>	4. Generator: BP America Production Company 5. Originating Site: Ulibarri GC 3M 6. Transporter: IEI 8. State: NM
2. Management Facility Destination: JFJ Landfarm L.L.C.	
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	
7. Location of Material (Street Address or ULSTR) UL P S35 T30N R 9W	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.  All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL: Hydro-Carbon Impacted Soil from Illegal Dumping-RCRA-8 attached

Estimated Volume: 12 Cubic Yards Known Volume: (to be entered by the operator at the end of the haul)

SIGNATURE  TITLE: Operations Manager DATE: 10/30/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

COPY



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**  
Cabinet Secretary

**Mark Fesmire**

Director

**Oil Conservation Division**

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: <b>BP America Production Company</b> <b>200 Energy Court</b> <b>Farmington, NM 87401</b>	2. Destination Name: <b>J.F.J. Landfarm C/O Industrial Ecosystems Inc.</b> <b>#81 CR 3150</b> <b>Aztec, NM 87410</b> <b>Phone # 505-632-1782 Fax No# 505-334-1003</b>
3. Originating Site (name):  <b>Ulibarri GC 3M</b>  <b>Attach list of originating sites as appropriate</b>	Location of the Waste (Street address &/or ULSTR):  <b>UL- P S 35 T 30N R- 9W or attach list</b> <b>Street Address: _____</b>
4. Source and Description of Waste <b>Hydro-Carbon Impacted soil from illegal dumping</b>	

I, **Rodolfo Garcia** representative for **BP America Production Company**, do hereby certify that, according to the New Mexico Administrative Code, 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):

*Rodolfo Garcia*

Phone Contact: **505-486-0978**

Title:

*Construction Specialist*

P.O# / Pay key No: **200605248**

Date:

*10/30/06*

**ZNELSJHJSL**

# CHAIN OF CUSTODY RECORD

15360

Client / Project Name <b>BLAGE/BP</b>			Project Location <b>ULIBARRI 3M</b>		ANALYSIS / PARAMETERS								
Sampler: <b>9-C-3699</b>			Client No. <b>94034-010</b>		No. of Containers <b>8</b>	RCRA METALS <b>8</b>	B260 <b>8</b>	TAP <b>8015</b>				Remarks	
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix									
<b>GRAB #1</b>	<b>1/11/06</b>	<b>1515</b>	<b>35716</b>	<b>SOLID</b>	<b>1</b>	<b>X</b>	<b>X</b>	<b>X</b>					
Relinquished by: (Signature) <b>9-C-3699</b>			Date <b>1/12/06</b>	Time <b>0820</b>	Received by: (Signature) <b>[Signature]</b>				Date <b>1/12/06</b>	Time <b>08:20</b>			
Relinquished by: (Signature)					Received by: (Signature)								
Relinquished by: (Signature)					Received by: (Signature)								
<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615										Sample Receipt			
											Y	N	N/A
										Received Intact	✓		
										Cool - Ice/Blue Ice	✓		

# ENVIROTECH LABS

**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****TRACE METAL ANALYSIS**

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	Grab #1	Date Reported:	01-13-06
Laboratory Number:	35716	Date Sampled:	01-11-06
Chain of Custody:	15360	Date Received:	01-12-06
Sample Matrix:	Solid	Date Analyzed:	01-13-06
Preservative:	N/A	Date Digested:	01-12-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.098	0.001	5.0
Barium	58.4	0.001	100
Cadmium	0.020	0.001	1.0
Chromium	0.167	0.001	5.0
Lead	0.635	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

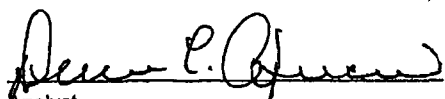
ND - Parameter not detected at the stated detection limit.

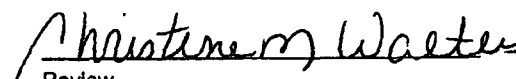
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: Ulibarri 3M.

  
Analyst

  
Review

**ENVIROTECH LABS****PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****EPA Method 8260B****Volatile Organic Compounds by GC/MS**

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	Grab #1	Date Reported:	01-13-06
Chain of Custody:	15360	Date Sampled:	01-11-06
Laboratory Number:	35716	Date Received:	01-12-06
Sample Matrix:	Solid	Date Analyzed:	01-13-06
Preservative:	Cool	Date Extracted:	01-12-06
Condition:	Cool and Intact	Analysis Requested:	8260 VOC

Parameter	Concentration	Units	Det. Limit	Dilution Factor
Benzene	ND	(ug/Kg)	1.0	1
Toluene	20.0	(ug/Kg)	1.0	1
Ethylbenzene	10.8	(ug/Kg)	1.0	1
Xylenes, Total	22.1	(ug/Kg)	1.0	1
Methyl tert-butyl ether (MTBE)	ND	(ug/Kg)	1.0	1
1,2,4-Trimethylbenzene	4.81	(ug/Kg)	1.0	1
1,3,5-Trimethylbenzene	2.48	(ug/Kg)	1.0	1
1,2-Dichloroethane (EDC)	ND	(ug/Kg)	1.0	1
1,2-Dibromoethane (EDB)	ND	(ug/Kg)	1.0	1
Naphthalene	36.3	(ug/Kg)	1.0	1
1-Methylnaphthalene	78.0	(ug/Kg)	2.0	1
2-Methylnaphthalene	71.6	(ug/Kg)	2.0	1
Bromobenzene	ND	(ug/Kg)	1.0	1
Bromochloromethane	ND	(ug/Kg)	1.0	1
Bromodichloromethane	ND	(ug/Kg)	1.0	1
Bromoform	ND	(ug/Kg)	1.0	1
Bromomethane	ND	(ug/Kg)	1.0	1
Carbon Tetrachloride	ND	(ug/Kg)	1.0	1
Chlorobenzene	ND	(ug/Kg)	1.0	1
Chloroethane	ND	(ug/Kg)	2.0	1
Chloroform	ND	(ug/Kg)	1.0	1
Chloromethane	ND	(ug/Kg)	1.0	1
2-Chlorotoluene	ND	(ug/Kg)	1.0	1
4-Chlorotoluene	ND	(ug/Kg)	1.0	1
cis-1,2-Dichloroethene	ND	(ug/Kg)	1.0	1
cis-1,3-Dichloropropene	ND	(ug/Kg)	1.0	1
1,2-Dibromo-3-chloropropane	ND	(ug/Kg)	2.0	1
Dibromochloromethane	ND	(ug/Kg)	1.0	1
Dibromoethane	ND	(ug/Kg)	2.0	1
1,2-Dichlorobenzene	ND	(ug/Kg)	1.0	1
1,3-Dichlorobenzene	ND	(ug/Kg)	1.0	1
1,4-Dichlorobenzene	ND	(ug/Kg)	1.0	1
Dichlorodifluoromethane	ND	(ug/Kg)	1.0	1
1,1-Dichloroethane	ND	(ug/Kg)	1.0	1
1,1-Dichloroethene	ND	(ug/Kg)	1.0	1
1,2-Dichloropropane	ND	(ug/Kg)	1.0	1
1,3-Dichloropropane	ND	(ug/Kg)	1.0	1
2,2-Dichloropropane	ND	(ug/Kg)	1.0	1



**ENVIROTECH LABS****PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****EPA Method 8260B****Volatile Organic Compounds by GC/MS**

Client: Blagg / BP

Sample ID: Grab #1

page 2

Laboratory Number: 35716

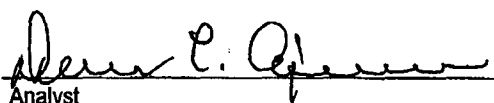
Parameter	Concentration (ug/Kg)	Units	Det. Limit	Dilution Factor
1,1-Dichloropropene	ND	(ug/Kg)	1.0	1
Hexachlorobutadiene	ND	(ug/Kg)	1.0	1
Isopropylbenzene	ND	(ug/Kg)	1.0	1
4-Isopropyltoluene	1.65	(ug/Kg)	1.0	1
Methylene Chloride	ND	(ug/Kg)	3.0	1
n-Butylbenzene	4.18	(ug/Kg)	1.0	1
n-Propylbenzene	1.09	(ug/Kg)	1.0	1
sec-Butylbenzene	1.32	(ug/Kg)	1.0	1
Styrene	ND	(ug/Kg)	1.0	1
tert-Butylbenzene	2.12	(ug/Kg)	1.0	1
Tetrachloroethene (PCE)	ND	(ug/Kg)	1.0	1
1,1,1,2-Tetrachloroethane	ND	(ug/Kg)	1.0	1
1,1,2,2-Tetrachloroethane	ND	(ug/Kg)	1.0	1
trans-1,2-Dichloroethene	ND	(ug/Kg)	1.0	1
trans-1,3-Dichloropropene	ND	(ug/Kg)	1.0	1
Trichloroethene (TCE)	ND	(ug/Kg)	1.0	1
Trichlorofluoromethane	ND	(ug/Kg)	1.0	1
1,2,3-Trichlorobenzene	ND	(ug/Kg)	1.0	1
1,2,4-Trichlorobenzene	ND	(ug/Kg)	1.0	1
1,1,1-Trichloroethane	ND	(ug/Kg)	1.0	1
1,1,2-Trichloroethane	ND	(ug/Kg)	1.0	1
1,2,3-Trichloropropane	ND	(ug/Kg)	2.0	1
Vinyl Chloride	ND	(ug/Kg)	2.0	1

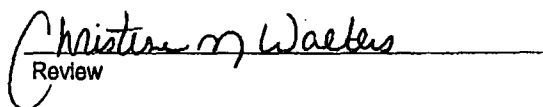
Surrogates:	Rec. Limits			
Dibromofluoromethane	99.6	% Recovery	78.6-115	1
1,2-Dichloroethane-d4	100.0	% Recovery	74.6-123	1
Toluene-d8	99.5	% Recovery	84.2-115	1
4-Bromofluorobenzene	99.9	% Recovery	78.6-115	1

ND = Parameter not detected at the stated detection limit.

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste,  
SW-846, USEPA, July 1992.  
Method 8260, Volatile Organic Compounds by Gas Chromatography / Mass  
Spectrometry, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Comments: **Uilbarri 3M.**

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

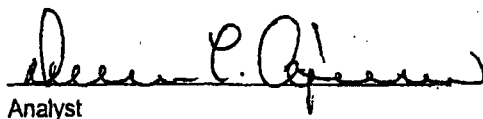
Client:	Blagg / BP	Project #:	94034-010
Sample ID:	Grab #1	Date Reported:	01-13-06
Laboratory Number:	35716	Date Sampled:	01-11-06
Chain of Custody No:	15360	Date Received:	01-12-06
Sample Matrix:	Solid	Date Extracted:	01-12-06
Preservative:	Cool	Date Analyzed:	01-13-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

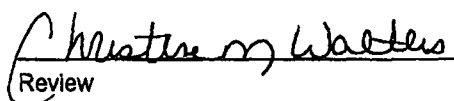
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.7	0.2
Diesel Range (C10 - C28)	5,880	0.1
Total Petroleum Hydrocarbons	5,880	0.2

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: Ulibarri 3M.

  
Analyst

  
Review

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> <i>Brandon Powell &amp; Brad Jones w/ O.C.D. on 9/7/06</i>	4. Generator: Halliburton Energy Services, Inc.  5. Originating Site: 210 Lorena Ave. (Halliburton facility)
2. Management Facility Destination: JFJ Landfarm L.L.C.	6. Transporter:
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	8. State: NM
7. Location of Material (Street Address or ULSTR)  410 Lorena Ave. Farmington, NM 87401	
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="checkbox"/> 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: Unused drilling mud (liquid/solid). Bill of Lading sheet and MSDS sheets attached for: AQUAGEL GOLD SEAL, BORE-HIB, PAC-R, FILTER-CHEK, EZ-MUD, and BARAZAN D.

Estimated Volume 20 bbls Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 9/6/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)		
APPROVED BY: <u><i>Brandon Powell</i></u>	TITLE: <u>Enviro/spec</u>	DATE: <u>9/7/06</u>
APPROVED BY: <u><i>[Signature]</i></u>	TITLE: <u>Enviro Engr</u>	DATE: <u>9/11/06</u>

## STRAIGHT BILL OF LADING

<b>CARRIER:</b>	<b>Shipper's No:</b>
<b>Carrier/Truck/Trailer No:</b>	<b>BOL No: B0000646843</b>

**Emergency Contact Number: 1-281-575-5000**For Non-Emergency Shipment Inquiries call 1345123541 during normal business hours

RECEIVED, subject to the property described below in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry the usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at anytime interested in all or any of said property, that every service to be performed hereunder shall be subject to all terms and conditions of the Uniform domestic Straight Bill of Lading set forth (1) in the Uniform Freight Classification in effect on the date hereof, if this is a rail or rail-water shipment, or (2) in the National Motor Freight Classification in effect on the date hereof, if this is a motor carrier shipment, except if subject to individual determined rates or contracts that had been agreed upon in writing between the shipper and the carrier (or their agent) in effect on the date of shipment. Carrier hereby certifies that it is familiar with all the terms and conditions of the said Bill of Lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the carrier and accepted for itself and its assigns.

**From:**  
**Address:**
**Date:** 09/05/06**Shipped to:****Dest ID:****Delivery Address:****Phone:****Contact:**

No. Pkg	Pkg Type	HM	Description of articles, special marks and exceptions	**Weight/Volume Subject to charge	COLLECTION OF CHARGES
1.00	1		201597 BA.FILTER-CHEK - 50 LB BAG NOT RESTRICTED	50.500 LB	Subject to section 7 of terms and conditions. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.  The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
1.00	1		201616 BA.BARAZAN D - 25 LB BAG NOT RESTRICTED	25.500 LB	
1.00	1		201215 BA.EZ-MUD - 5 GAL CAN NOT RESTRICTED	45.500 LB	
1.00	1		442358 BA.BORE-HIB - 5 GAL CAN NOT RESTRICTED	60.000 LB	
1.00	1		201319 BA.PAC-R - 50 LB BAG NOT RESTRICTED	50.500 LB	
1.00	1		200595 BA.AQUAGEL GOLDSEAL - 50 LB BAG NOT RESTRICTED	50.500 LB	
6.00			<b>Totals:</b>	<b>282.500 LB</b>	<b>Signature of Consignor</b>  <b>FREIGHT CHARGES</b> Prepaid unless otherwise marked.  <b>DECLARED VALUE</b> NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property which is hereby specifically stated by the shipped to be not exceeding.  \$  Per

*Product weights listed do not include pallets Charge Code (SAP): 23456235		Hazmat Reg. No. 060506 003 0020	
<b>Special Instructions:</b>			
<b>Loaded by:</b>	<b>Received by:</b>	<b>Date:</b>	
<b>Consignor Signature:</b>		<b>Carrier Signature</b>	
<b>No. of Pieces:</b>	<b>Date:</b>	<b>Time:</b>	

This is to certify that the above articles are properly classified, described, packaged, marked, and labeled, and are in proper conditions for transportation according to the applicable regulations of the Department of Transportation.

Signature: \_\_\_\_\_

Employee ID: \_\_\_\_\_

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **AQUAGEL® GOLD SEAL**

Revision Date: 16-Feb-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: AQUAGEL® GOLD SEAL  
Synonyms: None  
Chemical Family: Mineral  
Application: Viscosifier  
  
Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000  
  
Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Crystalline silica, cristobalite	14464-46-1	0 - 1%	0.05 mg/m <sup>3</sup>	1/2 x 10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Crystalline silica, tridymite	15468-32-3	0 - 1%	0.05 mg/m <sup>3</sup>	1/2 x 10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Crystalline silica, quartz	14808-60-7	1 - 5%	0.05 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> %SiO <sub>2</sub> + 2
Bentonite	1302-78-9	60 - 100%	Not applicable	Not applicable

More restrictive exposure limits may be enforced by some states, agencies, or other authorities.

### 3. HAZARDS IDENTIFICATION

## Hazard Overview

### CAUTION! - ACUTE HEALTH HAZARD

May cause eye and respiratory irritation.

### DANGER! - CHRONIC HEALTH HAZARD

Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposures below recommended exposure limits. Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Review the Material Safety Data Sheet (MSDS) for this product, which has been provided to your employer.

## 4. FIRST AID MEASURES

Inhalation	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Skin	Wash with soap and water. Get medical attention if irritation persists.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Ingestion	Under normal conditions, first aid procedures are not required.
Notes to Physician	Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media All standard firefighting media.

Special Exposure Hazards Not applicable.

Special Protective Equipment for Fire-Fighters Not applicable.

NFPA Ratings: Health 0, Flammability 0, Reactivity 0  
HMIS Ratings: Flammability 0, Reactivity 0, Health 0\*

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary Measures None known.

Procedure for Cleaning / Absorption Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

## 7. HANDLING AND STORAGE

Handling Precautions	This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard En 149, or equivalent respirator when using this product. Material is slippery when wet.
Storage Information	Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container. Product has a shelf life of 12 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits listed in Section 2.
Respiratory Protection	Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product.
Hand Protection	Normal work gloves.
Skin Protection	Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.
Eye Protection	Wear safety glasses or goggles to protect against exposure.
Other Precautions	None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Color:	Tan
Odor:	Mild earthy
pH:	8-10
Specific Gravity @ 20 C (Water=1):	2.6
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	50- 73
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Insoluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Hydrofluoric acid.
Hazardous Decomposition Products	Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	<p>Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 2A).</p> <p>Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).</p>
Skin Contact	May cause mechanical skin irritation.
Eye Contact	May cause eye irritation.
Ingestion	None known
Aggravated Medical Conditions	Individuals with respiratory disease, including but not limited to asthma and bronchitis, or subject to eye irritation, should not be exposed to quartz dust.
Chronic Effects/Carcinogenicity	<p>Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.</p> <p>Cancer Status: The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1 - carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A - possible carcinogen to humans). Refer to <u>IARC Monograph 68, Silica, Some Silicates and Organic Fibres</u> (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).</p> <p>There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.</p>



**Other Information**

For further information consult "Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, pages 761-768 (1997).

**Toxicity Tests**

Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined
Carcinogenicity	Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997).
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

**12. ECOLOGICAL INFORMATION**

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not determined
Bio-accumulation	Not Determined

**Ecotoxicological Information**

Acute Fish Toxicity:	Not determined
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information	Not determined
Other Information	Not applicable

**13. DISPOSAL CONSIDERATIONS**

Disposal Method	Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

**14. TRANSPORT INFORMATION****Land Transportation**

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **BORE-HIB**

Revision Date: 14-Dec-2005

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BORE-HIB  
Synonyms: None  
Chemical Family: Blend  
Application: Additive  
  
Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Glycerine	56-81-5	10 - 30%	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Silicate salt		30 - 60%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause skin and respiratory irritation. May be harmful if swallowed. May cause severe eye irritation.

### 4. FIRST AID MEASURES

**Inhalation**: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin**: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and laundry before reuse.

**Eyes**: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**Ingestion**: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Notes to Physician**: Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	> 351
Flash Point/Range (C):	> 177
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media All standard firefighting media.

Special Exposure Hazards Not applicable.

Special Protective Equipment for Fire-Fighters Not applicable.

NFPA Ratings: Health 3, Flammability 1, Reactivity 0

HMIS Ratings: Flammability 1, Reactivity 0, Health 3

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Spills of this product are very slippery. Use appropriate protective equipment.

Environmental Precautionary Measures Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning / Absorption Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing mist. Material is slippery underfoot.

Storage Information Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 36 months. Store at temperatures between 40 and 90 F (5 and 35 C).

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

Hand Protection Impervious rubber gloves.

Skin Protection Full protective chemical resistant clothing. Rubber apron.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Dark Yellow
Odor:	Mild

pH:	11.9
Specific Gravity @ 20 C (Water=1):	1.36
Density @ 20 C (lbs./gallon):	11.33
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	212
Boiling Point/Range (C):	100
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Miscible
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	63
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Contact with certain metals produces hydrogen gas.
Incompatibility (Materials to Avoid)	Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.
Hazardous Decomposition Products	Flammable hydrogen gas.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation.
Skin Contact	May cause skin irritation.
Eye Contact	Causes severe eye irritation May cause eye burns.
Ingestion	Irritation of the mouth, throat, and stomach.
Aggravated Medical Conditions	Skin disorders.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	
Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined

Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not applicable
Bio-accumulation	Not Determined

### Ecotoxicological Information

Acute Fish Toxicity:	May be toxic to aquatic life.
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information	Not determined
Other Information	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Disposal Method	Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging	If empty container retains product residues, all label precautions must be observed. Transport with all closures in place. Return for reuse or disposal according to national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

### Air Transportation

ICAO/IATA Not restricted

### Sea Transportation

IMDG  
Not restricted

### Other Shipping Information

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: PAC®-R

Revision Date: 09-Nov-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: PAC®-R  
Synonyms: None  
Chemical Family: Polysaccharide  
Application: Fluid Loss Additive

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Cellulose derivative		60 - 100%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye, skin, and respiratory irritation. Airborne dust may be explosive.

### 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin** Wash with soap and water. Get medical attention if irritation persists.

**Eyes** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion** Under normal conditions, first aid procedures are not required.

**Notes to Physician** Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	430
Flash Point/Range (C):	221
Flash Point Method:	Not Determined
Autoignition Temperature (F):	752
Autoignition Temperature (C):	400
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 1, Flammability 1, Reactivity 0  
**HMIS Ratings:** Flammability 1, Reactivity 0, Health 1

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Avoid creating and breathing dust.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid creating or inhaling dust. Avoid dust accumulations. Slippery when wet.

**Storage Information** Store away from oxidizers. Store in a dry location. Product has a shelf life of 12 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** A well ventilated area to control dust levels. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection** Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

**Hand Protection** Normal work gloves.

**Skin Protection** Normal work coveralls.

**Eye Protection** Wear safety glasses or goggles to protect against exposure.

**Other Precautions** None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid Powder

Color:	White to off white
Odor:	Odorless
pH:	6.5-9 (1%)
Specific Gravity @ 20 C (Water=1):	1.6
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	40-55
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None known.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause mild respiratory irritation.
Skin Contact	May cause mild skin irritation.
Eye Contact	May cause mild eye irritation.
Ingestion	None known
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	
Oral Toxicity:	LD50: 16,000 mg/kg (Rat)
Dermal Toxicity:	Not determined



Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	BOD(5 Day): 0 mg/g COD: 900 mg/l
Bio-accumulation	Not Determined

### Ecotoxicological Information

Acute Fish Toxicity:	TLM96: 27000 ppm (Oncorhynchus mykiss)
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information	Not determined
Other Information	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Disposal Method	Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

### Air Transportation

ICAO/IATA Not restricted

### Sea Transportation

IMDG  
Not restricted

## Other Shipping Information

Labels: None

### 15. REGULATORY INFORMATION

#### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	None
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

#### Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

### 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement** This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **FILTER-CHEK®**

Revision Date: 16-Feb-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: FILTER-CHEK®  
Synonyms: None  
Chemical Family: Modified Starch  
Application: Fluid Loss Additive

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Modified starch		60 - 100%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: No significant hazards expected. Airborne dust may be explosive.

### 4. FIRST AID MEASURES

**Inhalation**: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin**: Wash with soap and water. Get medical attention if irritation persists.

**Eyes**: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion**: Under normal conditions, first aid procedures are not required.

**Notes to Physician**: Not Applicable

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
					N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
6100.00	90.000	136.714	3914.00	2390.94	1740.31 S	1639.48 E	0.00	4160.31 FNL	4224.48 FWL	2151012.78 N	679807.28 E
6200.00	90.000	136.714	3914.00	2490.94	1813.10 S	1708.05 E	0.00	4233.10 FNL	4293.05 FWL	2150940.42 N	679876.30 E
6300.00	90.000	136.714	3914.00	2590.94	1885.88 S	1776.62 E	0.00	4305.88 FNL	4361.62 FWL	2150868.07 N	679945.33 E
6400.00	90.000	136.714	3914.00	2690.94	1958.67 S	1845.19 E	0.00	4378.67 FNL	4430.19 FWL	2150795.71 N	680014.36 E
6500.00	90.000	136.714	3914.00	2790.94	2031.46 S	1913.77 E	0.00	4451.46 FNL	4498.77 FWL	2150723.36 N	680083.39 E
6600.00	90.000	136.714	3914.00	2890.94	2104.25 S	1982.34 E	0.00	4524.25 FNL	4567.34 FWL	2150651.00 N	680152.41 E
6700.00	90.000	136.714	3914.00	2990.94	2177.03 S	2050.91 E	0.00	4597.03 FNL	4635.91 FWL	2150578.65 N	680221.44 E
6800.00	90.000	136.714	3914.00	3090.94	2249.82 S	2119.48 E	0.00	4669.82 FNL	4704.48 FWL	2150506.29 N	680290.47 E
6900.00	90.000	136.714	3914.00	3190.94	2322.61 S	2188.05 E	0.00	4742.61 FNL	4773.05 FWL	2150433.94 N	680359.50 E
7000.00	90.000	136.714	3914.00	3290.94	2395.40 S	2256.62 E	0.00	4815.40 FNL	4841.62 FWL	2150361.58 N	680428.52 E
7100.00	90.000	136.714	3914.00	3390.94	2468.19 S	2325.19 E	0.00	4888.19 FNL	4910.19 FWL	2150289.23 N	680497.55 E
7200.00	90.000	136.714	3914.00	3490.94	2540.97 S	2393.76 E	0.00	4960.97 FNL	4978.76 FWL	2150216.88 N	680566.58 E
7300.00	90.000	136.714	3914.00	3590.94	2613.76 S	2462.33 E	0.00	5033.76 FNL	5047.33 FWL	2150144.52 N	680635.61 E
7400.00	90.000	136.714	3914.00	3690.94	2686.55 S	2530.90 E	0.00	5106.55 FNL	5115.90 FWL	2150072.17 N	680704.64 E
7500.00	90.000	136.714	3914.00	3790.94	2759.34 S	2599.47 E	0.00	5179.34 FNL	5184.47 FWL	2149999.81 N	680773.66 E
7600.00	90.000	136.714	3914.00	3890.94	2832.12 S	2668.04 E	0.00	5252.12 FNL	5253.04 FWL	2149927.46 N	680842.69 E
<b>Total Depth at 7621.81ft, 6.13" Open Hole</b>											
7621.81	90.000	136.714	3914.00	3912.75	2848.00 S	2683.00 E	0.00	5268.00 FNL	5268.00 FWL	2149911.68 N	680857.75 E

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North.  
Vertical depths are relative to RKB(7018' +12' KB). Northings and Eastings are relative to Wellhead.

Based upon Minimum Curvature type calculations, at a Measured Depth of 7621.81ft.,  
The Bottom Hole Displacement is 3912.75ft., in the Direction of 136.714° (True).

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media      Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards      Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential. Decomposition in fire may produce toxic gases.

Special Protective Equipment for Fire-Fighters      Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

NFPA Ratings:      Health 0, Flammability 0, Reactivity 0

HMIS Ratings:      Flammability 0, Reactivity 0, Health 0

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures      Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary Measures      None known.

Procedure for Cleaning / Absorption      Scoop up and remove.

## 7. HANDLING AND STORAGE

Handling Precautions      Avoid creating or inhaling dust. Avoid dust accumulations.

Storage Information      Store away from oxidizers. Store in a cool, dry location.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls      Use in a well ventilated area.

Respiratory Protection      Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

Hand Protection      Normal work gloves.

Skin Protection      Normal work coveralls.

Eye Protection      Wear safety glasses or goggles to protect against exposure.

Other Precautions      None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Color:	Off white
Odor:	Starch
pH:	11.5

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
					N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
Top Coal Int											
3992.22	66.683	136.714	3875.00	288.48	209.98 S	197.81 E	12.00	2629.98 FNL	2782.81 FWL	2152534.00 N	678356.00 E
4000.00	67.616	136.714	3878.02	295.64	215.19 S	202.73 E	12.00	2635.19 FNL	2787.73 FWL	2152528.81 N	678360.94 E
7" Casing											
4079.28	77.130	136.714	3902.00	371.12	270.13 S	254.48 E	12.00	2690.13 FNL	2839.48 FWL	2152474.20 N	678413.04 E
Top Tgt Coal											
4093.71	78.861	136.714	3905.00	385.23	280.40 S	264.15 E	12.00	2700.40 FNL	2849.15 FWL	2152464.00 N	678422.78 E
4100.00	79.616	136.714	3906.17	391.41	284.90 S	268.39 E	12.00	2704.90 FNL	2853.39 FWL	2152459.52 N	678427.05 E
End of Build at 4186.53ft											
4186.53	90.000	136.714	3913.99	477.46	347.54 S	327.40 E	12.00	2767.54 FNL	2912.40 FWL	2152397.26 N	678486.45 E
4200.00	90.000	136.714	3913.99	490.94	357.34 S	336.64 E	0.00	2777.34 FNL	2921.64 FWL	2152387.51 N	678495.75 E
4300.00	90.000	136.714	3913.99	590.94	430.13 S	405.21 E	0.00	2850.13 FNL	2990.21 FWL	2152315.16 N	678564.78 E
4400.00	90.000	136.714	3913.99	690.94	502.92 S	473.78 E	0.00	2922.92 FNL	3058.78 FWL	2152242.80 N	678633.80 E
4500.00	90.000	136.714	3913.99	790.94	575.70 S	542.35 E	0.00	2995.70 FNL	3127.35 FWL	2152170.45 N	678702.83 E
4600.00	90.000	136.714	3913.99	890.94	648.49 S	610.92 E	0.00	3068.49 FNL	3195.92 FWL	2152098.09 N	678771.86 E
4700.00	90.000	136.714	3913.99	990.94	721.28 S	679.49 E	0.00	3141.28 FNL	3264.49 FWL	2152025.74 N	678840.89 E
4800.00	90.000	136.714	3914.00	1090.94	794.07 S	748.06 E	0.00	3214.07 FNL	3333.06 FWL	2151953.38 N	678909.91 E
4900.00	90.000	136.714	3914.00	1190.94	866.86 S	816.63 E	0.00	3286.86 FNL	3401.63 FWL	2151881.03 N	678978.94 E
5000.00	90.000	136.714	3914.00	1290.94	939.64 S	885.20 E	0.00	3359.64 FNL	3470.20 FWL	2151808.67 N	679047.97 E
5100.00	90.000	136.714	3914.00	1390.94	1012.43 S	953.77 E	0.00	3432.43 FNL	3538.77 FWL	2151736.32 N	679117.00 E
5200.00	90.000	136.714	3914.00	1490.94	1085.22 S	1022.35 E	0.00	3505.22 FNL	3607.35 FWL	2151663.97 N	679186.03 E
5300.00	90.000	136.714	3914.00	1590.94	1158.01 S	1090.92 E	0.00	3578.01 FNL	3675.92 FWL	2151591.61 N	679255.05 E
5400.00	90.000	136.714	3914.00	1690.94	1230.79 S	1159.49 E	0.00	3650.79 FNL	3744.49 FWL	2151519.26 N	679324.08 E
5500.00	90.000	136.714	3914.00	1790.94	1303.58 S	1228.06 E	0.00	3723.58 FNL	3813.06 FWL	2151446.90 N	679393.11 E
5600.00	90.000	136.714	3914.00	1890.94	1376.37 S	1296.63 E	0.00	3796.37 FNL	3881.63 FWL	2151374.55 N	679462.14 E
5700.00	90.000	136.714	3914.00	1990.94	1449.16 S	1365.20 E	0.00	3869.16 FNL	3950.20 FWL	2151302.19 N	679531.16 E
5800.00	90.000	136.714	3914.00	2090.94	1521.94 S	1433.77 E	0.00	3941.94 FNL	4018.77 FWL	2151229.84 N	679600.19 E
5900.00	90.000	136.714	3914.00	2190.94	1594.73 S	1502.34 E	0.00	4014.73 FNL	4087.34 FWL	2151157.48 N	679669.22 E
6000.00	90.000	136.714	3914.00	2290.94	1667.52 S	1570.91 E	0.00	4087.52 FNL	4155.91 FWL	2151085.13 N	679738.25 E

Specific Gravity @ 20 C (Water=1):	Not Determined
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	30-40
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Keep away from heat, sparks and flame.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause allergic respiratory reaction.
Skin Contact	None known.
Eye Contact	None known.
Ingestion	None known
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	
Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined

**Proposal Report for Sec. 11-T31N-R04W - Rosa Unit #369A - Plan 011806**  
**Data Source: Mr. Gary Sizemore**  
**Revised: 19 January, 2006**

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
					N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
0.00	0.000	0.000	0.00	0.00	0.00 N	0.00 E		2420.00 FNL	2585.00 FWL	2152742.73 N	678156.87 E
<b>San Jose Fm</b>											
12.00	0.000	0.000	12.00	0.00	0.00 N	0.00 E	0.00	2420.00 FNL	2585.00 FWL	2152742.73 N	678156.87 E
<b>9 5/8" Casing</b>											
300.00	0.000	0.000	300.00	0.00	0.00 N	0.00 E	0.00	2420.00 FNL	2585.00 FWL	2152742.73 N	678156.87 E
<b>Nacimiento Fm</b>											
2150.00	0.000	0.000	2150.00	0.00	0.00 N	0.00 E	0.00	2420.00 FNL	2585.00 FWL	2152742.73 N	678156.87 E
<b>Ojo Alamo Ss</b>											
3325.00	0.000	0.000	3325.00	0.00	0.00 N	0.00 E	0.00	2420.00 FNL	2585.00 FWL	2152742.73 N	678156.87 E
<b>Kick-Off at 3436.53ft</b>											
3436.53	0.000	0.000	3436.53	0.00	0.00 N	0.00 E	0.00	2420.00 FNL	2585.00 FWL	2152742.73 N	678156.87 E
<b>Kirkland Sh</b>											
3445.00	1.017	136.714	3445.00	0.08	0.05 S	0.05 E	12.00	2420.05 FNL	2585.05 FWL	2152742.67 N	678156.92 E
3500.00	7.616	136.714	3499.81	4.21	3.07 S	2.89 E	12.00	2423.07 FNL	2587.89 FWL	2152739.68 N	678159.77 E
3600.00	19.616	136.714	3596.83	27.71	20.17 S	19.00 E	12.00	2440.17 FNL	2604.00 FWL	2152722.67 N	678176.00 E
<b>Fruitland Fm</b>											
3692.02	30.659	136.714	3680.00	66.74	48.58 S	45.76 E	12.00	2468.58 FNL	2630.76 FWL	2152694.44 N	678202.94 E
3700.00	31.616	136.714	3686.83	70.87	51.58 S	48.59 E	12.00	2471.58 FNL	2633.59 FWL	2152691.45 N	678205.78 E
3800.00	43.616	136.714	3765.90	131.79	95.93 S	90.37 E	12.00	2515.93 FNL	2675.37 FWL	2152647.37 N	678247.84 E
3900.00	55.616	136.714	3830.57	207.83	151.27 S	142.51 E	12.00	2571.27 FNL	2727.51 FWL	2152592.35 N	678300.32 E



Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Readily biodegradable
Bio-accumulation	Not Determined

### Ecotoxicological Information

Acute Fish Toxicity:	Not determined
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined
Chemical Fate Information	Not determined
Other Information	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Disposal Method	Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

### Air Transportation

ICAO/IATA Not restricted

### Sea Transportation

IMDG  
Not restricted

### Other Shipping Information

Labels:	None
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**Williams Production Company  
New Mexico  
Rio Arriba County  
Sec. 11-T31N-R04W  
Rosa Unit #369A - Plan 011806**

**Revised: 19 January, 2006**

**Halliburton Sperry-Drilling  
Proposal Report**

**19 January, 2006**

Data Source: Mr. Gary Sizemore

Surface Coordinates: 2152742.73 N, 678156.87 E (36° 54' 52.5056" N, 107° 13' 26.1232" W)

Grid Coordinate System: NAD27 New Mexico State Planes, Western Zone

Surface Coordinates relative to Global Coordinates: 647751.60 N, 380476.10 E (Grid)

Surface Coordinates relative to NW Cor Sec 11: 2420.00 S, 2585.00 E (True)

Kelly Bushing Elevation: 7030.00ft above Mean Sea Level

Kelly Bushing Elevation: 12.00ft above Structure

Proposal Ref: pro9678

**HALLIBURTON**

**Sperry Drilling Services**

## 15. REGULATORY INFORMATION

### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	None
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

### Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

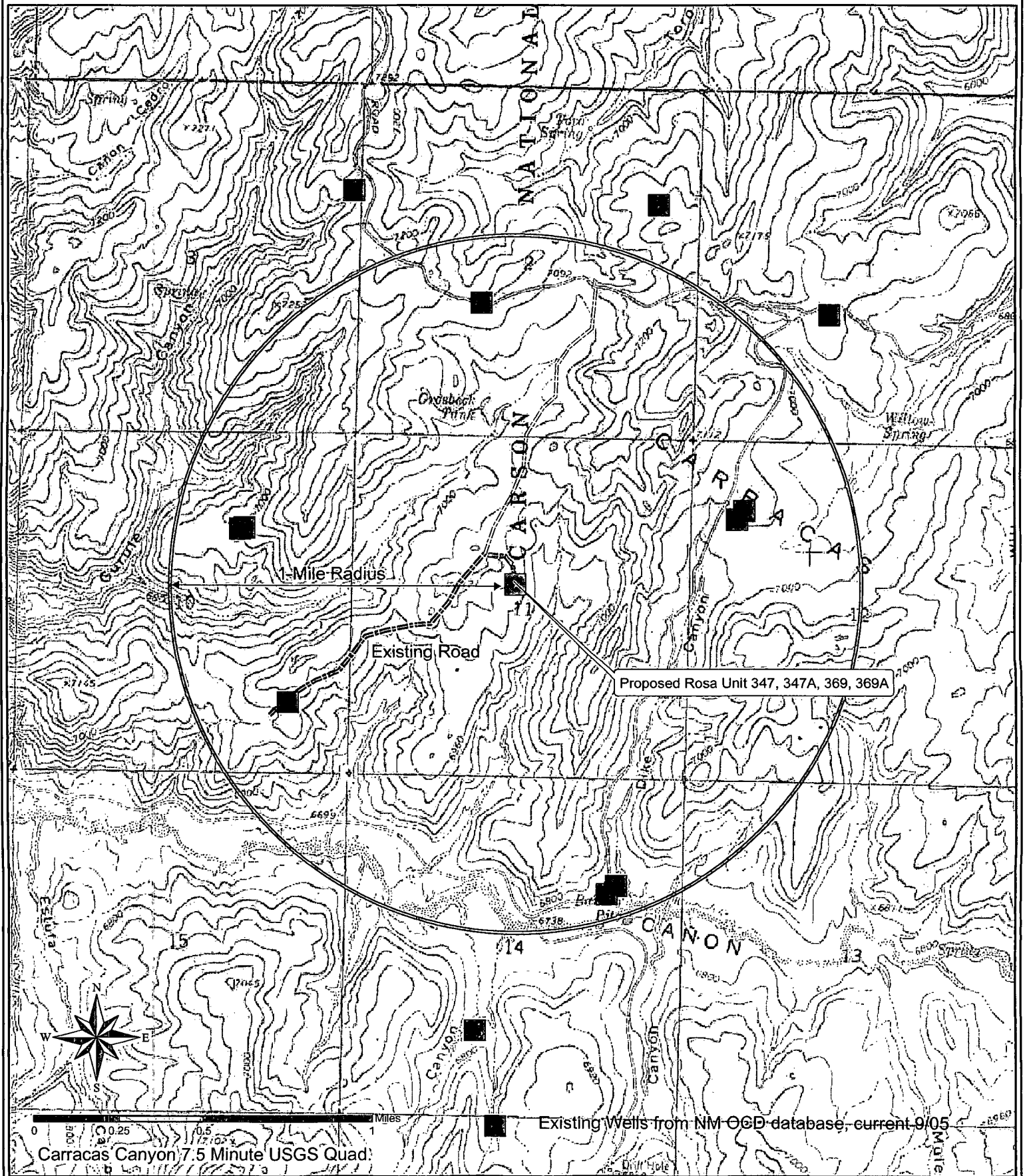
**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement** This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

Figure 3: Existing Wells within a 1-Mile Radius  
of the Proposed Rosa Unit #347, 347A, 369 and 369A  
Williams Exploration and Production Company  
T31N, R04W, Section 11, NMPM  
Rio Arriba County, New Mexico



# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **EZ-MUD®**

Revision Date: 16-Feb-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: EZ-MUD®  
Synonyms: None  
Chemical Family: Blend  
Application: Shale Inhibitor  
Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000  
Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Hydrotreated light petroleum distillate	64742-47-8	10 - 30%	200 mg/m <sup>3</sup>	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed.

### 4. FIRST AID MEASURES

**Inhalation**: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

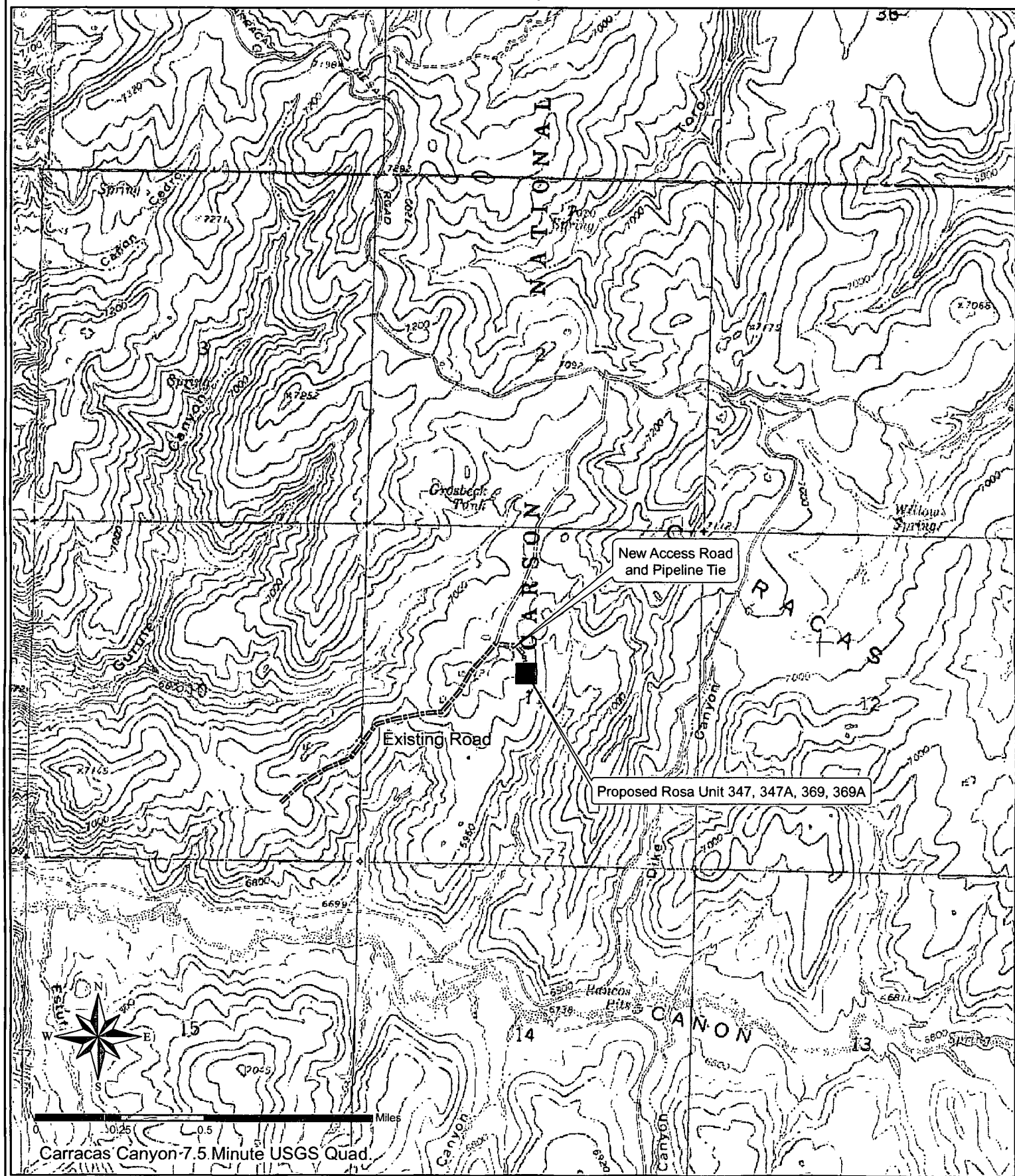
**Skin**: Wash with soap and water. Get medical attention if irritation persists. Remove contaminated shoes and discard.

**Eyes**: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion**: Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

**Notes to Physician**: Not Applicable

Figure 2: Project Area Map  
 Williams Exploration and Production Company  
 Proposed Rosa Unit #347, 347A, 369 and 369A  
 Well Pad, Access Road and Pipeline Ties  
 T31N, R04W, Section 11, NMPM  
 Rio Arriba County, New Mexico



## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	> 200Min: > 200
Flash Point/Range (C):	Not DeterminedMin: > 93
Flash Point Method:	PMCC
Autoignition Temperature (F):	> 392
Autoignition Temperature (C):	> 200
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Decomposition in fire may produce toxic gases. Use water spray to cool fire exposed surfaces.

Special Protective Equipment for Fire-Fighters Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

NFPA Ratings: Health 2, Flammability 1, Reactivity 0

HMIS Ratings: Flammability 1, Reactivity 0, Health 2

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment.

Environmental Precautionary Measures Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning / Absorption Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

Storage Information Store away from oxidizers. Keep container closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls A well ventilated area to control dust levels. Local exhaust ventilation should be used in areas without good cross ventilation.

Respiratory Protection Organic vapor respirator with a dust/mist filter. In high concentrations, supplied air respirator or a self-contained breathing apparatus.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

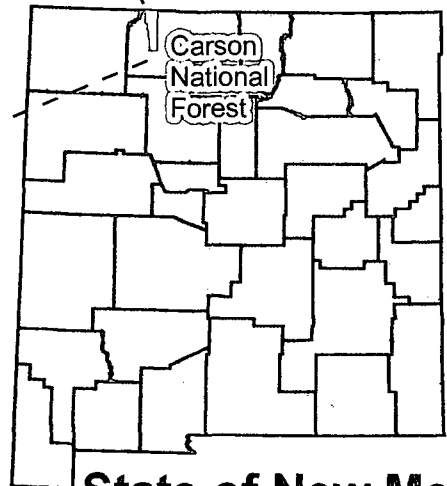
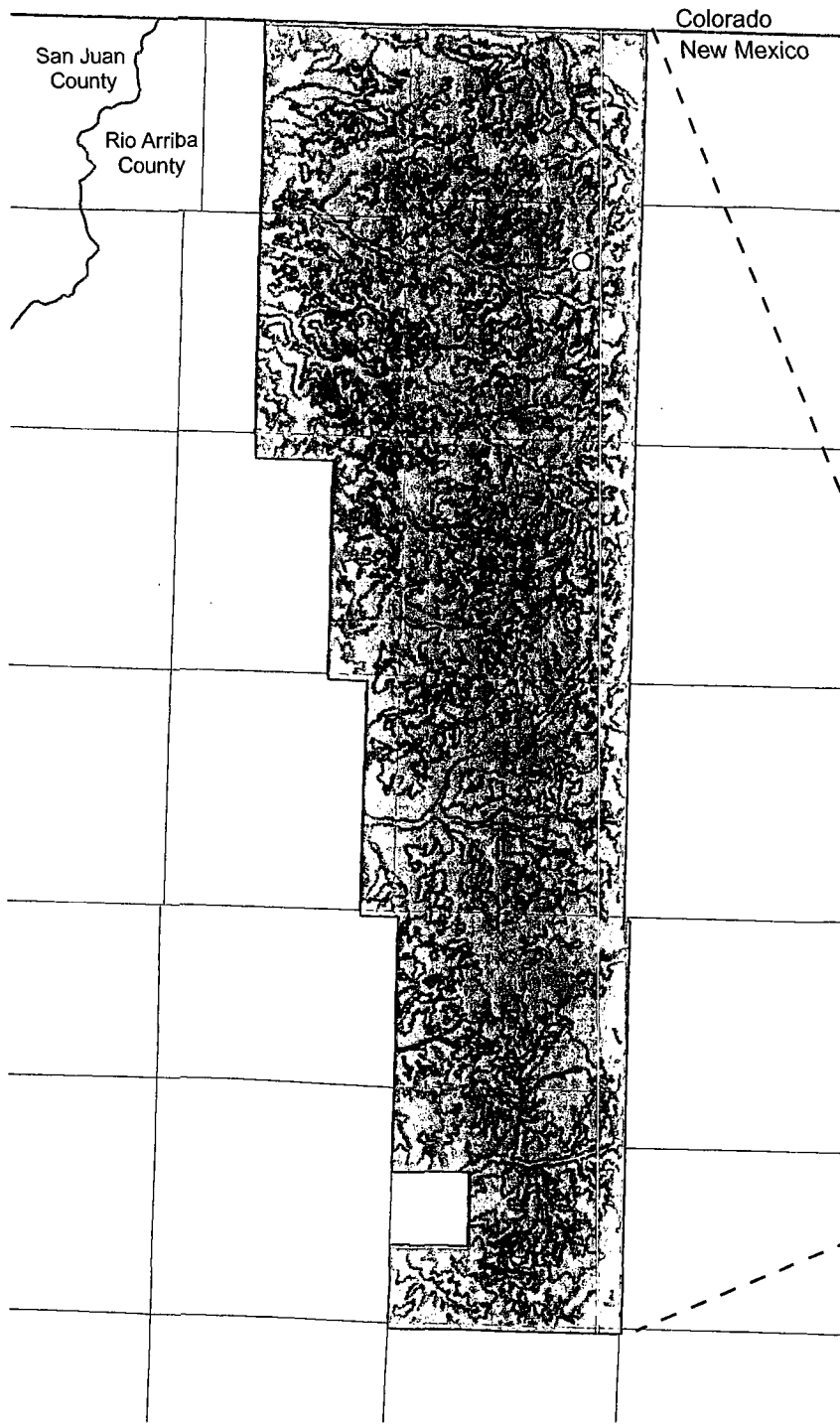
Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	White to gray
Odor:	Mild hydrocarbon
pH:	6-8

**Figure 1: Vicinity Map**  
**Williams Exploration and Production Company**  
**Proposed Rosa Unit #347, 347A, 369, 369A**  
**Jicarilla Ranger District, Carson National Forest**  
**T31N, R04W, Section 11, NMPM**  
**Rio Arriba County, New Mexico**



**State of New Mexico**



Specific Gravity @ 20 C (Water=1):	1.0
Density @ 20 C (lbs./gallon):	8.3
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	347
Boiling Point/Range (C):	175
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	0.002
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	70
Evaporation Rate (Butyl Acetate=1):	< 1
Solubility in Water (g/100ml):	Partially soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Keep away from heat, sparks and flame.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Ammonia. Oxides of nitrogen. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
Skin Contact	May cause skin irritation.
Eye Contact	May cause severe eye irritation.
Ingestion	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.
Aggravated Medical Conditions	Lung disorders.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Williams Production Company LLC, and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to 18 U.S. Code 1001 for the filing of a false statement.

Date: 1-31-2006

  
Larry Higgins  
Drlg COM  
Williams Production Company, LLC

Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	BOD(28 Day): 40% of COD
Bio-accumulation	Not Determined

### Ecotoxicological Information

Acute Fish Toxicity:	TLM96: >1000 mg/l (Pimephales promelas)
Acute Crustaceans Toxicity:	TLM48: 98 mg/l (Acartia tonsa)
Acute Algae Toxicity:	EC50: 16.70 mg/l (Skeletonema costatum)

Chemical Fate Information	Not determined
Other Information	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Disposal Method	Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging	If empty container retains product residues, all label precautions must be observed. Store away from ignition sources. Transport with all closures in place. Return for reuse or disposal according to national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

### Air Transportation

ICAO/IATA Not restricted

### Sea Transportation

10. Plans for Restoration of Surface:

When the well is abandoned, the location and access road will be cleaned and restored to the original topographical contours as much as possible. The area will be reseeded with the appropriate seed mixture.

If the well is productive, areas not used in production will be contoured and seeded with stipulated seed mixture. Production equipment will be painted the color designated by the surface managing agency. A below-grade tank will be used for production. See attached NMOCD form C-103.

11. Surface Ownership:

The surface ownership of the proposed well pad, access road, and well-tie pipeline is the Carson National Forest.

12. Other Information:

Refer to the archaeology and Environmental Assessment reports for a description of the soil characteristics and local flora and fauna.

There are no residents within a one-mile radius of the proposed action.

The proposed well pad should not impact any floodplains, riparian, springs, or stock ponds. There were no ephemeral washes that would be impacted.

The top 6" of soil material will be stripped and stockpiled on either side of the reserve pit and used for future reclamation.

13. Lessee's or Operator's Representative:

Larry Higgins  
Drilling COM  
Aztec, New Mexico 87410  
Phone: (505 634-4208

IMDG  
Not restricted

### Other Shipping Information

Labels: None

## 15. REGULATORY INFORMATION

### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	Acute Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

### Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	D2B Toxic Materials

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

5. Water Supply:

Water for drilling and completion operations will be hauled by truck from various water sources within the area, mainly from Navajo Lake, NM and produced water from locations close to the proposed location. Reference BLM letter 3162.3-2.

6. Source of Construction Materials:

No additional construction materials will be required to build the proposed location.

7. Methods for Handling Waste Disposal:

a. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. Three sides of the reserve pit will be fenced prior to drilling. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backfilled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured and reseeded with the appropriate seed mixture.

b. All garbage and trash will be placed in a metal trash basket. It will be hauled off and dumped in an approved land fill upon completion of operations.

c. Portable toilets will be provided and maintained during drilling operations. See Plat #3 for location.

8. Ancillary Facilities:

Ancillary facilities are to be based on well productivity. A pipeline plat is included as Plat #2.

9. Well Site Layout:

A cross section of the drill pad with approximate cuts, fills, and pad orientation is attached as Plat #1. Location of drilling equipment and rig orientation is also attached as Plat #3.

#### Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **BARAZAN® D**

Revision Date: 10-Mar-2005

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BARAZAN® D  
Synonyms: None  
Chemical Family: Polysaccharide  
Application: Viscosifier  
Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Xanthan gum	11138-66-2	60 - 100%	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye irritation. Airborne dust may be explosive.

### 4. FIRST AID MEASURES

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin: Wash with soap and water. Get medical attention if irritation persists.

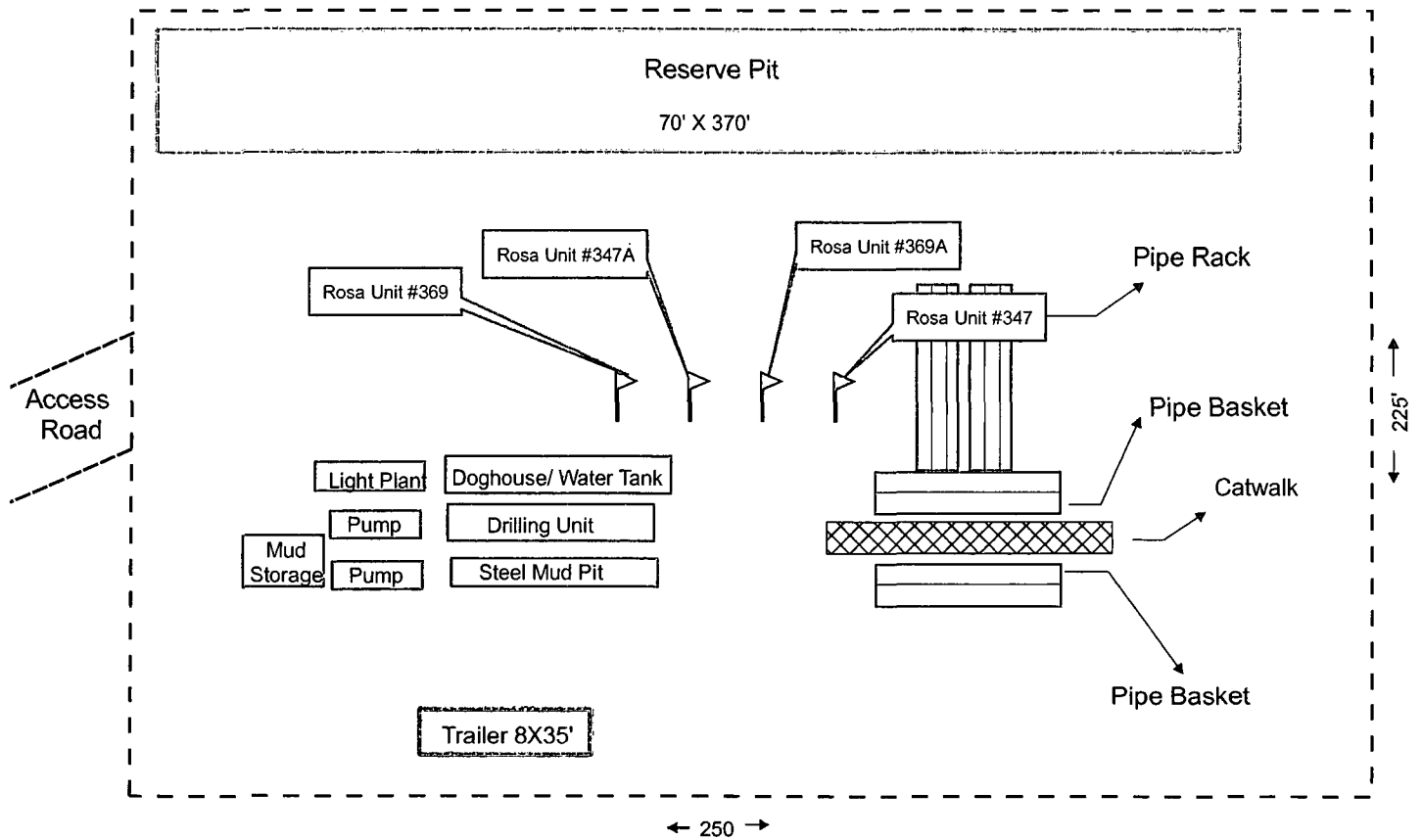
Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Ingestion: Under normal conditions, first aid procedures are not required.

Notes to Physician: Not Applicable



**Plat #3: Typical Well Diagram**  
**Williams Exploration and Production Company**  
**Proposed Rosa Unit #347, 347A, 369 and 369A Well Pad**  
**T31N, R04W, Section 11, NMPM**  
**Rio Arriba County, New Mexico**



1" = approximately 50'

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	950
Flash Point/Range (C):	510
Flash Point Method:	Not Determined
Autoignition Temperature (F):	400
Autoignition Temperature (C):	204
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Lower (oz./ft3):	0.04 - 0.4
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

Special Protective Equipment for Fire-Fighters Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

NFPA Ratings: Health 0, Flammability 1, Reactivity 0  
HMIS Ratings: Flammability 1, Reactivity 0, Health 0

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary Measures None known.

Procedure for Cleaning / Absorption Scoop up and remove.

## 7. HANDLING AND STORAGE

Handling Precautions Slippery when wet. Avoid creating or inhaling dust.

Storage Information Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 6 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

Hand Protection Normal work gloves.

Skin Protection Normal work coveralls.

Eye Protection Wear safety glasses or goggles to protect against exposure.

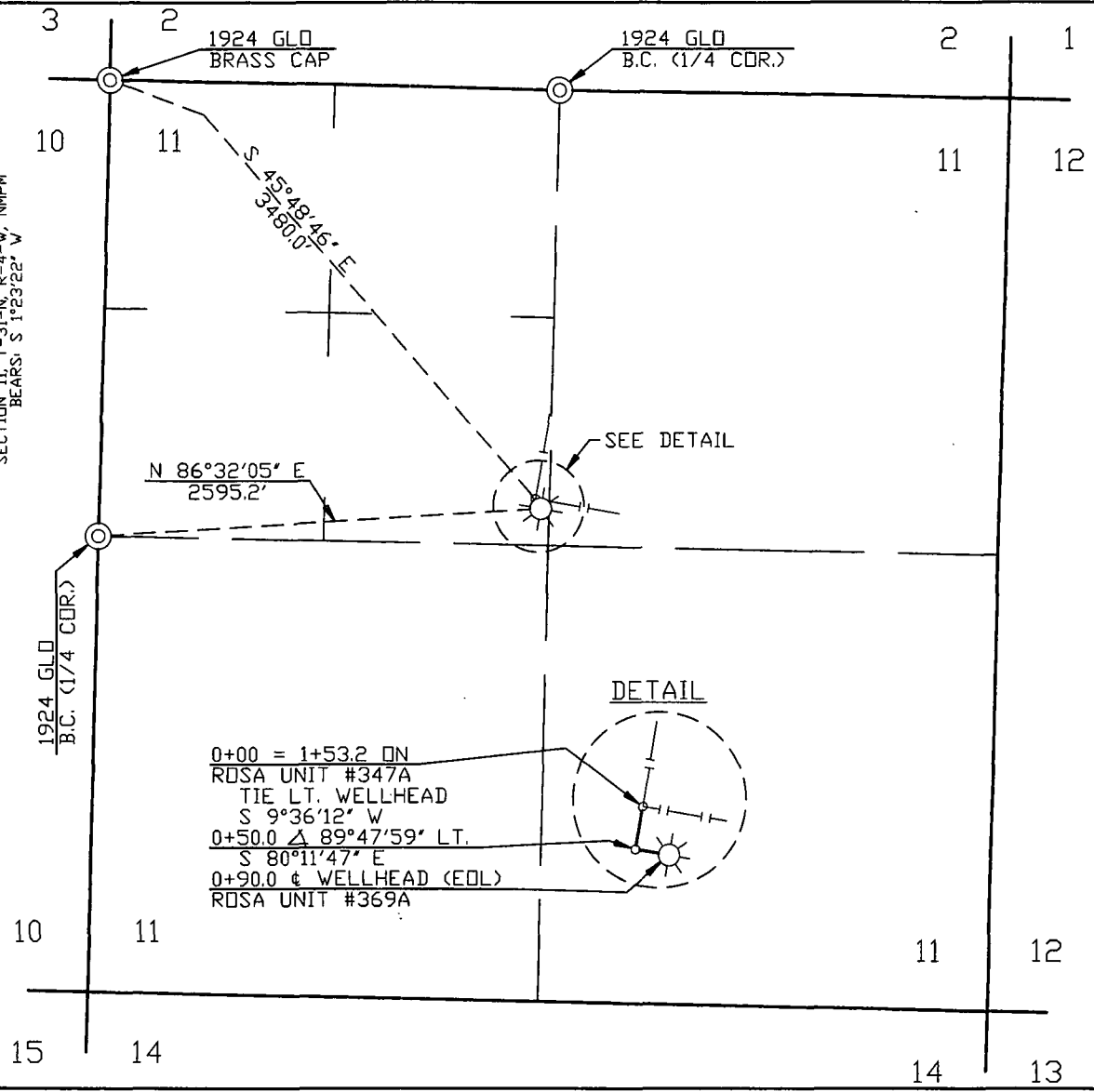
Other Precautions None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder

PLAT #2

NOTE: BEARINGS ARE BASED ON A GRID BEARING.  
ALONG THE WEST LINE OF THE NW 1/4 OF  
SECTION 11, T-31-N, R-4-W, NMPM  
BEARS: S 1°23'22" W



PIPE DATA

OWNERSHIP	SUBDIVISION		OWNER		FEET	MILES	ACRES	RODS
	0+00 TO 0+90.0		CARSON NATIONAL FOREST		90.0	0.017	0.083	5.455

REVISION	NO.	DATE	BY	DESCRIPTION	W.D.NO.	CHK.	APP.	NO.	DATE	BY	DESCRIPTION	W.D.NO.	CHK.	APP.
1	9/19/05	AM		ISSUED FOR REVIEW		PB								

<b>INFO</b>		<b>DRAFTING</b>	<b>BY</b>	<b>DATE</b>	STATE: NEW MEXICO		<b>WILLIAMS FIELD SERVICES</b>			
R/W #: 06246		DRAWN BY	AM	9/19/05	COUNTY: RIO ARriba		ONE OF THE WILLIAMS COMPANIES			
METER #:		CHECKED BY	PB	9/21/05	EVERGREEN GATHERING SYSTEM WPX - ROSA UNIT #369A 0+00 = 1+53.2 ON ROSA UNIT #347A (REF DWG. 765.0-34-1) SEC. 11, T-31-N, R-4-W, NMPM					
SURVEYED: 8/30/04		APPROVED BY								
		<b>ENGINEER</b>	<b>BY</b>	<b>DATE</b>						
		DESIGNED BY			SCALE: 1" = 1000'		<b>DWG NO.</b>	765.0-35-1		
		PROJ. APPROVED			W.D. NO.					
							SHEET 1 OF 1	REV 1		

## Air Transportation

ICAO/IATA Not restricted

## Sea Transportation

IMDG

Not restricted

## Other Shipping Information

Labels: None

## 15. REGULATORY INFORMATION

### US Regulations

US TSCA Inventory All components listed on inventory.

EPA SARA Title III Extremely Hazardous Substances Not applicable

EPA SARA (311,312) Hazard Class Acute Health Hazard  
Chronic Health Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity For This Product Not applicable.

EPA RCRA Hazardous Waste Classification If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

California Proposition 65 The California Proposition 65 regulations apply to this product.

MA Right-to-Know Law One or more components listed.

NJ Right-to-Know Law One or more components listed.

PA Right-to-Know Law One or more components listed.

### Canadian Regulations

Canadian DSL Inventory All components listed on inventory.

WHMIS Hazard Class D2A Very Toxic Materials  
Crystalline silica

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

**Additional Information**

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

**\*\*\*END OF MSDS\*\*\***

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **BORE-HIB**

Revision Date: 14-Dec-2005

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BORE-HIB

Synonyms: None

Chemical Family: Blend

Application: Additive

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Glycerine	56-81-5	10 - 30%	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Silicate salt		30 - 60%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause skin and respiratory irritation. May be harmful if swallowed. May cause severe eye irritation.

### 4. FIRST AID MEASURES

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

Eyes: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician: Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	> 351
Flash Point/Range (C):	> 177
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** All standard firefighting media.

**Special Exposure Hazards** Not applicable.

**Special Protective Equipment for Fire-Fighters** Not applicable.

**NFPA Ratings:** Health 3, Flammability 1, Reactivity 0  
**HMIS Ratings:** Flammability 1, Reactivity 0, Health 3

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Spills of this product are very slippery. Use appropriate protective equipment.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing. Avoid breathing mist. Material is slippery underfoot.

**Storage Information** Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 36 months. Store at temperatures between 40 and 90 F (5 and 35 C).

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area.

**Respiratory Protection** Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Full protective chemical resistant clothing. Rubber apron.

**Eye Protection** Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions** Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid  
**Color:** Dark Yellow  
**Odor:** Mild

pH:	11.9
Specific Gravity @ 20 C (Water=1):	1.36
Density @ 20 C (lbs./gallon):	11.33
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	212
Boiling Point/Range (C):	100
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Miscible
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	63
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Contact with certain metals produces hydrogen gas.
Incompatibility (Materials to Avoid)	Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.
Hazardous Decomposition Products	Flammable hydrogen gas.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation.
Skin Contact	May cause skin irritation.
Eye Contact	Causes severe eye irritation May cause eye burns.
Ingestion	Irritation of the mouth, throat, and stomach.
Aggravated Medical Conditions	Skin disorders.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	
Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined



Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not applicable
Bio-accumulation	Not Determined

### Ecotoxicological Information

Acute Fish Toxicity:	May be toxic to aquatic life.
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined

Chemical Fate Information	Not determined
Other Information	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Disposal Method	Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging	If empty container retains product residues, all label precautions must be observed. Transport with all closures in place. Return for reuse or disposal according to national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

DOT  
Not restricted

Canadian TDG  
Not restricted

ADR Not restricted

### Air Transportation

ICAO/IATA Not restricted

### Sea Transportation

IMDG  
Not restricted

### Other Shipping Information

Labels: None

## 15. REGULATORY INFORMATION

### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	Acute Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	One or more components listed.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	One or more components listed.

### Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	D2B Toxic Materials

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS  
Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement** This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **PAC®-R**

Revision Date: 09-Nov-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: PAC®-R  
Synonyms: None  
Chemical Family: Polysaccharide  
Application: Fluid Loss Additive

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Cellulose derivative		60 - 100%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye, skin, and respiratory irritation. Airborne dust may be explosive.

### 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin** Wash with soap and water. Get medical attention if irritation persists.

**Eyes** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion** Under normal conditions, first aid procedures are not required.

**Notes to Physician** Not Applicable

DUPLICATE

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	430
Flash Point/Range (C):	221
Flash Point Method:	Not Determined
Autoignition Temperature (F):	752
Autoignition Temperature (C):	400
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 1, Flammability 1, Reactivity 0  
**HMIS Ratings:** Flammability 1, Reactivity 0, Health 1

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Avoid creating and breathing dust.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid creating or inhaling dust. Avoid dust accumulations. Slippery when wet.

**Storage Information** Store away from oxidizers. Store in a dry location. Product has a shelf life of 12 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** A well ventilated area to control dust levels. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection** Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

**Hand Protection** Normal work gloves.

**Skin Protection** Normal work coveralls.

**Eye Protection** Wear safety glasses or goggles to protect against exposure.

**Other Precautions** None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid Powder

Color:	White to off white
Odor:	Odorless
pH:	6.5-9 (1%)
Specific Gravity @ 20 C (Water=1):	1.6
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	40-55
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None known.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause mild respiratory irritation.
Skin Contact	May cause mild skin irritation.
Eye Contact	May cause mild eye irritation.
Ingestion	None known
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	
Oral Toxicity:	LD50: 16,000 mg/kg (Rat)
Dermal Toxicity:	Not determined

Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined
Carcinogenicity	Not determined
Genotoxicity:	Not determined
Reproductive / Developmental Toxicity:	Not determined

## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	BOD(5 Day): 0 mg/g COD: 900 mg/l
Bio-accumulation	Not Determined

### Ecotoxicological Information

Acute Fish Toxicity:	TLM96: 27000 ppm (Oncorhynchus mykiss)
Acute Crustaceans Toxicity:	Not determined
Acute Algae Toxicity:	Not determined

Chemical Fate Information	Not determined
Other Information	Not applicable

## 13. DISPOSAL CONSIDERATIONS

Disposal Method	Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging	Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR** Not restricted

### Air Transportation

**ICAO/IATA** Not restricted

### Sea Transportation

**IMDG**  
Not restricted

## Other Shipping Information

Labels: None

### 15. REGULATORY INFORMATION

#### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	None
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

#### Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

### 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

Additional Information	For additional information on the use of this product, contact your local Halliburton representative.  For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.
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Disclaimer Statement	This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.
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\*\*\*END OF MSDS\*\*\*

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **FILTER-CHEK®**

Revision Date: 16-Feb-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: FILTER-CHEK®  
Synonyms: None  
Chemical Family: Modified Starch  
Application: Fluid Loss Additive

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Modified starch		60 - 100%	Not applicable	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: No significant hazards expected. Airborne dust may be explosive.

### 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

**Skin** Wash with soap and water. Get medical attention if irritation persists.

**Eyes** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion** Under normal conditions, first aid procedures are not required.

**Notes to Physician** Not Applicable

DUPLICATE



## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential. Decomposition in fire may produce toxic gases.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 0, Flammability 0, Reactivity 0  
**HMIS Ratings:** Flammability 0, Reactivity 0, Health 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment. Avoid creating and breathing dust.

**Environmental Precautionary Measures** None known.

**Procedure for Cleaning / Absorption** Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid creating or inhaling dust. Avoid dust accumulations.

**Storage Information** Store away from oxidizers. Store in a cool, dry location.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area.

**Respiratory Protection** Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

**Hand Protection** Normal work gloves.

**Skin Protection** Normal work coveralls.

**Eye Protection** Wear safety glasses or goggles to protect against exposure.

**Other Precautions** None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Color:	Off white
Odor:	Starch
pH:	11.5

Specific Gravity @ 20 C (Water=1):	Not Determined
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	30-40
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Keep away from heat, sparks and flame.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause allergic respiratory reaction.
Skin Contact	None known.
Eye Contact	None known.
Ingestion	None known
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
<b>Toxicity Tests</b>	
Oral Toxicity:	Not determined
Dermal Toxicity:	Not determined
Inhalation Toxicity:	Not determined
Primary Irritation Effect:	Not determined

<b>Carcinogenicity</b>	Not determined
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## **12. ECOLOGICAL INFORMATION**

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	Readily biodegradable
<b>Bio-accumulation</b>	Not Determined

### **Ecotoxicological Information**

<b>Acute Fish Toxicity:</b>	Not determined
<b>Acute Crustaceans Toxicity:</b>	Not determined
<b>Acute Algae Toxicity:</b>	Not determined

<b>Chemical Fate Information</b>	Not determined
<b>Other Information</b>	Not applicable

## **13. DISPOSAL CONSIDERATIONS**

<b>Disposal Method</b>	Bury in a licensed landfill according to federal, state, and local regulations.
<b>Contaminated Packaging</b>	Follow all applicable national or local regulations.

## **14. TRANSPORT INFORMATION**

### **Land Transportation**

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR** Not restricted

### **Air Transportation**

**ICAO/IATA** Not restricted

### **Sea Transportation**

**IMDG**  
Not restricted

### **Other Shipping Information**

<b>Labels:</b>	None
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## 15. REGULATORY INFORMATION

### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	None
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

### Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **EZ-MUD®**

Revision Date: 16-Feb-2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: EZ-MUD®  
Synonyms: None  
Chemical Family: Blend  
Application: Shale Inhibitor

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Hydrotreated light petroleum distillate	64742-47-8	10 - 30%	200 mg/m <sup>3</sup>	Not applicable

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed.

### 4. FIRST AID MEASURES

**Inhalation**: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

**Skin**: Wash with soap and water. Get medical attention if irritation persists. Remove contaminated shoes and discard.

**Eyes**: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Ingestion**: Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

**Notes to Physician**: Not Applicable

DUPLICATE

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	> 200Min: > 200
Flash Point/Range (C):	Not DeterminedMin: > 93
Flash Point Method:	PMCC
Autoignition Temperature (F):	> 392
Autoignition Temperature (C):	> 200
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Decomposition in fire may produce toxic gases. Use water spray to cool fire exposed surfaces.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 2, Flammability 1, Reactivity 0  
**HMIS Ratings:** Flammability 1, Reactivity 0, Health 2

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption** Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

**Storage Information** Store away from oxidizers. Keep container closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** A well ventilated area to control dust levels. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection** Organic vapor respirator with a dust/mist filter. In high concentrations, supplied air respirator or a self-contained breathing apparatus.

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Rubber apron.

**Eye Protection** Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions** Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid  
**Color:** White to gray  
**Odor:** Mild hydrocarbon  
**pH:** 6-8

Specific Gravity @ 20 C (Water=1):	1.0
Density @ 20 C (lbs./gallon):	8.3
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	347
Boiling Point/Range (C):	175
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	0.002
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	70
Evaporation Rate (Butyl Acetate=1):	< 1
Solubility in Water (g/100ml):	Partially soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	Keep away from heat, sparks and flame.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Ammonia. Oxides of nitrogen. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
Skin Contact	May cause skin irritation.
Eye Contact	May cause severe eye irritation.
Ingestion	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.
Aggravated Medical Conditions	Lung disorders.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	

<b>Oral Toxicity:</b>	Not determined
<b>Dermal Toxicity:</b>	Not determined
<b>Inhalation Toxicity:</b>	Not determined
<b>Primary Irritation Effect:</b>	Not determined
<b>Carcinogenicity</b>	Not determined
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## 12. ECOLOGICAL INFORMATION

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	BOD(28 Day): 40% of COD
<b>Bio-accumulation</b>	Not Determined

### Ecotoxicological Information

<b>Acute Fish Toxicity:</b>	TLM96: >1000 mg/l (Pimephales promelas)
<b>Acute Crustaceans Toxicity:</b>	TLM48: 98 mg/l (Acartia tonsa)
<b>Acute Algae Toxicity:</b>	EC50: 16.70 mg/l (Skeletonema costatum)

<b>Chemical Fate Information</b>	Not determined
<b>Other Information</b>	Not applicable

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Method</b>	Disposal should be made in accordance with federal, state, and local regulations.
<b>Contaminated Packaging</b>	If empty container retains product residues, all label precautions must be observed. Store away from ignition sources. Transport with all closures in place. Return for reuse or disposal according to national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR** Not restricted

### Air Transportation

**ICAO/IATA** Not restricted

### Sea Transportation



**IMDG**

Not restricted

**Other Shipping Information**

Labels: None

**15. REGULATORY INFORMATION****US Regulations**

<b>US TSCA Inventory</b>	All components listed on inventory.
<b>EPA SARA Title III Extremely Hazardous Substances</b>	Not applicable
<b>EPA SARA (311,312) Hazard Class</b>	Acute Health Hazard
<b>EPA SARA (313) Chemicals</b>	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
<b>EPA CERCLA/Superfund Reportable Spill Quantity For This Product</b>	Not applicable.
<b>EPA RCRA Hazardous Waste Classification</b>	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
<b>California Proposition 65</b>	All components listed do not apply to the California Proposition 65 Regulation.
<b>MA Right-to-Know Law</b>	Does not apply.
<b>NJ Right-to-Know Law</b>	Does not apply.
<b>PA Right-to-Know Law</b>	Does not apply.

**Canadian Regulations**

<b>Canadian DSL Inventory</b>	All components listed on inventory.
<b>WHMIS Hazard Class</b>	D2B Toxic Materials

**16. OTHER INFORMATION**

The following sections have been revised since the last issue of this MSDS

Not applicable

**Additional Information** For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

**Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

**\*\*\*END OF MSDS\*\*\***

# HALLIBURTON

## MATERIAL SAFETY DATA SHEET

Product Trade Name: **BARAZAN® D**

Revision Date: 10-Mar-2005

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BARAZAN® D

Synonyms: None

Chemical Family: Polysaccharide

Application: Viscosifier

Manufacturer/Supplier: Baroid Drilling Fluids  
a Product Service Line of Halliburton Energy Services, Inc.  
P.O. Box 1675  
Houston, TX 77251  
Telephone: (281) 871-4000  
Emergency Telephone: (281) 575-5000

Prepared By: Chemical Compliance  
Telephone: 1-580-251-4335

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Xanthan gum	11138-66-2	60 - 100%	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

### 3. HAZARDS IDENTIFICATION

Hazard Overview: May cause eye irritation. Airborne dust may be explosive.

### 4. FIRST AID MEASURES

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin: Wash with soap and water. Get medical attention if irritation persists.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Ingestion: Under normal conditions, first aid procedures are not required.

Notes to Physician: Not Applicable

DUPLICATE

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	950
Flash Point/Range (C):	510
Flash Point Method:	Not Determined
Autoignition Temperature (F):	400
Autoignition Temperature (C):	204
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Lower (oz./ft3):	0.04 - 0.4
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 0, Flammability 1, Reactivity 0

**HMS Ratings:** Flammability 1, Reactivity 0, Health 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment. Avoid creating and breathing dust.

**Environmental Precautionary Measures** None known.

**Procedure for Cleaning / Absorption** Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Slippery when wet. Avoid creating or inhaling dust.

**Storage Information** Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 6 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area.

**Respiratory Protection** Not normally needed. But if significant exposures are possible then the following respirator is recommended:  
Dust/mist respirator. (95%)

**Hand Protection** Normal work gloves.

**Skin Protection** Normal work coveralls.

**Eye Protection** Wear safety glasses or goggles to protect against exposure.

**Other Precautions** None known.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Powder

Color:	White to yellow
Odor:	Slight
pH:	5.5-8.5
Specific Gravity @ 20 C (Water=1):	1.6
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	52.4
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	1,000,000

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation.
Inhalation	May impede respiration.
Skin Contact	None known.
Eye Contact	May cause mild eye irritation.
Ingestion	None known
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Other Information	None known.
Toxicity Tests	
Oral Toxicity:	LD50: > 5000 mg/kg (Rat)
Dermal Toxicity:	Not determined

<b>Inhalation Toxicity:</b>	Not determined
<b>Primary Irritation Effect:</b>	Not determined
<b>Carcinogenicity</b>	Not determined
<b>Genotoxicity:</b>	Not determined
<b>Reproductive / Developmental Toxicity:</b>	Not determined

## 12. ECOLOGICAL INFORMATION

<b>Mobility (Water/Soil/Air)</b>	Not determined
<b>Persistence/Degradability</b>	BOD(5 Day): 200 mg/g COD: 1600 mg/g
<b>Bio-accumulation</b>	Not Determined

### Ecotoxicological Information

<b>Acute Fish Toxicity:</b>	TLM96: 320-560 ppm (Oncorhynchus mykiss)
<b>Acute Crustaceans Toxicity:</b>	TLM96: > 75000 ppm (Mysidopsis bahia)
<b>Acute Algae Toxicity:</b>	Not determined

<b>Chemical Fate Information</b>	Not determined
<b>Other Information</b>	Not applicable

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Method</b>	Bury in a licensed landfill according to federal, state, and local regulations.
<b>Contaminated Packaging</b>	Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

**DOT**  
Not restricted

**Canadian TDG**  
Not restricted

**ADR** Not restricted

### Air Transportation

**ICAO/IATA** Not restricted

### Sea Transportation

**IMDG**  
Not restricted

## Other Shipping Information

Labels: None

### 15. REGULATORY INFORMATION

#### US Regulations

US TSCA Inventory	All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances	Not applicable
EPA SARA (311,312) Hazard Class	None
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product	Not applicable.
EPA RCRA Hazardous Waste Classification	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65	All components listed do not apply to the California Proposition 65 Regulation.
MA Right-to-Know Law	Does not apply.
NJ Right-to-Know Law	Does not apply.
PA Right-to-Know Law	Does not apply.

#### Canadian Regulations

Canadian DSL Inventory	All components listed on inventory.
WHMIS Hazard Class	Un-Controlled

### 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS

Not applicable

Additional Information	For additional information on the use of this product, contact your local Halliburton representative.  For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.
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Disclaimer Statement	This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.
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\*\*\*END OF MSDS\*\*\*

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/> Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>		4. Generator: Red Willow Production Company
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: McElvain Compressor
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		6. Transporter:
7. Location of Material (Street Address or ULSTR) S-25, T-33N, R-08W		8. State: NM
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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:** Mixture of sand/gravel/engine oil (15w40). -MSDS and RCRA 8 attached.

Known Volume \_\_\_\_\_ bbls (to be entered by the operator at the end of the haul)

SIGNATURE Joel Owens TITLE: Operations Manager DATE: 12/5/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: BP TITLE: \_\_\_\_\_ DATE: 12/5/06

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

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Oct 10 06 11:51a

Industrial EcoSystems

5056321876

p.2



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

Joanna Prukop  
Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

<b>1. Generator Name and Address</b> Red Willow Production Company PO Box 369 14933 Hwy. 172 Ignacio, CO 81137	<b>2. Destination Name:</b> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
<b>3. Originating Site (name):</b>  McElvain Compressor  Attach list of originating sites as appropriate	<b>Location of the Waste (Street address &amp;/or ULSTR):</b>  UL- <u>S- 25 T- 33N R- 08W</u> or attach list Street Address: _____
<b>4. Source and Description of Waste</b>  Mixture of Sand/Gravel/Engine oil (15W40)	

I, Jonathan Sorrell representative for Red Willow Production 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  
characteristic

☒ NON-EXEMPT oilfield waste which is non-hazardous by

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) RCRA 8

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]

Phone Contact: 970-563-5193

Title: EHS Manager

P.O# / Pay key No: \_\_\_\_\_

Date: 12/11/06

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

I have reviewed the enclosed information concerning the Exempt, Not-toxic oilfield waste material from McElusain Compressor 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 Exempt oilfield waste.~~ ay
- The material is Non-hazardous by ~~regulatory definition~~ ay characteristic Analysis

**THEREFORE:**

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

Name:

Diana L. Ogden

Title: Acting Superintendent

Date:

Dec. 4, 2006

Agency Address & Phone:

BIA Southern Ute Agency  
Ignacio, Colorado

MSDS Code: 776084  
Status: Final

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Date of Issue: 06-May-2004



## MATERIAL SAFETY DATA SHEET

### Conoco HD Fleet Supreme Engine Oil

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Conoco HD Fleet Supreme Engine Oil  
**Product Code:** 46261  
**Intended Use:** Heavy Duty Diesel Engine Oil  
**Synonyms:** Conoco MSDS #MOTC0090  
Conoco HD Fleet Supreme Engine Oil (AP Region)  
Conoco HD Fleet Supreme Engine Oil 10W-30  
Conoco HD Fleet Supreme Engine Oil 15W-40  
Conoco HD Fleet Supreme Engine Oil 20W-50  
**Chemical Family:** Not Given  
**Responsible Party:** Conoco Lubricants  
A Division of ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas  
77079-1175  
**Customer Service:** 800-255-9556  
**Technical Information:** 800-255-9556

The intended use of this product is indicated above. If any additional use is known, please contact us at the Technical Information number listed.

#### EMERGENCY OVERVIEW

**24 Hour Emergency Telephone Numbers:**  
Spill, Leak, Fire or Accident Call CHEMTREC:  
North America: (800) 424-9300  
Others: (703) 527-3867 (collect)

California Poison Control System: (800) 356-3219

**Health Hazards/Precautionary Measures:** Causes eye and skin irritation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Keep away from all sources of ignition.

**Appearance:** Light brown  
**Physical Form:** Liquid  
**Odor:** Light petroleum

#### NFPA 704 Hazard Class:

**Health:** 1 (Slight)  
**Flammability:** 1 (Slight)  
**Instability:** 0 (Least)

#### HMIS Hazard Class:

**Health:** 1 (Slight)  
**Flammability:** 1 (Slight)  
**Physical Hazards:** 0 (Least)

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### HAZARDOUS COMPONENTS

Component / CAS No:	Percent (%)	ACGIH:	OSHA:	NIOSH:	Other:
Zinc Compound PROPRIETARY	1 - 2	NE	NE	NE	

### NON-HAZARDOUS COMPONENTS

Component / CAS No:	Percent (%)	ACGIH:	OSHA:	NIOSH:	Other:
Lubricant Base Oil (Petroleum) VARIOUS	70 - 80	5mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> STEL	5 mg/m <sup>3</sup> TWA	2500 mg/m <sup>3</sup> IDLH	as Oil Mist, if Generated  5 mg/m <sup>3</sup> NOHSC TWA
Additives PROPRIETARY	20 - 30	NE	NE	NE	

All components are listed on the TSCA inventory.

The base oil for this product can be a mixture of any of the following highly refined petroleum streams: CAS 64741-88-4; CAS 64741-89-5; CAS 64741-96-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-62-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

NE=Not Established

## 3. HAZARDS IDENTIFICATION

### Potential Health Effects:

**Eye:** Eye irritant. Contact may cause stinging, watering, redness, and swelling.

**Skin:** Skin irritant. Contact may cause redness, itching, burning, and skin damage. No harmful effects from skin absorption are expected.

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** No harmful effects expected from ingestion.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea, and, diarrhea.

**Cancer:** Inadequate evidence available to evaluate the cancer hazard of this material. See Section 11 for carcinogenicity information of individual components, if any.

**Target Organs:** No data available for this material.

**Developmental:** No data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders.

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#### 4. FIRST AID MEASURES

**Eye:** Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek medical attention. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

**Skin:** Wipe material from skin, remove contaminated shoes and clothing and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops, seek medical attention.

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

**Notes to Physician:** High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. Often these injuries require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury.

Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

#### 5. FIRE-FIGHTING MEASURES

##### Flammable Properties:

Flash Point:	380°F / 193°C
Test Method:	PM
OSHA Flammability Class:	Not applicable
LEL%:	No data
UEL%:	No data
Autoignition Temperature:	No data

**Unusual Fire & Explosion Hazards:** This material may burn, but will not ignite readily. If water is applied to heated material, it can cause violent foaming and boilover. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

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## 6. ACCIDENTAL RELEASE MEASURES

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. Notify appropriate federal, state, and local agencies.

## 7. HANDLING AND STORAGE

**Handling:** Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.148. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Storage temperatures above 113°F may lead to thermal decomposition, resulting in the generation of hydrogen sulfide and other sulfur containing gases. Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Use and store this material in cool, dry, well-ventilated areas. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required.

**Personal Protective Equipment (PPE):**

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**Respiratory:** Inhalation is not an expected route of exposure. However, a NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

<b>Appearance:</b>	Light brown
<b>Physical Form:</b>	Liquid
<b>Odor:</b>	Light petroleum
<b>Odor Threshold:</b>	No data
<b>pH:</b>	Not applicable
<b>Vapor Pressure (mm Hg):</b>	<1
<b>Vapor Density (air=1):</b>	>1
<b>Boiling Point:</b>	No data
<b>Melting/Freezing Point:</b>	No data
<b>Solubility In Water:</b>	No data
<b>Partition Coefficient (n-octanol/water):</b>	No data
<b>Specific Gravity:</b>	0.88
<b>Bulk Density:</b>	7.33
<b>Bulk Density Units</b>	lbs/gal
<b>Viscosity cSt @ 100°C:</b>	15.1
<b>Viscosity cSt @ 40°C:</b>	115
<b>Evaporation Rate (nBuAc=1):</b>	<1
<b>Flash Point:</b>	380°F / 193°C
<b>Test Method:</b>	PM
<b>Flammable/Explosive Limits:</b>	No data
<b>Decomposition Temperature:</b>	No data

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Status: Final

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## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Conditions to avoid:** Can become unstable at elevated temperatures and pressures.

**Materials to Avoid (Incompatible Materials):** Avoid contact with acids and strong oxidizing agents.

**Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen, sulfur, phosphorus, and zinc oxides. Hydrogen sulfide and alkyl mercaptans may also be released. Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 113°F.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Lubricant Base Oil (Petroleum) - VARIOUS

**Carcinogenicity:** The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, hydrotreating, and dewaxing to remove aromatics and improve performance characteristics. None of the oils used are listed as a carcinogen by NTP, IARC, or OSHA.

#### Acute Data:

### Lubricant Base Oil (Petroleum) - VARIOUS

Dermal LD50 = >2 g/kg

LC50 = No information available

Oral LD50 = >5 g/kg

### Additives - PROPRIETARY

Dermal LD50 = No information available

LC50 = No information available

Oral LD50 = No information available

### Zinc Compound - PROPRIETARY

Dermal LD50 = No information available

LC50 = No information available

Oral LD50 = No information available

## 12. ECOLOGICAL INFORMATION

Not evaluated at this time.



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Status: Final

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Date of Issue: 06-May-2004

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### 13. DISPOSAL CONSIDERATIONS

This material under most intended uses would become used oil due to contamination by physical or chemical impurities. RECYCLE ALL USED OIL. While being recycled, used oil is regulated by 40 CFR 279. Use resulting in chemical or physical change or contamination may also subject it to regulation as hazardous waste. Under federal regulations, used oil is a solid waste managed under 40 CFR 279. However, in California, used oil is managed as hazardous waste until tested to show it is not hazardous. Consult state and local regulations regarding the proper handling of used oil. In the case of used oil, the intent to discard it may cause the used oil to be regulated as hazardous waste.

Contents should be completely used and containers emptied prior to discard. Rinsate may be considered a RCRA hazardous waste and must be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or a drum reconditioner. To assure proper disposal of small empty containers, consult with state and local regulations and disposal authorities.

### 14. TRANSPORTATION INFORMATION

DOT Shipping Description: Not classified as hazardous

Note: Material is unregulated unless in container of 3500 gallons or more, then provisions of 49 CFR Part 130 apply for land shipment.

IMDG Shipping Description: Not regulated

ICAO/IATA Shipping Description: Not regulated

### 15. REGULATORY INFORMATION

#### U.S. Regulations:

##### EPA SARA 311/312 (Title III Hazard Categories)

Acute Health:	Yes
Chronic Health:	No
Fire Hazard:	No
Pressure Hazard:	No
Reactive Hazard:	No

##### SARA - Section 313 and 49 CFR 372:

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 49 CFR 372:  
Zinc Compound 1-2%

##### EPA (CERCLA) Reportable Quantity:

--None Known--

##### CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPOs

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 49 CFR 372:  
-- None Known --

##### California Proposition 65:

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA

Health & Safety Code Section 25249.5):

-- None Known --

##### Carcinogen Identification:

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Status: Final

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Date of Issue: 06-May-2004

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This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

**TSCA:**  
All components are listed on the TSCA inventory.

## 16. OTHER INFORMATION

Issue/Revision Date: 06-May-2004  
Previous Issue Date: 5/13/2003  
Product Code: 46261  
Reason for revision: Formulation Change. SEE SECTION 2.  
Previous Product Code: 46261, 46260, 46272  
MSDS Code: 776084

### Disclaimer of Expressed and Implied Warranties:

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

Nov. 20. 2006 11:18AM 970-247-4227

No. 7234 P. 4

Green Analytical Laboratories, Inc.  
75 Suttle Street  
Durango, CO 81303

Red Willow Production  
PO Box 369  
Ignacio, CO 81137  
Attention: Andy Young

GAL I.D.: 610-043-01

Date Received: 10/05/06

Date Reported: 11/20/06

QC Batches:

PROJECT NAME:PROJECT NUMBER:SAMPLE I.D.:

McElvain Comp

- Totals -

Sample Date: 10/05/06

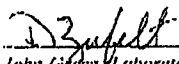
Sample Matrix: Soil

Units: mg/kg

## RCRA Metals

RESULTS

PARAMETER	METHOD	REPORT		DATE	
		LIMIT	RESULT	DILUTION	ANALYZED ANALYST
Arsenic	6010B	10	<10	100	
Barium	6010B	1.0	146	100	
Cadmium	6010B	1.0	2.0	100	
Chromium	6010B	1.0	5.9	100	
Lead	6010B	50	6.6	100	
Mercury	7470A	0.10	0.19	500	
Selenium	6010B	20	<20	100	
Silver	6010B	1.0	<1.0	100	

for:   
John Green, Laboratory Manager

Nov. 20. 2006 11:18AM 970-247-4227

No. 7234 P. 3

Green Analytical Laboratories, Inc.  
75 Suttle Street  
Durango, CO 81303

Red Willow Production  
PO Box 369  
Ignacio, CO 81137  
Attention: Andy Young

GAL I.D.: 610-043-01

Date Received: 10/05/06

Date Reported: 11/20/06

QC Batches:

PROJECT NAME:PROJECT NUMBER:SAMPLE I.D.: McElvain Comp

Sample Date: 10/05/06

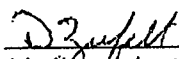
Sample Matrix: Water

Units: mg/L

## TCLP Metals

RESULTS

PARAMETER	METHOD	REPORT		DILUTION	DATE	
		LIMIT	RESULT		ANALYZED	ANALYST
Arsenic	200.7	0.10	<0.10	1		
Barium	200.7	0.01	1.25	1		
Cadmium	200.7	0.01	0.01	1		
Chromium	200.7	0.01	<0.01	1		
Lead	200.7	0.05	<0.05	1		
Mercury	245.1	0.0002	<0.0002	1		
Selenium	200.7	0.20	<0.20	1		
Silver	200.7	0.01	<0.01	1		

  
John C. Green, Laboratory Manager

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: XTO Energy
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> 9/27/06 Leon Brandon Aweil		5. Originating Site: Ohio Gov. La Plata CDP
2. Management Facility Destination: JFJ Landfarm L.L.C.		6. Transporter:
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		8. State: NM
7. Location of Material (Street Address or ULSTR) S-18, T-31N, R-12W		
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="checkbox"/> 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: excavation of soils from abandon historical unlined compressor pit (RCRA 8-Metals analysis attached)

Estimated Volume 20cy Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE Joel Owens  
Waste Management Facility Authorized Agent

TITLE: Operations Manager DATE: 9/27/2006

TYPE OR PRINT NAME: Joel Owens

TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)		
APPROVED BY: <u>[Signature]</u>	TITLE: <u>Enviro Spec</u>	DATE: <u>9-27-06</u>
APPROVED BY: <u>[Signature]</u>	TITLE: <u>Enviro Engr</u>	DATE: <u>10-18-06</u>

RECEIVED

OCT 11 2006

Oil Conservation Division  
1220  
Santa Fe, NM

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301-W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> <i>9/27/06 from Brandon Powell</i>		4. Generator: XTO Energy
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: Ohio Gov. La Plata CDP
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		6. Transporter:
7. Location of Material (Street Address or ULSTR) S-18, T-31N, R-12W		8. State: NM
9. <u>Circle One</u> :  A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>		

**BRIEF DESCRIPTION OF MATERIAL:** ~~excavation of soils from abandon historical unlined compressor pit~~ (RCRA 8-Metals analysis attached)

Estimated Volume 20cy Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE *Joel Owens*  
Waste Management Facility Authorized Agent

TITLE: Operations Manager DATE: 9/27/2006

TYPE OR PRINT NAME: Joel Owens

TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: *BP* TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

DUPLICATE



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor  
Betty Rivera  
Cabinet Secretary

Lori Wrotenbery

Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address XTO ENERGY INC. 2700 FARMINGTON AVE BUILDING K, SUITE 1 FARMINGTON, NM 87401	2. Destination Name: JFJ LANDFARM C/O INDUSTRIAL ECOSYSTEM INC. #81 CR 3150 AZTEC, NM 87410
3. Originating Site (name): OHIO GOV. LA PLATA CDP	Location of the Waste (Street address &/or ULSTR): (B) SEC. 18 - T 31N - R 12W SAN JUAN COUNTY, NEW MEXICO
attach list of originating sites as appropriate	
4. Source and Description of Waste EXCAVATION OF SOILS FROM ABANDON HISTORICAL UNLINED COMPRESSOR PIT	

I, JEFF BLAGG representative for :  
Print Name

XTO ENERGY, 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 - 8 RCRA METALS  
☐ 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): Jeff Blagg

Title: AGENT

Date: SEPT 27, 2006

# CHAIN OF CUSTODY RECORD

14701

Client / Project Name <b>BLAGG / XTO</b>			Project Location <b>OHIO GOV. LA PLATA CDP</b>		ANALYSIS / PARAMETERS									
Sampler: <b>JEFF BLAGG</b>			Client No. <b>94034-010</b>		No. of Containers <b>1</b>	TPH <b>005</b>	B RORA METALS <b>0021</b>	BTEX <b>0021</b>	CL- <b>77</b>			Remarks		
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix								Remarks		
<b>5-POINT COMPOSITE OF STOCKPILE</b>	<b>9/29/06</b>	<b>1610</b>	<b>38562</b>	<b>SOIL</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>			<b>ABANDON HISTORICAL COMPRESSOR P.I.T</b>		
Relinquished by: (Signature) <i>Jeff Blagg</i>			Date <b>9/21/06</b>	Time <b>0905</b>	Received by: (Signature) <i>Blind Vault</i>						Date <b>9/21/06</b>	Time <b>0905</b>		
Relinquished by: (Signature)					Received by: (Signature)									
Relinquished by: (Signature)					Received by: (Signature)									
<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615											Sample Receipt			
												Y	N	N/A
											Received Intact	<input checked="" type="checkbox"/>		
											Cool - Ice/Blue Ice	<input checked="" type="checkbox"/>		



Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	5 - Point Composite of Stockpile	Date Reported:	09-23-06
Laboratory Number:	38562	Date Sampled:	09-20-06
Chain of Custody:	14701	Date Received:	09-21-06
Sample Matrix:	Soil	Date Analyzed:	09-23-06
Preservative:	N/A	Date Digested:	09-22-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.071	0.001	5.0
Barium	5.60	0.001	100
Cadmium	0.087	0.001	1.0
Chromium	0.196	0.001	5.0
Lead	0.448	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

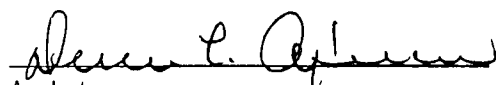
ND - Parameter not detected at the stated detection limit.

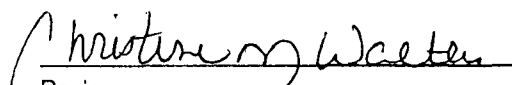
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: Ohio Gov. La Plata CDP Abandon Historical Compressor Pit

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	5-Point Composite of Stockpile	Date Reported:	09-24-06
Lab ID#:	38562	Date Sampled:	09-20-06
Sample Matrix:	Soil	Date Received:	09-21-06
Preservative:	Cool	Date Analyzed:	09-24-06
Condition:	Cool and Intact	Chain of Custody:	14701

Parameter

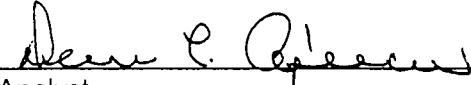
Concentration (mg/Kg)

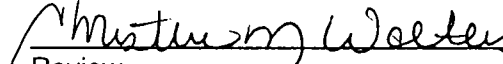
Total Chloride

27.2

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Ohio Gov. La Plata CDP Abandon Historical Compressor Pit

  
Analyst

  
Review

EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	5-Point Composite of Stockpile	Date Reported:	09-24-06
Laboratory Number:	38562	Date Sampled:	09-20-06
Chain of Custody:	14701	Date Received:	09-21-06
Sample Matrix:	Soil	Date Analyzed:	09-24-06
Preservative:	Cool	Date Extracted:	09-22-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	3.0	1.5
p,m-Xylene	9.6	2.2
o-Xylene	3.5	1.0
Total BTEX	16.1	

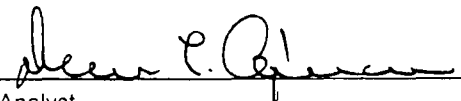
ND - Parameter not detected at the stated detection limit.

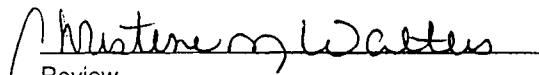
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Ohio Gov. La Plata CDP Abandon Historical Compressor Pit

  
Analyst

  
Review

EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

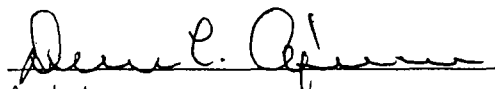
Client:	Blagg / XTO	Project #:	94034-010
Sample ID:	5-Point Composite of Stockpile	Date Reported:	09-24-06
Laboratory Number:	38562	Date Sampled:	09-20-06
Chain of Custody No:	14701	Date Received:	09-21-06
Sample Matrix:	Soil	Date Extracted:	09-22-06
Preservative:	Cool	Date Analyzed:	09-24-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

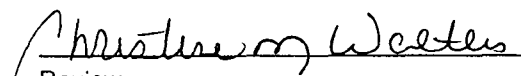
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Ohio Gov. La Plata CDP Abandon Historical Compressor Pit**

  
Analyst

  
Review

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: Non-Exempt: <input checked="" type="checkbox"/>	4. Generator: Stewart & Stevenson Power LLC
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <i>Rec'd Verbal from Brandon Powell-OCA 8/14/06</i>	5. Originating Site: Stewart & Stevenson Power LLC
2. Management Facility Destination: JFJ Landfarm L.L.C.	6. Transporter: Riley
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	8. State: NM
7. Location of Material (Street Address or ULSTR) 1515 W. Murray, Farmington, NM 87401	
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: Primarily oil field waste generator from washing parts and motors that is collected in four sumps located in wash bay. Analyticals attached (TCLP Organics & Metals).

Estimated Volume 11 bbls Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 08/14/06  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: JOEL OWENS TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)		
APPROVED BY: <u><i>Brandon Powell</i></u>	TITLE: <u>EnviroSpec</u>	DATE: <u>8/15/06</u>
APPROVED BY: <u><i>Joel Owens</i></u>	TITLE: <u>Environ. Eng.</u>	DATE: <u>9/5/06</u>

\* Note: New Laboratory Analysis Is Required Prior To Next Approval Request

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: Non-Exempt: <input checked="" type="checkbox"/>	4. Generator: Stewart & Stevenson Power LLC
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <i>Rec'd Verbal from Brandon Powell - OGD 8/14/06</i>	5. Originating Site: Stewart & Stevenson Power LLC
2. Management Facility Destination: JFJ Landfarm L.L.C.	6. Transporter: Riley
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499	8. State: NM
7. Location of Material (Street Address or ULSTR) 1515 W. Murray, Farmington, NM 87401	
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:** Primarily oil field waste generator from washing parts and motors that is collected in four sumps located in wash bay. Analyticals attached (TCLP Organics & Metals).

Estimated Volume 11 bbls Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 08/14/06  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: JOEL OWENS TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: BP TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

**COPY**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

Joanna Prukop  
Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Stewart & Stevenson Power LLC. 1515 W. Murray Farmington, NM 87401 Phone# 505-326-0588	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name): Stewart & Stevenson Power LLC. 1515 W. Murray Farmington, NM. 87401  Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR):  UL- K S- 36 T- 30N R- 14W or attach list Street Address: _____
4. Source and Description of Waste  Primarily oil field waste generated from washing parts and motors that is collected in four sumps located in wash bay.	

I, Wayne Work representative for Stewart & Stevenson Power LLC. 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  
characteristic☒ NON-EXEMPT oilfield waste which is non-hazardous by

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 (TCLP Organics & Metals)☐ 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): Wayne A. WorkPhone Contact: 505-320-3211Title: EHS Coordinator

P.O# / Pay key No: \_\_\_\_\_

Date: 8/14/06

Oil Conservation Division \* 1000 Rio Brazos Road \* Aztec, New Mexico 87410  
Phone: (505) 334-6178 \* Fax (505) 334-6170 \* <http://www.emnrd.state.nm.us>

FIRSTECH, Inc  
19701 South Miles Rd  
Warrensville Hts., OH 44128



Phone: (216) 663-0808  
Fax: (216) 663-0656  
E-Mail: firstlabs@sbcglobal.net

## Report of Analysis

Name: Attn: Wayne A. Work  
Stewart & Stevenson - Farmington, NM  
1515 W. Murray Dr.  
Farmington, NM 87410  
Sample Date: 4/6/05  
Sample Time: 10 00.00 AM  
Receipt Date: 4/6/05 9:15:00 AM  
Report Date: 4/20/05  
Sample Site:

Sample ID#: 76375  
Sample Type: Solid  
Sample Source:  
Sampler's Name: WW  
Client Sample ID: POS Sump - Wash Bay Sump

Parameter	Sample Result	Units	Limit	Minimum Detection Level	Analysis Date	Analyst
<b>TCLP Organics</b>						
1,1-Dichloroethene	ND	mg/L	0.7	0.05	4/14/05	AC
1,2-Dichloroethane	ND	mg/L	0.5	0.05	4/14/05	AC
1,4-Dichlorobenzene	ND	mg/L	7.5	0.05	4/14/05	AC
2,4,5-Trichlorophenol	ND	mg/L	400	0.1	4/19/05	AC
2,4,6-Trichlorophenol	ND	mg/L	2	0.1	4/19/05	AC
2,4-Dinitrotoluene	ND	mg/L	0.13	0.1	4/19/05	AC
2-Butanone (MEK)	ND	mg/L	200	0.5	4/14/05	AC
2-Methylphenol	ND	mg/L	200	0.1	4/19/05	AC
3&4-Methylphenol	ND	mg/L	200	0.2	4/19/05	AC
Benzene	ND	mg/L	0.5	0.05	4/14/05	AC
Carbon Tetrachloride	ND	mg/L	0.5	0.05	4/14/05	AC
Chlorobenzene	ND	mg/L	100	0.05	4/14/05	AC
Chloroform	ND	mg/L	6	0.05	4/14/05	AC
Hexachlorobenzene	ND	mg/L	0.13	0.1	4/19/05	AC
Hexachlorobutadiene	ND	mg/L	0.5	0.1	4/19/05	AC
Hexachloroethane	ND	mg/L	3	0.1	4/19/05	AC
Nitrobenzene	ND	mg/L	2	0.1	4/19/05	AC
Pentachlorophenol	ND	mg/L	100	0.5	4/19/05	AC
Pyridine	ND	mg/L	5	0.1	4/19/05	AC
Tetrachloroethene	ND	mg/L	0.7	0.05	4/14/05	AC
Trichloroethene	ND	mg/L	0.5	0.05	4/14/05	AC
Vinyl Chloride	ND	mg/L	0.2	0.05	4/14/05	AC

Mark Kalmeyer, Lab Director

ND = Not Detected

Monique Posner, Ph.D., QA/QC Officer

Signature: *SC3*

**Comment:** Methods: TCLP Metals - SW846(1311,6010,7470). TCLP Organics - SW846(1311,8260,8270)



FIRSTECH, Inc  
19701 South Miles Rd  
Warrensville Hts., OH 44128



Phone: (216) 663-0808  
Fax: (216) 663-0656  
E-Mail: firstlabs@sbcglobal.net

## Report of Analysis

Name: Attn: Wayne A. Work  
Stewart & Stevenson - Farmington, NM  
1515 W. Murray Dr.  
Farmington, NM 87410  
Sample Date: 4/6/05  
Sample Time: 10 00.00 AM  
Receipt Date: 4/6/05 9:15:00 AM  
Report Date: 4/20/05  
Sample Site:

Sample ID#: 76375  
Sample Type: Solid  
Sample Source:  
Sampler's Name: WW  
Client Sample ID: POS Sump - Wash Bay Sump

Parameter	Sample Result	Units	Limit	Minimum Detection Level	Analysis Date	Analyst
<b>TCLP Organics</b>						
1,1-Dichloroethene	ND	mg/L	0.7	0.05	4/14/05	AC
1,2-Dichloroethane	ND	mg/L	0.5	0.05	4/14/05	AC
1,4-Dichlorobenzene	ND	mg/L	7.5	0.05	4/14/05	AC
2,4,5-Trichlorophenol	ND	mg/L	400	0.1	4/19/05	AC
2,4,6-Trichlorophenol	ND	mg/L	2	0.1	4/19/05	AC
2,4-Dinitrotoluene	ND	mg/L	0.13	0.1	4/19/05	AC
2-Butanone (MEK)	ND	mg/L	200	0.5	4/14/05	AC
2-Methylphenol	ND	mg/L	200	0.1	4/19/05	AC
3&4-Methylphenol	ND	mg/L	200	0.2	4/19/05	AC
Benzene	ND	mg/L	0.5	0.05	4/14/05	AC
Carbon Tetrachloride	ND	mg/L	0.5	0.05	4/14/05	AC
Chlorobenzene	ND	mg/L	100	0.05	4/14/05	AC
Chloroform	ND	mg/L	6	0.05	4/14/05	AC
Hexachlorobenzene	ND	mg/L	0.13	0.1	4/19/05	AC
Hexachlorobutadiene	ND	mg/L	0.5	0.1	4/19/05	AC
Hexachloroethane	ND	mg/L	3	0.1	4/19/05	AC
Nitrobenzene	ND	mg/L	2	0.1	4/19/05	AC
Pentachlorophenol	ND	mg/L	100	0.5	4/19/05	AC
Pyridine	ND	mg/L	5	0.1	4/19/05	AC
Tetrachloroethene	ND	mg/L	0.7	0.05	4/14/05	AC
Trichloroethene	ND	mg/L	0.5	0.05	4/14/05	AC
Vinyl Chloride	ND	mg/L	0.2	0.05	4/14/05	AC

Mark Kalmeyer, Lab Director

ND = Not Detected

Monique Posner, Ph.D., QA/QC Officer

Signature by SC3 on behalf of:

**Comment:** Methods: TCLP Metals - SW846(1311,6010,7470). TCLP Organics - SW846(1311,8260,8270)

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <u>Verbal phone approval 3/27/2006 @ 11:35am</u>	4. Generator: Dugan Production
2. Management Facility Destination JFJ Landfarm L.L.C. Industrial Ecosystems Inc. #81 County Road 3150 Aztec, NM 87410	5. Originating Site Turks Toast Pipeline @ (Monte Carlo #2)
3. Address of Facility Operator: Po Box 420, Farmington, NM 87499-0420	6. Transporter: To Be Determined
7. Location of Material (Street Address or ULSTR) UL - M, Section 24, T30N, R15W	8. State: New Mexico
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: Disposal of contaminated Inert Sulpha Treat

Estimated Volume less than 10 cubic yards Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE: [Signature] TITLE: Business Manager DATE: 3/27/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Vince Scott TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY: [Signature] TITLE: Environmental Engr DATE: 3/30/06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

 Joana Prunkap  
Cabinet Secretary

**Lori Wrotenbery**

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

<b>1. Generator Name and Address</b> DUGAN PRODUCTION 87499 P.O. Box 420 Farmington N.M.	<b>2. Destination Name:</b> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No. 505-632-1876
<b>3. Originating Site (name):</b> TURKS TOAST Pipeline @ MONTE CARLO #2 Attach list of originating sites as appropriate	<b>Location of the Waste (Street address &amp;/or ULSTR):</b> UL- M S- 24 T- 30 N R- 15 W or attach list Street Address:
<b>4. Source and Description of Waste</b> INERT Sulpha TREAT	

 I, TERRY ROWELL representative for:  
 Print Name

DUGAN 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  
☐ 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): Terry Rowell

 Phone: 505-325-1821 / 505-4565

 Title: CONSTRUCTION Foreman

P.O# / Paykey No:

 Date: 3-24-06

## MATERIAL SAFETY DATA SHEET

Product ID: 12084  
Revision Date: 07/29/2002

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Trade Name: SULFATREAT(R) - 410HP  
Chemical Family: Mixture  
Product Use: Hydrogen Sulfide Treatment  
Emergency Telephone (24 hr.): 281-561-1600

Supplied by a Business Unit of: M-I L.L.C.  
5950 North Course Dr.  
Houston, TX 77072  
Telephone: 281-561-1511  
Fax: 281-561-7240  
Contact Person: Catherine Miller, Occupational Health

Revision Number: New

WHMIS Class: D2A D2B  
UN PIN No: Not regulated

**HMIS Rating**

Health: 1\*

Flammability: 1

Physical Hazard: 0

PPE: E

HMIS Key: 4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal Hazard. \*Chronic effects - See Section 11. See Section 8 for Personal Protective Equipment recommendations.

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient	CAS NO:	Wt. %	Ingredient Comments:
Silica, crystalline, quartz	14808-60-7	5 - 10	No comments.
Montmorillonite, calcined	70892-59-0	30 - 60	No comments.
Silica, crystalline, Cristobalite	14464-46-1	1 - 5	No comments.
Iron oxides	Various	10 - 30	No comments.
Water	7732-18-5	10 - 30	No comments.

**3. HAZARDS IDENTIFICATION****Emergency Overview:**

Caution! May cause eye, skin, and respiratory tract irritation. Long term inhalation of particulates may cause lung damage. Cancer hazard. Contains crystalline silica which may cause lung cancer. There is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC classification group 1 carcinogen. Risk of cancer depends on duration and level of exposure.

**Potential Health Effects:**Acute Effects

Eye Contact: Dust may cause irritation and inflammation.  
Skin Contact: Dust may cause skin irritation.  
Inhalation: May be irritating to the respiratory tract if inhaled.  
Ingestion: Not considered a likely route of exposure. May be harmful if large amounts are swallowed.

Chronic Effects

**MATERIAL SAFETY DATA SHEET**Trade Name: **SULFATREAT(R) - 410HP**

MSDS NO. 12084

Revision Date: 07/29/2002

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**Carcinogenicity & Chronic Effects:**

See Section 11 - Toxicological Information.

**Routes of Exposure:**

Inhalation. Dermal (skin) contact. Eyes.

**Target Organs:**

Eyes. Skin. Respiratory System.

**Medical Conditions Aggravated By Exposure:**

Respiratory and skin conditions.

**4. FIRST AID MEASURES****Eye Contact:**

Promptly wash eyes with lots of water while lifting eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

**Skin Contact:**

Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if any discomfort continues.

**Inhalation:**

Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:**

Dilute with 2 - 3 glasses of water or milk, if conscious. Never give anything by mouth to an unconscious person. If signs of irritation or toxicity occur seek medical attention.

**General Notes:**

Persons seeking medical attention should carry a copy of this MSDS with them.

**Notes To Physician:**

None known.

**5. FIRE FIGHTING MEASURES****Flammable Properties****Flash Point: F (C)**

Not applicable

**Flash Point Method:**

Not applicable

**Flammable Limits in Air - Lower (%):** Not applicable**Flammable Limits in Air - Upper (%):** Not applicable**Autoignition Temperature: F(C)** Not applicable**Autoignition Temperature: °C** Not applicable**Flammability Class:**

Not combustible

**Other Flammable Properties:**

Not determined.

**Extinguishing Media:**

Use extinguishing media appropriate for surrounding fire. This material is not combustible.

**Protection Of Fire-Fighters:**

**Special Fire-Fighting Procedures:** Do not enter fire area without proper personal protective equipment, including NIOSH/MSHA approved self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Manage water run-off in accordance with local, state and federal environmental regulations.

**Hazardous Combustion Products:** Metal fumes.**6. ACCIDENTAL RELEASE MEASURES****Personal Precautions:**

Use personal protective equipment identified in Section 8.

**Spill Procedures:**

Avoid the generation of dust. Sweep, vacuum, or shovel and place into closable container for disposal.

**MATERIAL SAFETY DATA SHEET**Trade Name: **SULFATREAT(R) - 410HP**

MSDS NO. 12084

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**Environmental Precautions:** Waste must be disposed of in accordance with federal, state and local laws. Manage any release of product into sewers, surface/subsurface waters in accordance with local, state and federal environmental regulations.

**7. HANDLING AND STORAGE**

**Handling:** Put on appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid generating or breathing dust. Use only in a well ventilated area. Wash thoroughly after handling.

**Storage:** Keep container closed. Store away from incompatibles.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Limits**

Ingredient	CAS NO:	Wt. %	ACGIH TLV TWA	OSHA PEL TWA	Other	Notes
Silica, crystalline, quartz	14808-60-7	5 - 10	0.05 mg/m <sup>3</sup>	see Table Z-3		(R)
Montmorillonite, calcined	70892-59-0	30 - 60	Not Listed	Not Listed		(1)
Silica, crystalline, Cristobalite	14464-46-1	1 - 5	0.05 mg/m <sup>3</sup>	see Table Z-3		(R)
Iron oxides	Various	10 - 30	5 mg/m <sup>3</sup> , as Fe	15 mg/m <sup>3</sup> (Total); 5 mg/m <sup>3</sup> (Respirable), as Fe		None
Water	7732-18-5	10 - 30	Not Listed	Not Listed		None

**Notes:**

(1) Control as an ACGIH particulate not otherwise specified (PNOS): 10 mg/m<sup>3</sup> (Inhalable); 3 mg/m<sup>3</sup> (Respirable) and an OSHA particulate not otherwise regulated (PNOR): 15 mg/m<sup>3</sup> (Total); 5 mg/m<sup>3</sup> (Respirable).

(R) Respirable fraction (ACGIH);

Table Z-3: PEL for Mineral Dusts containing crystalline silica are 10 mg/m<sup>3</sup> / (%SiO<sub>2</sub>+2) for quartz and 1/2 the calculated quartz value for cristobalite and tridymite.

An independent study conducted for SulfaTreat, a Business Unit of M-I L.L.C., concluded that workers, who manufacture SulfaTreat products, were not exposed to levels of crystalline silica that exceeded the permissible exposure limit (PEL) and the Threshold Limit Value (TLV) established by OSHA and ACGIH, respectively, for this substance. These manufacturing operations included drying; loading, unloading and mixing of raw materials; final product bagging and general housekeeping activities. Both the PEL and TLV represent the time weighted average concentration for an 8 hour workday and 40 hour workweek, to which it is believed that workers may be repeatedly exposed, day after day, without adverse effect.

**Engineering Controls:** Use appropriate engineering controls such as, exhaust ventilation and process enclosure, to ensure air contamination and keep workers exposure below the applicable limits.

**Personal Protection Equipment**

**Eye/Face Protection:** Dust resistant safety goggles.

**Skin Protection:** If needed to minimize irritation: Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear chemical resistant gloves such as nitrile or neoprene.

**Respiratory Protection:** If exposed to airborne particulates: Use at least a NIOSH-approved N95 half-mask disposable or reusable particulate respirator (dust mask).

**MATERIAL SAFETY DATA SHEET**Trade Name: **SULFATREAT(R) - 410HP**

MSDS NO. 12084

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**General Hygiene  
Considerations:**

Work clothes should be washed separately at the end of each work day.  
Disposable clothing should be discarded, if contaminated with product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Color:	Black
Odor:	Odorless
Physical State:	Granular Solid
pH:	Not determined.
Vapor Pressure:	Not applicable
Vapor Density (Air=1):	Not determined
Boiling Point:	Not determined
Melting/Freezing Point:	Not determined
Solubility Description:	In water
Solubility:	Negligible
Density/Specific Gravity:	62 lb/ft <sup>3</sup> (1.0 g/cc)
Evaporation Rate:	Not applicable
Odor Threshold Lower:	Not determined
Odor Threshold Upper:	Not determined

**10. STABILITY AND REACTIVITY**

Chemical Stability:	Stable
Conditions to Avoid:	Not determined.
Materials to Avoid:	Strong acids. Strong oxidizers.
Hazardous Decomposition Products:	None known
Hazardous Polymerization:	Will not occur

**11. TOXICOLOGICAL INFORMATION****Component Toxicological Data**

**MATERIAL SAFETY DATA SHEET**Trade Name: **SULFATREAT(R) - 410HP**

MSDS NO. 12084

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<b>Ingredient</b>	<b>Component Toxicological Summary</b>
Silica, crystalline, quartz	Crystalline silica is the most widely occurring of all minerals. The most common form of silica is sand. One form of crystalline silica, respirable crystalline silica (RCS), is known to be a human carcinogen. This finding is based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in exposed workers (International Agency for Research on Cancer (IARC), 1997). According to IARC the overall relative risk associated risk of developing cancer due to exposure to RCS is 1.3 to 1.5. This risk may be influenced by level and length of exposure. The National Toxicology Program (NTP) classifies crystalline silica as "reasonably anticipated to cause cancer in humans" (6th Annual Report on Carcinogens, 1991). Long term inhalation of crystalline silica can also result in the lung disease, silicosis. Symptoms of this disease include coughing and shortness of breath. (NJ HSFS, January 1996)
Montmorillonite, calcined	Prolonged and repeated inhalation of particulate may lead to pulmonary fibrosis, chronic bronchitis, emphysema and bronchial asthma.
Iron oxides	Chronic exposure to this component may cause a benign pneumoconiosis (irritation caused by dust inhalation which may lead to fibrosis (formation of fibrous tissue)). (NIOSH, HazardText) Prolonged and repeated inhalation of particulate may lead to pulmonary fibrosis, chronic bronchitis, emphysema and bronchial asthma.

**Product Toxicological Information:**

Product oral LD50 is &gt;3990 mg/kg (rat) (highest practical test level).

**12. ECOLOGICAL INFORMATION****Component Ecotoxicity Data**

<b>Ingredient</b>	<b>CAS NO:</b>	<b>Data</b>
Silica, crystalline, quartz	14808-60-7	Not determined
Montmorillonite, calcined	70892-59-0	Not determined
Silica, crystalline, Cristobalite	14464-46-1	Not determined
Iron oxides	Various	Not determined
Water	7732-18-5	Not applicable

**Product Ecotoxicity Data**

Product Data: Contact M-I Environmental Affairs Department for ecotoxicity information.

**Chemical Fate Data**

Biodegradation: Not determined

Bioaccumulation: Not determined

Octanol/Water Partition Coefficient: Not determined

**13. DISPOSAL CONSIDERATIONS**

Waste Classification: Not determined.



**MATERIAL SAFETY DATA SHEET**Trade Name: **SULFATREAT(R) - 410HP**

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**Waste Management:**

Under RCRA, it is the responsibility of the user to determine at the time of disposal, whether the product meets RCRA criteria for the hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may render the resulting materials hazardous. Empty container retain residues. All labeled precautions must be observed.

**Disposal Method:**

Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted industrial landfill.

**14. TRANSPORT INFORMATION****U.S. DOT**

Shipping Description: Not regulated

**TDG (Canada):**

Shipping Description: Not regulated

UN PIN No: Not regulated

**IMDG:**

Shipping Description: Not regulated

**ICAO/IATA:**

Shipping Description: Not regulated

**15. REGULATORY INFORMATION****US Regulations****SARA 311/312:**

SARA 311/312 Hazard Categories: Delayed (chronic) health hazard;

Ingredient	SARA 313	CERCLA	SARA 302 / TPQs	CA 65 Cancer	CA 65 Dev. Tox.	CA 65 Repro. F	CA 65 Repro. M
Silica, crystalline, quartz	Not Listed	Not Listed	Not Listed	carcinogen (airborne particles of respirable size); initial date 10/1/88	Not Listed	Not Listed	Not Listed
Montmorillonite, calcined	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Silica, crystalline, Cristobalite	Not Listed	Not Listed	Not Listed	carcinogen (airborne particles of respirable size); initial date 10/1/88	Not Listed	Not Listed	Not Listed
Iron oxides	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Water	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

**State Regulations**

**State Comments:** Proposition 65: This product contains chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 to cause cancer and/or reproductive toxicity. See table under US Regulations for the specific chemicals.

**MATERIAL SAFETY DATA SHEET**Trade Name: **SULFATREAT(R) - 410HP**

MSDS NO. 12084

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**International Inventories**

Ingredient	CAS NO:	TSCA	DSL	NDSL	EINECS	AICS
Silica, crystalline, quartz	14808-60-7	Listed	Listed	Not Listed	Listed	Listed
Montmorillonite, calcined	70892-59-0	Listed	Listed	Not Listed	Listed	Listed
Silica, crystalline, Cristobalite	14464-46-1	Listed	Listed	Not Listed	Listed	Listed
Iron oxides	Various	Listed	Listed	Not Listed	Listed	Listed
Water	7732-18-5	Listed	Listed	Not Listed	Listed	Listed

**Inventory Comment:**

"Listed" indicates the component is listed or exempt from listing on the chemical inventory.

**Canadian Regulations**

Controlled Products Regulations Statement: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS Class:**

D2A D2B

**16. OTHER INFORMATION**

The following has been revised since the last issue of this MSDS:

New issue

**Disclaimer:**

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We can not make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
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"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <b>Verbal phone approval 3/27/2006 @ 11:32am</b>	4. Generator: Dugan Production
2. Management Facility Destination JFJ Landfarm L.L.C.	5. Originating Site McAdams #2
3. Address of Facility Operator: Po Box 420, Farmington, NM 87499-0420	6. Transporter: TRC Construction
7. Location of Material (Street Address or ULSTR) UL - P, Section 34, 27N, 10W	8. State: New Mexico
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL: Disposal of contaminated soil impacted by used motor and compressor oil, (Noticed of written order by BLM for clean up action with deadline date of 1-30-06).

Estimated Volume less than 10 cubic yards Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE: [Signature] TITLE: Business Manager DATE: 3/27/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Vince Scott TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY: [Signature] TITLE: Environmental Eng DATE: 3/30/06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Bill Richardson  
Governor  
Joanne Prukop  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Dugan Production Corp 709 E. Murray Drive Farmington, NM 87499-0420 505-325-1821	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone: 505-632-1782 Fax: 505-632-1876
3. Originating Site (name): McAdams #2	Location of the Waste (Street address &/or ULSTR): UL <u>P</u> , SECTION <u>34</u> , T- <u>27N</u> , R- <u>10W</u> or Street Address:
4. Source and Description of Waste Soil impacted by used motor & compressor oils. Excavated with backhoe.	

I, Paul Sikora representative for :  
Print Name

Dugan Production Corp 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): [Signature]

Phone No: 320-4640

Title: Senior Production Foreman

Pay Key/P.O.: \_\_\_\_\_

Date: 3-17-86

***BLAGG ENGINEERING, INC.***

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

February 23, 2006

Mr. Paul Sikora  
Dugan Production Corporation  
P.O. Box 420  
Farmington, New Mexico 87401

Re: Compressor Overflow Soil Sample Test Results  
McAdams No. 2  
(P) Sec. 34 - T27N - R10W  
San Juan County, New Mexico

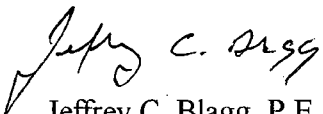
Dear Mr. Sikora:

At your request, Blagg Engineering, Inc. (BEI) sampled a soil stockpile on February 15, 2006 at the Dugan Production Corporation McAdams No. 2. This stockpile, consisting of approximately 10 cubic yards, was accumulated during removal of oil stained soil around a compressor at the well. BEI collected a 5-point composite of the stockpile, stored it in an ice chest with ice and hand delivered it to Envirotech Laboratories in Farmington, New Mexico for testing of RCRA metals.

Laboratory analytical results, attached, indicate that the soils do not exceed closure standards for RCRA metals as established by the New Mexico Oil Conservation Division (NMOCD). Based on these results BEI believes the soils are non-hazardous and, following NMOCD and landfarm approval, may be transported for remediation at a permitted landfarm. Material Safety Data Sheets (MSDS's) for compressor and/or engine oil may be required before landfarm disposal approval can be obtained.

Questions or comments concerning this transmittal may be directed to myself at (505)632-1199. BEI appreciates the opportunity to provide services to Dugan Production Corporation.

Respectfully submitted:  
***Blagg Engineering, Inc.***

  
Jeffrey C. Blagg, P.E.  
President

Attachment: Laboratory Test Reports

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## TRACE METAL ANALYSIS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Compressor Overflow	Date Reported:	02-17-06
Laboratory Number:	36243	Date Sampled:	02-15-06
Chain of Custody:	15557	Date Received:	02-15-06
Sample Matrix:	Soil	Date Analyzed:	02-17-06
Preservative:	N/A	Date Digested:	02-16-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.110	0.001	5.0
Barium	12.6	0.001	100
Cadmium	0.015	0.001	1.0
Chromium	0.131	0.001	5.0
Lead	0.643	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.019	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: **McAdams 2 5-Point Composite.**

  
Analyst

  
Review

## TRACE METAL ANALYSIS Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	QA/QC
Sample ID:	02-17 TM QA/AC	Date Reported:	02-17-06
Laboratory Number:	36243	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	02-17-06
Condition:	N/A	Date Digested:	02-16-06

Blank & Duplicate Conc. (mg/Kg)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	0.11	0.11	1.8%	0% - 30%
Barium	ND	ND	0.001	12.6	12.5	0.8%	0% - 30%
Cadmium	ND	ND	0.001	0.015	0.015	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.131	0.129	1.5%	0% - 30%
Lead	ND	ND	0.001	0.643	0.645	0.3%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.019	0.019	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

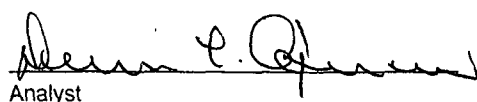
Spike Conc. (mg/Kg)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.11	0.609	99.8%	80% - 120%
Barium	0.500	12.6	13.1	100.0%	80% - 120%
Cadmium	0.500	0.015	0.515	100.0%	80% - 120%
Chromium	0.500	0.131	0.630	99.8%	80% - 120%
Lead	0.500	0.643	1.14	99.7%	80% - 120%
Mercury	0.500	ND	0.499	99.8%	80% - 120%
Selenium	0.500	0.019	0.518	99.8%	80% - 120%
Silver	0.500	ND	0.500	100.0%	80% - 120%

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.

Comments: **QA/QC for Sample 36243.**

  
Analyst

  
Review

# CHAIN OF CUSTODY RECORD

15557

Client / Project Name <b>BLAGG / DUGAN</b>			Project Location <b>MCADAMS 2</b>		ANALYSIS / PARAMETERS								
Sampler: <b>J. C. Blagg</b>			Client No. <b>94034-010</b>		No. of Containers <b>1</b>	RCRA METALS <b>X</b>							Remarks
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix									
<b>COMPRESSOR OVERFLOW</b>	<b>2/15/06</b>	<b>1215</b>	<b>36243</b>	<b>SOIL</b>									<b>5-Point Composite</b>
Relinquished by: (Signature) <b>J. C. Blagg</b>			Date <b>2/15/06</b>	Time <b>1625</b>	Received by: (Signature) <b>M. Bruce</b>			Date <b>2/15/06</b>	Time <b>1625</b>				
Relinquished by: (Signature)					Received by: (Signature)								
Relinquished by: (Signature)					Received by: (Signature)								
<b>ENVIROTECH INC.</b> 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615										Sample Receipt			
											Y	N	N/A
										Received Intact	<input checked="" type="checkbox"/>		
										Cool - Ice/Blue Ice	<input checked="" type="checkbox"/>		



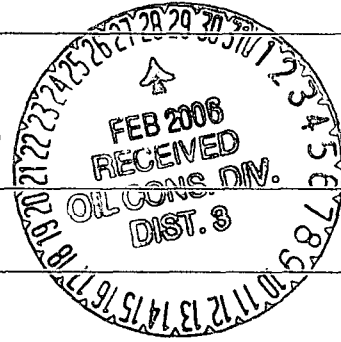
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised March 17, 1999

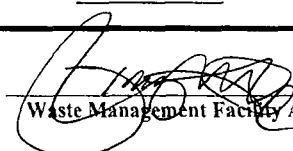
Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

<b>1. RCRA Exempt:</b> Non-Exempt: <input checked="" type="checkbox"/>  <b>Verbal Approval Received:</b> Yes <input checked="" type="checkbox"/> No: <u>Verbal approval per Denny Foust 2/22/06 @ 4:00pm per phone conversation.</u>		<b>4. Generator:</b> Koch Exploration Company, LLC 610 S. Main/ Po Box 489 Aztec, New Mexico 87410  <b>5. Originating Site:</b> Quinn 338
<b>2. Management Facility Destination</b> JFJ Landfarm L.L.C.	<b>6. Transporter:</b>	
<b>3. Address of Facility Operator:</b> JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499	<b>8. State:</b> New Mexico	
<b>7. Location of Material (Street Address or ULSTR)</b> SESW Section 18, T31N, R08W, San Juan County, New Mexico		
<b>9. Circle One:</b> 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>(B)</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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>		

**BRIEF DESCRIPTION OF MATERIAL:** Removal of soils containing glycol and compressor oil resulting from spills.

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_

SIGNATURE  TITLE: Business Manager DATE: 02-23-2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: VINCE SCOTT TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY:  TITLE: Enviro/Eng DATE: 2/28/06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON  
Governor  
Joanne Prukop  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Koch Exploration Company, LLC 610 S. Main PO Box 489, Aztec, NM 87410	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 505)632-1782
3. Originating Site (name): Quinn 338 well location, SESW Section 18, Township 31N, Range 8W, NMPM, San Juan County, New Mexico	
attach list of originating sites as appropriate	
4. Source and Description of Waste Removal of soils containing glycol and compressor oil resulting from spills.	

I, Donald L. Johnson representative for :  
Print Name

Koch Exploration Company, LLC 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

X 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):

X MSDS Information

Other (description)

X RCRA Hazardous Waste Analysis

X 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): Donald L. Johnson Contact Phone Number 505-334-9111

Title: Field Operations Manager

Date: 2/23/06

612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072

## ANALYTICAL REPORT

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P.O. Box 3788  
Shiprock, NM 87420

Date: 06-Feb-06 Off: (505) 368-4065

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155  
**Lab ID:** 0601030-001A

**Client Sample Info:** Quinn 338 Compressor Pad  
**Client Sample ID:** Quinn 338 @ 8 inches BG  
**Collection Date:** 1/23/2006 9:15:00 AM  
**Matrix:** SOIL

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>						
		<b>SW8015B</b>				Analyst: jem
T/R Hydrocarbons: C10-C28	ND	25.0		mg/Kg	1	2/2/2006
Surr: o-Terphenyl	77.0	47-149		%REC	1	2/2/2006
<b>GASOLINE RANGE ORGANICS</b>						
		<b>SW8015B</b>				Analyst: jem
		<b>(SW5035A)</b>				
T/R Hydrocarbons: C6-C10	ND	4.50		mg/Kg	25	2/2/2006
Surr: Trifluorotoluene	106	92.5-127		%REC	25	2/2/2006
<b>AROMATIC VOLATILES BY GC/PID</b>						
		<b>SW8021B</b>				Analyst: jem
		<b>(SW5035A)</b>				
Benzene	ND	50.0		µg/Kg	25	2/1/2006
Toluene	ND	50.0		µg/Kg	25	2/1/2006
Ethylbenzene	ND	50.0		µg/Kg	25	2/1/2006
m,p-Xylene	ND	100		µg/Kg	25	2/1/2006
o-Xylene	ND	50.0		µg/Kg	25	2/1/2006
Surr: Fluorobenzene	101	80-120		%REC	25	2/1/2006
Surr: 1,4-Difluorobenzene	101	80-120		%REC	25	2/1/2006
Surr: 4-Bromochlorobenzene	94.1	50-140		%REC	25	2/1/2006
<b>MERCURY, TCLP LEACHED</b>						
		<b>SW7470</b>				Analyst: jle
		<b>(SW7470)</b>				
Mercury	< 0.0020	0.0020		mg/L	1	2/3/2006
<b>ICP METALS, TCLP LEACHED</b>						
		<b>SW1311/6010B</b>				Analyst: jle
		<b>(SW3010A)</b>				
Arsenic	< 0.018	0.018		mg/L	1	2/3/2006 1:49:16 PM
Barium	2.19	0.003	B	mg/L	1	2/3/2006 1:49:16 PM
Cadmium	0.004	0.003		mg/L	1	2/3/2006 1:49:16 PM
Chromium	< 0.003	0.003		mg/L	1	2/3/2006 1:49:16 PM
Lead	< 0.005	0.005		mg/L	1	2/3/2006 1:49:16 PM
Selenium	0.011	0.011		mg/L	1	2/3/2006 1:49:16 PM
Silver	< 0.020	0.020		mg/L	1	2/3/2006 1:49:16 PM

**Qualifiers:** ND - Not Detected at the Practical Quantitation Limit  
J - Analyte detected below Practical Quantitation Limit  
B - Analyte detected in the associated Method Blank  
H - Parameter exceeded Maximum Allowable Holding Time

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted precision limits  
E - Value above Upper Quantitation Limit - UQL

612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072

## ANALYTICAL REPORT

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P.O. Box 3788  
Shiprock, NM 87420

Date: 06-Feb-06 Off: (505) 368-4065

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155  
**Lab ID:** 0601030-002A

**Client Sample Info:** Quinn 338 Compressor Pad  
**Client Sample ID:** Quinn 338 @ 3 ft BG  
**Collection Date:** 1/23/2006 9:30:00 AM  
**Matrix:** SOIL

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>		Analyst: jem		
T/R Hydrocarbons: C10-C28	ND	25.0		mg/Kg	1	2/2/2006
Surr: o-Terphenyl	77.7	47-149		%REC	1	2/2/2006
<b>GASOLINE RANGE ORGANICS</b>		<b>SW8015B (SW5035A)</b>		Analyst: jem		
T/R Hydrocarbons: C6-C10	ND	4.50		mg/Kg	25	2/2/2006
Surr: Trifluorotoluene	105	92.5-127		%REC	25	2/2/2006
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B (SW5035A)</b>		Analyst: jem		
Benzene	ND	50.0		µg/Kg	25	2/1/2006
Toluene	ND	50.0		µg/Kg	25	2/1/2006
Ethylbenzene	ND	50.0		µg/Kg	25	2/1/2006
m,p-Xylene	ND	100		µg/Kg	25	2/1/2006
o-Xylene	ND	50.0		µg/Kg	25	2/1/2006
Surr: Fluorobenzene	102	80-120		%REC	25	2/1/2006
Surr: 1,4-Difluorobenzene	103	80-120		%REC	25	2/1/2006
Surr: 4-Bromochlorobenzene	102	50-140		%REC	25	2/1/2006

**Qualifiers:** ND - Not Detected at the Practical Quantitation Limit  
J - Analyte detected below Practical Quantitation Limit  
B - Analyte detected in the associated Method Blank  
H - Parameter exceeded Maximum Allowable Holding Time

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted precision limits  
E - Value above Upper Quantitation Limit - UQL

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155

**ANALYTICAL QC SUMMARY REPORT****TestCode: 1311\_HG**

Sample ID	MB_1187	SampType: MBLK	TestCode: 1311_HG	Units: mg/L	Prep Date: 2/3/2006	Run ID: AA_060203A					
Client ID:	ZZZZZ	Batch ID: 1187	TestNo: SW7470	(SW7470)	Analysis Date: 2/3/2006	SeqNo: 109026					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	< 0.00200	0.00200									

Sample ID	LCS_1187	SampType: LCS	TestCode: 1311_HG	Units: mg/L	Prep Date: 2/3/2006	Run ID: AA_060203A					
Client ID:	ZZZZZ	Batch ID: 1187	TestNo: SW7470	(SW7470)	Analysis Date: 2/3/2006	SeqNo: 109027					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01414	0.00200	0.0125	0	113	70	130	0	0		

Sample ID	LCSD_1187	SampType: LCSD	TestCode: 1311_HG	Units: mg/L	Prep Date: 2/3/2006	Run ID: AA_060203A					
Client ID:	ZZZZZ	Batch ID: 1187	TestNo: SW7470	(SW7470)	Analysis Date: 2/3/2006	SeqNo: 109028					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01468	0.00200	0.0125	0	117	70	130	0.01414	3.73	0	

Sample ID	0601035-001AMS	SampType: MS	TestCode: 1311_HG	Units: mg/L	Prep Date: 2/3/2006	Run ID: AA_060203A					
Client ID:	ZZZZZ	Batch ID: 1187	TestNo: SW7470	(SW7470)	Analysis Date: 2/3/2006	SeqNo: 109034					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01484	0.00200	0.0125	0	119	70	130	0	0		

Sample ID	0601035-001AMSD	SampType: MSD	TestCode: 1311_HG	Units: mg/L	Prep Date: 2/3/2006	Run ID: AA_060203A					
Client ID:	ZZZZZ	Batch ID: 1187	TestNo: SW7470	(SW7470)	Analysis Date: 2/3/2006	SeqNo: 109035					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.01299	0.00200	0.0125	0	104	70	130	0.01484	13.3	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Souder, Miller & Associates  
Work Order: 0601030  
Project: Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

TestCode: 1311\_HG

Sample ID	0601030-001AD	SampType:	DUP	TestCode:	1311_HG	Units:	mg/L	Prep Date:	2/3/2006	Run ID:	AA_060203A	
Client ID:	Quinn 338 @ 8 inch	Batch ID:	1187	TestNo:	SW7470	(SW7470)		Analysis Date:	2/3/2006	SeqNo:	109033	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		< 0.00200	0.00200	0	0	0	0	0	0	0	15	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 1311\_M

Sample ID <b>MB_1184</b>	SampType: <b>MBLK</b>	TestCode: <b>1311_M</b>	Units: <b>mg/L</b>	Prep Date: <b>2/2/2006</b>	Run ID: <b>ICP_1_060203B</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>1184</b>	TestNo: <b>SW1311/6010 (SW3010A)</b>		Analysis Date: <b>2/3/2006</b>	SeqNo: <b>109037</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.01011	0.0180									J
Barium	0.498	0.00300									
Cadmium	< 0.00300	0.00300									
Chromium	0.002221	0.00300									J
Lead	0.002209	0.00500									J
Selenium	0.003344	0.0110									J
Silver	< 0.0200	0.0200									

Sample ID <b>LCS_1184</b>	SampType: <b>LCS</b>	TestCode: <b>1311_M</b>	Units: <b>mg/L</b>	Prep Date: <b>2/2/2006</b>	Run ID: <b>ICP_1_060203B</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>1184</b>	TestNo: <b>SW1311/6010 (SW3010A)</b>		Analysis Date: <b>2/3/2006</b>	SeqNo: <b>109038</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.9745	0.0180	1	0.01011	96.4	75	125	0	0		
Barium	1.524	0.00300	1	0.498	103	75	125	0	0		B
Cadmium	1.134	0.00300	1	0	113	75	125	0	0		
Chromium	0.9983	0.00300	1	0.002221	99.6	75	125	0	0		
Lead	0.9575	0.00500	1	0.002209	95.5	75	125	0	0		
Selenium	1.003	0.0110	1	0.003344	100	75	125	0	0		
Silver	1.108	0.0200	1	0	111	75	125	0	0		

Sample ID <b>LCSD_1184</b>	SampType: <b>LCSD</b>	TestCode: <b>1311_M</b>	Units: <b>mg/L</b>	Prep Date: <b>2/2/2006</b>	Run ID: <b>ICP_1_060203B</b>
Client ID: <b>ZZZZZ</b>	Batch ID: <b>1184</b>	TestNo: <b>SW1311/6010 (SW3010A)</b>		Analysis Date: <b>2/3/2006</b>	SeqNo: <b>109039</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.9505	0.0180	1	0.01011	94	75	125	0.9745	2.49	20	
Barium	1.477	0.00300	1	0.498	97.9	75	125	1.524	3.16	20	B
Cadmium	1.08	0.00300	1	0	108	75	125	1.134	4.87	20	
Chromium	0.9615	0.00300	1	0.002221	95.9	75	125	0.9983	3.76	20	
Lead	0.9846	0.00500	1	0.002209	98.2	75	125	0.9575	2.80	20	
Selenium	0.9917	0.0110	1	0.003344	98.8	75	125	1.003	1.17	20	
Silver	1.053	0.0200	1	0	105	75	125	1.108	5.10	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 1311\_M

Sample ID	0601030-001AMS	SampType:	MS	TestCode:	1311_M	Units:	mg/L	Prep Date:	2/2/2006	Run ID:	ICP_1_060203B
Client ID:	Quinn 338 @ 8 inch	Batch ID:	1184	TestNo:	SW1311/6010 (SW3010A)			Analysis Date:	2/3/2006	SeqNo:	109041
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.8971	0.0180	1	0.01347	88.4	75	125	0	0		
Barium	2.863	0.00300	1	2.185	67.7	75	125	0	0		BS
Cadmium	1.041	0.00300	1	0.004294	104	75	125	0	0		
Chromium	0.9199	0.00300	1	0.002565	91.7	75	125	0	0		
Lead	0.8984	0.00500	1	0.004083	89.4	75	125	0	0		
Selenium	0.8722	0.0110	1	0.01148	86.1	75	125	0	0		
Silver	1.001	0.0200	1	0	100	75	125	0	0		

Sample ID	0601030-001AMSD	SampType:	MSD	TestCode:	1311_M	Units:	mg/L	Prep Date:	2/2/2006	Run ID:	ICP_1_060203B
Client ID:	Quinn 338 @ 8 inch	Batch ID:	1184	TestNo:	SW1311/6010 (SW3010A)			Analysis Date:	2/3/2006	SeqNo:	109042
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.9939	0.0180	1	0.01347	98	75	125	0.8971	10.2	20	
Barium	3.211	0.00300	1	2.185	103	75	125	2.863	11.5	20	B
Cadmium	1.142	0.00300	1	0.004294	114	75	125	1.041	9.19	20	
Chromium	1.024	0.00300	1	0.002565	102	75	125	0.9199	10.7	20	
Lead	1.002	0.00500	1	0.004083	99.8	75	125	0.8984	10.9	20	
Selenium	1.009	0.0110	1	0.01148	99.8	75	125	0.8722	14.5	20	
Silver	1.112	0.0200	1	0	111	75	125	1.001	10.5	20	

Sample ID	0601030-001AD	SampType:	DUP	TestCode:	1311_M	Units:	mg/L	Prep Date:	2/2/2006	Run ID:	ICP_1_060203B
Client ID:	Quinn 338 @ 8 inch	Batch ID:	1184	TestNo:	SW1311/6010 (SW3010A)			Analysis Date:	2/3/2006	SeqNo:	109043
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.005983	0.0180	0	0	0	0	0	0.01347	0	20	J
Barium	1.988	0.00300	0	0	0	0	0	2.185	9.48	20	B
Cadmium	0.004218	0.00300	0	0	0	0	0	0.004294	1.78	20	
Chromium	0.001882	0.00300	0	0	0	0	0	0.002565	0	20	J
Lead	0.003611	0.00500	0	0	0	0	0	0.004083	0	20	J
Selenium	0.005829	0.0110	0	0	0	0	0	0.01148	0	20	J
Silver	< 0.0200	0.0200	0	0	0	0	0	0	0	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8015DR2\_S

Sample ID	MBLK_060127	SampType: MBLK	TestCode: 8015DR2_S	Units: mg/Kg	Prep Date: 1/27/2006	Run ID: GC-2_060202A					
Client ID:	ZZZZZ	Batch ID: R7806	TestNo: SW8015B		Analysis Date: 2/2/2006	SeqNo: 108990					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	ND	25.0	0	0	0	0	0	0	0		
Surr: o-Terphenyl	23.34	0	40	0	58.4	47	149	0	0		

Sample ID	MBLK_060202	SampType: MBLK	TestCode: 8015DR2_S	Units: mg/Kg	Prep Date: 2/2/2006	Run ID: GC-2_060202A					
Client ID:	ZZZZZ	Batch ID: R7806	TestNo: SW8015B		Analysis Date: 2/2/2006	SeqNo: 109001					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	ND	25.0	0	0	0	0	0	0	0		
Surr: o-Terphenyl	20.83	0	40	0	52.1	47	149	0	0		

Sample ID	LCS_060127	SampType: LCS	TestCode: 8015DR2_S	Units: mg/Kg	Prep Date: 1/27/2006	Run ID: GC-2_060202A					
Client ID:	ZZZZZ	Batch ID: R7806	TestNo: SW8015B		Analysis Date: 2/2/2006	SeqNo: 108993					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	634	25.0	627	0	101	70	130	0	0		
Surr: o-Terphenyl	31.8	0	40	0	79.5	47	149	0	0		

Sample ID	LCS_060202	SampType: LCS	TestCode: 8015DR2_S	Units: mg/Kg	Prep Date: 2/2/2006	Run ID: GC-2_060202A					
Client ID:	ZZZZZ	Batch ID: R7806	TestNo: SW8015B		Analysis Date: 2/2/2006	SeqNo: 109002					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	515.8	25.0	501	0	103	70	130	0	0		
Surr: o-Terphenyl	22.42	0	40	0	56	47	149	0	0		

Sample ID	0601030-001AMS	SampType: MS	TestCode: 8015DR2_S	Units: mg/Kg	Prep Date: 1/27/2006	Run ID: GC-2_060202A					
Client ID:	Quinn 338 @ 8 inch	Batch ID: R7806	TestNo: SW8015B		Analysis Date: 2/2/2006	SeqNo: 108995					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	524.8	25.0	501	0	105	70	130	0	0		
Surr: o-Terphenyl	32.71	0	40	0	81.8	47	149	0	0		

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8015DR2\_S

Sample ID	0601045-001AMS	SampType:	MS	TestCode:	8015DR2_S	Units:	mg/Kg	Prep Date:	2/2/2006	Run ID:	GC-2_060202A	
Client ID:	ZZZZZ	Batch ID:	R7806	TestNo:	SW8015B			Analysis Date:	2/2/2006	SeqNo:	109000	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28		583.8	25.0	501	67.08	103	70	130	0	0		
Surr: o-Terphenyl		30.21	0	40	0	75.5	47	149	0	0		

Sample ID	0601030-002AD	SampType:	DUP	TestCode:	8015DR2_S	Units:	mg/Kg	Prep Date:	1/27/2006	Run ID:	GC-2_060202A	
Client ID:	Quinn 338 @ 3 ft B	Batch ID:	R7806	TestNo:	SW8015B			Analysis Date:	2/2/2006	SeqNo:	108997	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28		ND	25.0	0	0	0	0	0	0	0	15	
Surr: o-Terphenyl		30.8	0	40	0	77	47	149	0	0	0	

Sample ID	0601045-001AD	SampType:	DUP	TestCode:	8015DR2_S	Units:	mg/Kg	Prep Date:	2/2/2006	Run ID:	GC-2_060202A	
Client ID:	ZZZZZ	Batch ID:	R7806	TestNo:	SW8015B			Analysis Date:	2/2/2006	SeqNo:	108999	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28		79.74	25.0	0	0	0	0	0	67.08	17.2	15	R
Surr: o-Terphenyl		32.28	0	40	0	80.7	47	149	0	0	0	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8015GRO\_S

Sample ID	MBLK_1176	SampType:	MBLK	TestCode:	8015GRO_S	Units:	mg/Kg	Prep Date:	1/27/2006	Run ID:	GC-1B_060202A
Client ID:	ZZZZZ	Batch ID:	1176	TestNo:	SW8015B	(SW5035A)		Analysis Date:	2/2/2006	SeqNo:	108966
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C10	ND	4.50	0	0	0	0	0	0	0		
Surr: Trifluorotoluene	2.643	0	2.5	0	106	92.5	127	0	0		

Sample ID	LCS_1176	SampType:	LCS	TestCode:	8015GRO_S	Units:	mg/Kg	Prep Date:		Run ID:	GC-1B_060202A
Client ID:	ZZZZZ	Batch ID:	1176	TestNo:	SW8015B	(SW5035A)		Analysis Date:	2/2/2006	SeqNo:	108968
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C10	45.6	4.50	45	0	101	80	120	0	0		
Surr: Trifluorotoluene	2.592	0	2.5	0	104	92.5	127	0	0		

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**CLIENT:** Souder, Miller & Associates  
**Work Order:** 0601030  
**Project:** Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** BTEX\_S

Sample ID	MBLK_1176	SampType:	MBLK	TestCode:	BTEX_S	Units:	µg/Kg	Prep Date:	1/27/2006	Run ID:	GC-1_060201A
Client ID:	ZZZZZ	Batch ID:	1176	TestNo:	SW8021B	(SW5035A)		Analysis Date:	2/1/2006	SeqNo:	108942
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	50.0	0	0	0	0	0	0	0		
Ethylbenzene	ND	50.0	0	0	0	0	0	0	0		
m,p-Xylene	ND	100	0	0	0	0	0	0	0		
o-Xylene	ND	50.0	0	0	0	0	0	0	0		
Toluene	ND	50.0	0	0	0	0	0	0	0		
Surr: 1,4-Difluorobenzene	2531	0	2500	0	101	80	120	0	0		
Surr: 4-Bromochlorobenzene	2484	0	2500	0	99.3	50	140	0	0		
Surr: Fluorobenzene	2540	0	2500	0	102	80	120	0	0		

Sample ID	LCS_1176	SampType:	LCS	TestCode:	BTEX_S	Units:	µg/Kg	Prep Date:	1/27/2006	Run ID:	GC-1_060201A
Client ID:	ZZZZZ	Batch ID:	1176	TestNo:	SW8021B	(SW5035A)		Analysis Date:	2/1/2006	SeqNo:	108944
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1518	50.0	1500	0	101	85	115	0	0		
Ethylbenzene	1467	50.0	1500	0	97.8	85	115	0	0		
m,p-Xylene	2912	100	3000	0	97.1	85	115	0	0		
o-Xylene	1517	50.0	1500	0	101	85	115	0	0		
Toluene	1607	50.0	1500	0	107	85	115	0	0		
Surr: 1,4-Difluorobenzene	2455	0	2500	0	98.2	80	120	0	0		
Surr: 4-Bromochlorobenzene	2431	0	2500	0	97.3	50	140	0	0		
Surr: Fluorobenzene	2450	0	2500	0	98	80	120	0	0		

Sample ID	0601030-001AMS	SampType:	MS	TestCode:	BTEX_S	Units:	µg/Kg	Prep Date:		Run ID:	GC-1_060201A
Client ID:	Quinn 338 @ 8 inch	Batch ID:	1176	TestNo:	SW8021B	(SW5035A)		Analysis Date:	2/1/2006	SeqNo:	108946
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1605	50.0	1500	0	107	80	120	0	0		
Ethylbenzene	1566	50.0	1500	0	104	80	120	0	0		
m,p-Xylene	3118	100	3000	0	104	80	120	0	0		
o-Xylene	1557	50.0	1500	0	104	80	120	0	0		
Toluene	1573	50.0	1500	0	105	80	120	0	0		

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CLIENT: Souder, Miller & Associates  
 Work Order: 0601030  
 Project: Quinn 338 Compressor Pad / 5115155

## ANALYTICAL QC SUMMARY REPORT

TestCode: BTEX\_S

Sample ID	0601030-001AMS	SampType: MS	TestCode: BTEX_S	Units: µg/Kg	Prep Date:	Run ID: GC-1_060201A					
Client ID:	Quinn 338 @ 8 inch	Batch ID: 1176	TestNo: SW8021B	(SW5035A)	Analysis Date: 2/1/2006	SeqNo: 108946					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1,4-Difluorobenzene	2463	0	2500	0	98.5	80	120	0	0		
Surr: 4-Bromochlorobenzene	2138	0	2500	0	85.5	50	140	0	0		
Surr: Fluorobenzene	2468	0	2500	0	98.7	80	120	0	0		

Sample ID	0601030-001AMSD	SampType: MSD	TestCode: BTEX_S	Units: µg/Kg	Prep Date:	Run ID: GC-1_060201A					
Client ID:	Quinn 338 @ 8 inch	Batch ID: 1176	TestNo: SW8021B	(SW5035A)	Analysis Date: 2/1/2006	SeqNo: 108947					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1560	50.0	1500	0	104	80	120	1605	2.85	15	
Ethylbenzene	1519	50.0	1500	0	101	80	120	1566	3.06	15	
m,p-Xylene	3019	100	3000	0	101	80	120	3118	3.22	15	
o-Xylene	1508	50.0	1500	0	101	80	120	1557	3.21	15	
Toluene	1527	50.0	1500	0	102	80	120	1573	2.98	15	
Surr: 1,4-Difluorobenzene	2437	0	2500	0	97.5	80	120	0	0	0	
Surr: 4-Bromochlorobenzene	2133	0	2500	0	85.3	50	140	0	0	0	
Surr: Fluorobenzene	2438	0	2500	0	97.5	80	120	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit  
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612 E. Murray Drive  
Farmington, NM 87401

Off: (505) 327-1072  
Fax: (505) 327-1496

*iiná bá*

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

February 06, 2006

John Hagstrom  
Souder, Miller & Associates  
612 E. Murray Dr  
Farmington, NM 87401

TEL: 505-325-5667  
FAX 505-327-1496

RE: Quinn 338 Compressor Pad / 5115155

Order No.: 0601030

Dear John Hagstrom:

iiná bá received 2 samples on 1/23/2006 1:40:00 PM for the analyses presented in the following report.

This certificate of analysis includes the Analytical Report(s) for the sample(s) received by the laboratory. A Quality Control Summary Report, the Sample Receipt Checklist and an executed Chain of Custody are included as an addendum to this report.

Should you have any questions regarding this certificate of analysis, please contact the laboratory at your convenience.

Report Approved By:



Jeffrey Engels  
Laboratory Director

Edwina Aspaas  
Quality Assurance Officer

This certificate of analysis and respective material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the person responsible for delivering this to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify the laboratory immediately at 505-327-1072.



MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496



P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

**iiná bá**

**Date:** 06-Feb-06

---

**CLIENT:** Souder, Miller & Associates  
**Project:** Quinn 338 Compressor Pad / 5115155  
**Lab Order:** 0601030

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## **CASE NARRATIVE**

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.

Any quality control and/or data qualifiers associated with this laboratory order will be flagged in the analytical result page(s), the quality control summary report(s) or the sample receipt checklist.

Barium was detected in the associated method blank for the TCLP extraction.

606111-00 MOBIL PEGASUS 805 SUPER  
MATERIAL SAFETY DATA BULLETIN

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## 1. PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: MOBIL PEGASUS 805 SUPER

SUPPLIER: EXXONMOBIL CORPORATION

3225 GALLOWS RD.

FAIRFAX, VA 22037

24 - Hour Health and Safety Emergency (call collect): 609-737-4411

24 - Hour Transportation Emergency (Primary) CHEMTREC: 800-424-9300  
(Secondary) 281-834-3296

Product and Technical Information:

Lubricants and Specialties: 800-662-4525 800-443-9966

Fuels Products: 800-947-9147

MSDS Fax on Demand: 613-228-1467

MSDS Internet Website: <http://emmsds.ihssolutions.com/>

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

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CHEMICAL NAMES AND SYNONYMS: SEVERE TREAT MIN. OILS & ADDITIVES

GLOBALY REPORTABLE MSDS INGREDIENTS:

None.

OTHER INGREDIENTS:

Substance Name	Approx. Wt%
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POLY BUTENYL SUCCINIMIDE	1-5
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See Section 8 for exposure limits (if applicable).

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## 3. HAZARDS IDENTIFICATION

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Under normal conditions of use, this product is not considered hazardous according to regulatory guidelines (See section 15).

EMERGENCY OVERVIEW: Amber Liquid. DOT ERG No. : NA

POTENTIAL HEALTH EFFECTS: Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation.

For further health effects/toxicological data, see Section 11.

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## 4. FIRST AID MEASURES

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

SKIN CONTACT: Wash contact areas with soap and water. Remove and clean oil soaked clothing daily and wash affected area. (See Section 16 - Injection Injury)

INHALATION: Not expected to be a problem. However, if respiratory irritation, dizziness, nausea, or unconsciousness occurs due to excessive vapor or mist exposure, seek immediate medical



assistance. If breathing has stopped, assist ventilation with a mechanical device or mouth-to-mouth resuscitation.  
INGESTION: Not expected to be a problem. Seek medical attention if discomfort occurs. Do not induce vomiting.

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## 5. FIRE-FIGHTING MEASURES

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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.  
COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.  
Flash Point C(F): 224(435) (ASTM D-92).  
Flammable Limits (approx.% vol.in air) - LEL: 0.9%, UEL: 7.0%  
NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0

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## 6. ACCIDENTAL RELEASE MEASURES

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NOTIFICATION PROCEDURES: Report spills/releases as required to appropriate authorities. U.S. Coast Guard and EPA regulations require immediate reporting of spills/releases that could reach any waterway including intermittent dry creeks. Report spill/release to Coast Guard National Response Center 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:  
LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping or contain spilled material with sand or other suitable absorbent and remove mechanically into containers. If necessary, dispose of adsorbed residues as directed in Section 13.  
WATER SPILL: Confine the spill immediately with booms. Warn other ships in the vicinity. Notify port and other relevant authorities. Remove from the surface by skimming or with suitable absorbents. If permitted by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.  
ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.  
PERSONAL PRECAUTIONS: See Section 8

---

## 7. HANDLING AND STORAGE

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HANDLING: No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.  
STORAGE: Keep containers closed when not in use. Do not store in open or unlabelled containers. Store away from strong oxidizing agents and combustible materials. Do not store near heat, sparks, flame or strong oxidants.

**SPECIAL PRECAUTIONS:** Prevent small spills and leakages to avoid slip hazard.

**EMPTY CONTAINER WARNING:** Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### OCCUPATIONAL EXPOSURE LIMITS:

When mists/aerosols can occur, the following are recommended: 5 mg/m<sup>3</sup> (as oil mist) - ACGIH Threshold Limit Value (TLV), 10 mg/m<sup>3</sup> (as oil mist) - ACGIH Short Term Exposure Limit (STEL), 5 mg/m<sup>3</sup> (as oil mist) - OSHA Permissible Exposure Limit (PEL)

**VENTILATION:** If mists are generated, use adequate ventilation, local exhaust or enclosures to control below exposure limits.

**RESPIRATORY PROTECTION:** If mists are generated, and/or when ventilation is not adequate, wear approved respirator.

**EYE PROTECTION:** If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn.

**SKIN PROTECTION:** Not normally required. When splashing or liquid contact can occur frequently, wear oil resistant gloves and/or other protective clothing. Good personal hygiene practices should always be followed.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

**APPEARANCE:** Liquid

**COLOR:** Amber

**ODOR:** Mild

**ODOR THRESHOLD-ppm:** NE

**pH:** NA

**BOILING POINT C(F):** > 288(550)

**MELTING POINT C(F):** NA

**FLASH POINT C(F):** 224(435) (ASTM D-92)

**FLAMMABILITY (solids):** NE

**AUTO FLAMMABILITY C(F):** NA

**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:** 0.89

**SOLUBILITY IN WATER:** Negligible

**PARTITION COEFFICIENT:** > 3.5

**VISCOSITY AT 40 C, cSt:** 115.0

**VISCOSITY AT 100 C, cSt:** 14.5

**POUR POINT C(F):** < -30(-22)

**FREEZING POINT C(F):** NE

**VOC:** < 5.00 (Wt. %); 0.358 lbs/gal

**DMSO EXTRACT, IP-346 (WT.%):** <3, for mineral oil only

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

---

## 10. STABILITY AND REACTIVITY

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STABILITY (THERMAL, LIGHT, ETC.): Stable.

CONDITIONS TO AVOID: Extreme heat and high energy sources of ignition.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

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## 11. TOXICOLOGICAL DATA

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### ---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: Although an acute inhalation study was not performed with this product, a variety of mineral and synthetic oils, such as those in this product, have been tested. These samples had virtually no effect other than a nonspecific inflammatory response in the lung to the aerosolized mineral oil. The presence of additives in other tested formulations (in approximately the same amounts as in the present formulation) did not alter the observed effects.

### ---SUBCHRONIC TOXICOLOGY (SUMMARY)---

No significant adverse effects were found in studies using repeated dermal applications of similar formulations to the skin of laboratory animals for 13 weeks at doses significantly higher than those expected during normal industrial exposure. The animals were evaluated extensively for effects of exposure (hematology, serum chemistry, urinalysis, organ weights, microscopic examination of tissues etc.).

### ---REPRODUCTIVE TOXICOLOGY (SUMMARY)---

No teratogenic effects would be expected from dermal exposure, based on laboratory developmental toxicity studies of major components in this formulation and/or materials of similar composition.

### ---CHRONIC TOXICOLOGY (SUMMARY)---

Repeated and/or prolonged exposure may cause irritation to the skin, eyes or respiratory tract. Overexposure to oil mist may result in oil droplet deposition and/or granuloma formation. For mineral base oils: 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 Modified Ames Test, IP-346, and/or other analytical methods. For synthetic base oils: The base oils in this product have been

tested in the Ames assay and other tests of mutagenicity with negative results. These base oils are not expected to be carcinogenic with chronic dermal exposures.

---SENSITIZATION (SUMMARY)---

Not expected to be sensitizing based on tests of this product, components, or similar products.

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## 12. ECOLOGICAL INFORMATION

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### ENVIRONMENTAL FATE AND EFFECTS:

In the absence of specific environmental data for this product, this assessment is based on information for representative products.

ECOTOXICITY: Available ecotoxicity data (LL50 >1000 mg/L) indicates that adverse effects to aquatic organisms are not expected from this product.

MOBILITY: When released into the environment, adsorption to sediment and soil will be the predominant behavior.

PERSISTENCE AND DEGRADABILITY: This product is expected to be inherently biodegradable.

BIOACCUMULATIVE POTENTIAL: Bioaccumulation is unlikely due to the very low water solubility of this product, therefore bioavailability to aquatic organisms is minimal.

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## 13. DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value. 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. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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## 14. TRANSPORT INFORMATION

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USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

STATIC ACCUMULATOR (50 picosiemens or less): YES

---

## 15. REGULATORY INFORMATION

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US OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this product is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

EU Labeling: Product is not dangerous as defined by the European Union Dangerous Substances/Preparations Directives. EU labeling not required.

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

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) (<0.04%)	7440-66-6	22
PHOSPHORODITHOIC ACID, O,O-DI	68649-42-3	22
C1-14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDDP) (0.33%)		

--- 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.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

### INDUSTRIAL LABEL

Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. First Aid: Wash skin with soap and water. Flush eyes with water. If overcome by fumes or vapor, remove to fresh air. If ingested do not induce vomiting. If symptoms persist seek medical assistance. Read and understand the MSDS before using this product.

\*\*\*\*\*  
For Internal Use Only: MHC: 1\* 1\* 1\* 1\* 1\*, MPPEC: A, TRN: 606111-00, CMCS97: 97G051, REQ: US - MARKETING, SAFE USE: L  
EHS Approval Date: 23JAN2002  
\*\*\*\*\*

\*\*\*\*\*  
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

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007 10/12/04 TRIETHYLENE GLYCOL

\*\*\*\*\*

## PRODUCT IDENTIFICATION

\*\*\*\*\*

PRODUCT NAME: TRIETHYLENE GLYCOL

MSDS#: UCN0262M

DATE ISSUED: 03/10/2004

SUPERSEDES: 05/12/2002

ISSUED BY: 008360

## MATERIAL SAFETY DATA SHEET

Product Name: Triethylene Glycol Effective Date: 03/10/2004

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## 1.1 IDENTIFICATION

Product Name /Triethylene Glycol P

## 1.2 COMPANY IDENTIFICATION

Distributed by:  
Univar USA Inc.  
6100 Carillon Point  
Kirkland, WA 98033  
425-889-3400

## 2. COMPOSITION INFORMATION

Component	CAS #	Amount (%W/W )
Triethylene glycol	112-27-6	>= 98
Diethylene glycol	111-46-6	<= 1%

## 3. HAZARDS IDENTIFICATION

## 3.1 EMERGENCY OVERVIEW

Appearance Colorless

Physical State Liquid

Odor Mild

Hazards of product MAY CAUSE SKIN IRRITATION.

## 3.2 POTENTIAL HEALTH EFFECTS

## Effects of Single Acute Overexposure

Inhalation At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of upper respiratory tract (nose and throat).

Eye Contact May cause slight temporary eye irritation. Mist may cause eye irritation.

Skin Contact Prolonged contact may cause skin irritation with local redness. May cause more severe response if skin is abraded (scratched or cut).

Skin Absorption Prolonged skin contact is unlikely to result in absorption of

harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potentially lethal amounts.

Swallowing Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. May cause nausea or vomiting. May cause abdominal discomfort or diarrhea. May cause dizziness and drowsiness.

#### Chronic, Prolonged or Repeated Overexposure

Effects of Repeated Overexposure Based on available data, repeated exposures are not expected to cause significant adverse effects except at very high aerosol concentrations. Repeated excessive aerosol exposures may cause respiratory tract irritation and even death. Triethylene glycol did not cause birth defects in animals; other effects were seen in the fetus only at very high doses which caused toxic effects to the mother.

Other Effects of Overexposure No information available.

See Section 11 for toxicological information and additional information about potential health effects.

### 3.3 POTENTIAL ENVIRONMENTAL EFFECTS

See Section 12 for Ecological Information.

## 4. FIRST AID PROCEDURES

### 4.1 INHALATION

Move person to fresh air; if effects occur, consult a physician.

### 4.2 EYE CONTACT

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

### 4.3 SKIN CONTACT

Wash skin with plenty of water.

### 4.4 SWALLOWING

Do not induce vomiting. Seek medical attention immediately. If person is fully conscious give 1 cup or 8 ounces (240 ml) of water. If medical advice is delayed and if an adult has swallowed several ounces of chemical, then give 3-4 ounces (1/3-1/2 cup) (90-120 ml) of hard liquor such as 80 proof whiskey. For children, give proportionally less liquor at a dose of 0.3 ounce (1 1/2 tsp.) (8 ml) liquor for each 10 pounds of body weight, or 2 ml per kg body weight (e.g., 1.2 ounce (2 1/3 tbsp.) for a 40 pound child or 36 ml for an 18 kg child).

### 4.5 NOTES TO PHYSICIAN

Due to structural analogy and clinical data, this material may have a mechanism of intoxication similar to ethylene glycol. On that basis, treatment similar to ethylene glycol intoxication may be of benefit.

In cases where several ounces have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol(R)) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol, di- or triethylene glycol, ethylene glycol butyl ether, or methanol intoxication if available.

Fomepizole protocol (Brent, J. et al., New England Journal of Medicine, Feb. 8, 2001, 344:6, p. 424-9): loading dose 15 mg/kg IV, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, or TEG are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including



pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.

## 5. FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES - REFER TO SECTION 9, PHYSICAL AND CHEMICAL PROPERTIES

### 5.2 EXTINGUISHING MEDIA

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

### 5.3 FIRE FIGHTING PROCEDURES

Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

### 5.4 SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

### 5.5 UNUSUAL FIRE AND EXPLOSION HAZARDS

Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

### 5.6 HAZARDOUS COMBUSTION PRODUCTS

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

## 16. ACCIDENTAL RELEASE MEASURES

Steps to be Taken if Material is Released or Spilled:

Small spills: Absorb with materials such as: dirt. Sand. Sawdust. Vermiculite. perlite. Zorb-all(R). Oil-Dri or equivalent filler. Large spills: Dike area to contain spill. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

Personal Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling for additional precautionary measures.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/ or groundwater. See Section 12, Ecological Information.

## 7. HANDLING AND STORAGE

#### Other Protective Equipment:

Eye Bath, Safety Shower

If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures.

When handling hot material, protect skin from thermal burns as well as from skin absorption.

When prolonged or frequently repeated contact could occur, use chemically protective clothing resistant to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full-body suit will depend on operation.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: Colorless

Odor: Mild

Flash Point -Closed Cup: 1770C 350 F Pensky-Martens Closed Cup  
ASTM D 93

Flammable Limits In Air:  
Lower 0.9 %(V) Calculated  
Upper 9.2 %(V) Estimated

Autoignition Temperature: 349 C 660 F

Vapor Pressure: < 0.01 mmHg 20 C

Boiling Point (760 mmHg): 288 C 550.4 F

Vapor Density (air = 1): 5.2

Specific Gravity (H2O = 1): 1.1255 20 C120 C

Freezing Point: -4.3 C 24 F

Melting Point: Not applicable (for liquids)

Solubility in Water (by weight): 100

pH: 8

Molecular Weight: 150 g/mol

Octanol/Water Partition Coefficient - Calculated by Structural  
Fragment Method: - 1.75

Evaporation Rate (Butyl Acetate = 1): < 0.001

### 10. STABILITY AND REACTIVITY

10.1 STABILITY/INSTABILITY Thermally stable at recommended temperatures and pressures.

#### Conditions to Avoid:

Exposure to elevated temperatures can cause product to decompose.

Generation of gas during decomposition can cause pressure in closed systems.

#### Incompatible Materials:

Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

#### Thermal Decomposition:

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited

to: Aldehydes. Alcohols. Ethers.

10.2 HAZARDOUS POLYMERIZATION Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

#### Peroral

Rat; LD50 (16800 - 22060) mg/kg

#### Percutaneous

Rabbit; LD50 = > 18016 mg/kg

#### Inhalation

Rat; LC50 = > 4.5 mg/L; 4 hours, Aerosol

### DEVELOPMENTAL TOXICITY

Triethylene glycol did not cause birth defects in animals; other effects were seen in the fetus only at very high doses which caused toxic effects to the mother.

### REPRODUCTIVE TOXICITY

In animal studies, did not interfere with reproduction.

### CHRONIC TOXICITY AND CARCINOGENICITY

Did not cause cancer in laboratory animals.

### GENETIC TOXICOLOGY

#### In Vitro

In vitro genetic toxicity studies were negative.

### SIGNIFICANT DATA WITH POSSIBLE RELEVANCE TO HUMANS

Based on available data, repeated exposures are not expected to cause significant adverse effects except at very high aerosol concentrations. Repeated excessive aerosol exposures may cause respiratory tract irritation and even death.

## 12. ECOLOGICAL INFORMATION

### 12.1 ENVIRONMENTAL FATE

Material is ultimately biodegradable. Reaches > 70% mineralization in OECD test(s) for inherent biodegradability. Biodegradation reached in Modified MITI Test (I) (OECD Test No. 301 C) after 28 days: 25 - 92% Biodegradation reached in Modified OECD Screening Test (OECD Test No. 301 E) after 28 days: 23.5 - 63% Biodegradation reached in Modified Zahn-Wellens/EMPA Test (OECD Test No. 302 B) after 28 days: >70 - 95% The rate constant for the vapor phase reaction with photochemically produced hydroxyl radicals at 25C is estimated to be:  $3.64 \times 10^{-11}$  cm<sup>3</sup>/molecule-sec.

BOD (% Oxygen consumption)

Day 5	Day 10	Day 15	Day 20	Day 28/30
12-32%	15-64%		17-86%	

### 12.2 ECOTOXICITY

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in the most sensitive species tested).

#### Toxicity to Micro-organisms

Bacterial/NA; 16 h; EC50

Result value: > 10000 mg/L

#### Toxicity to Aquatic Invertebrates

water flea (Daphnia magna); LC50

Result value: 39000 mg/L

PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986) SECTION 313

To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 TITLE III (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986) SECTION 302

To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 TITLE III (EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986) SECTIONS 311 AND 312

Delayed (Chronic) Health Hazard : Yes  
Fire Hazard : No  
Immediate (Acute) Health Hazard : No  
Reactive Hazard : No  
Sudden Release of Pressure Hazard : No

Toxic SUBSTANCES CONTROL ACT: (TSCA)

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

CEPA - DOMESTIC SUBSTANCES LIST (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS)

The components of this product are on the EINECS inventory or are exempt from EINECS inventory requirements.

15.2 STATE/LOCAL

PENNSYLVANIA (WORKER AND COMMUNITY RIGHT-TO-KNOW ACT): PENNSYLVANIA HAZARDOUS SUBSTANCES LIST AND/OR PENNSYLVANIA ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST:

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS #	Amount
Triethylene glycol	112-27-6	>= 98.0000
Diethylene glycol	111-46-6	<= 1.0000%

PENNSYLVANIA (WORKER AND COMMUNITY RIGHT-TO-KNOW ACT): PENNSYLVANIA SPECIAL HAZARDOUS SUBSTANCES LIST:

To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

CALIFORNIA PROPOSITION 65 (SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986) WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Component	CAS #	Amount
Formaldehyde	50-00-0	<= 0.0047%
Acetaldehyde	75-07-0	<= 0.0016%

CALIFORNIA SCAQMD RULE 443.1 (SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 443.1 % LABELING OF MATERIALS CONTAINING ORGANIC SOLVENTS)

VOC: Vapor pressure <0.01 mmHg at 20 C

2 g/l VOC

2 g/l of material less water and less exempted solvents.

This section provides selected regulatory information on this product including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

16. OTHER INFORMATION

## 16.2 HAZARD RATING SYSTEM

NFPA ratings for this product are: H - 1 F - 1 R-0

These ratings are part of a specific hazard communication program and should be disregarded where individuals are not trained in the use of this hazard rating system. You should be familiar with the hazard communication programs applicable to your workplace.

## 16.3 RECOMMENDED USES AND RESTRICTIONS

For industrial use.

## 16.4 REVISION

Revision: 03/10/2004

## 16.5 LEGEND

Bacterial/NA	Non Acclimated Bacteria
F	Fire
H	Health
IHG	Industrial Hygiene Guideline
N/A	Not available
NFPA	National Fire Protection Association
O	Oxidizer
R	Reactivity
TS	Trade secret
VOL/VOL	Volume/Volume
W	Water Reactive
W/W	Weight/Weight

## ----- FOR ADDITIONAL INFORMATION -----

CONTACT: MSDS COORDINATOR UNIVAR USA INC.  
DURING BUSINESS HOURS, PACIFIC TIME (425) 889-3400

## ----- NOTICE -----

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DAMAGES. \*\*

-----  
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PROCESS.

\* \* \* E N D O F M S D S \* \* \*

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### Sample Receipt Checklist

Client Name: SMA1005

Date and Time Received: 1/23/2006 1:40:00 PM

Work Order Number: 0601030

Received by:

Checklist completed by:

Yolanda 1/23/06  
Signature Date

Reviewed by:

jem 1/23/06  
Initials Date

Matrix:

Carrier name: John Hagstrom

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	9.5°C
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A 2/21/06

Adjusted? \_\_\_\_\_ Checked by: \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted: \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: Samples brought in at 1:25 pm and were signed off at 15:25.

Time was corrected.

Corrective Action: \_\_\_\_\_



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised March 17, 1999

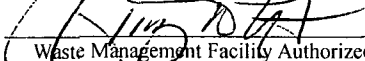
Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> <b>527 4/6/06</b> <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		4. Generator: <b>Burlington Resources</b>
2. Management Facility Destination: <b>JFJ Landfarm L.L.C.</b>		5. Originating Site: <b>San Juan 29-7 #86 M</b>
3. Address of Facility Operator: <b>Industrial Ecosystems Inc. #81 County Road 3150 Aztec, New Mexico 87410</b>		6. Transporter: <b>Riley Industries</b>
7. Location of Material (Street Address or ULSTR) <b>UL-L, Section 17, T29, R07</b>		8. State: <b>New Mexico</b>
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: **Disposal of contaminated spilled hydraulic oil est.10 gallons and soil, hydraulic hose broke on drilling rig.**

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_

SIGNATURE   
Waste Management Facility Authorized Agent

TITLE: Business Manager

DATE: 4/6/06

TYPE OR PRINT NAME: Vince Scott

TELEPHONE NO: 505-632-1782

E-MAIL: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY: _____	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**Bill Richardson**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Burlington Resources 3401 E 30 <sup>th</sup> St. Farmington, New Mexico 87499	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-632-1876
3. Originating Site (name): San Juan 29-7 # 86 MUL- <u>4</u> S- <u>17</u> T- <u>29</u> R- <u>7</u> or attach list Street Address: _____ AWS Drilling Rig 449 attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): _____
4. Source and Description of Waste Spilled hydraulic oil est. 10 gallons and soil. Hydraulic hose broke on Rig.	
5. Bill to: Drilling Dept. Darren Kirkpatrick	

*MSDS!!*  
*Product 3 Substrate*

I. Gregg Wurtz representative for:  
Print Name

Burlington Resources 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): Gregg Wurtz

Title: Env. Rep

Date: 4/3/06



HYDC0180

Revised 29-NOV-1995

Printed 24-JAN-1996

## SUPER HYDRAULIC OIL 22, 32, 46, 68

### CHEMICAL PRODUCT/COMPANY IDENTIFICATION

**Product Use**  
Antiwear Hydraulic Fluid

**Tradenames and Synonyms**  
7447, 7448, 7449, 7450 - Conoco Base Codes

**Company Identification**  
MANUFACTURER/DISTRIBUTOR  
Conoco, Inc.  
PO Box 2197  
Houston, TX 77252

#### PHONE NUMBERS

Product Information	1-713-293-5550
Transport Emergency	1-800-424-9300 (Canada 1-613-348-3616)
Medical Emergency	1-800-441-3637 (Canada 1-613-348-3616)

### COMPOSITION/INFORMATION ON INGREDIENTS

#### Components

Material	CAS Number	%
Highly Refined Base Oils		95-100
*Zinc Compound	68649-42-3	0-1
Proprietary Additives		<5

If oil mist is generated, exposure limits apply.

\* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

(Continued)

**HAZARDS IDENTIFICATION****Potential Health Effects****Primary Route of Entry: Skin**

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper personal protective equipment and sufficient ventilation can provide adequate protection.

**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.

If injected under the skin, necrosis could occur. See physician.

**EYE CONTACT**

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

**INGESTION**

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.

High velocity injection under the skin can cause a bloodless puncture wound and result in necrosis. Immediate attention by a surgical specialist is recommended.

(Continued)

## **FIRE FIGHTING MEASURES**

### **Flammable Properties**

#### **Flash Point**

355 F (179 C) (Minimum, Grade 22)  
375 F (191 C) (Minimum, Grade 32)  
385 F (196 C) (Minimum, Grade 46)  
400 F (204 C) (Minimum, Grade 68)

#### **Method**

Cleveland Open Cup - COC.

#### **Autoignition**

650 F (343 C)

#### **Flammable limits in Air, % by Volume**

#### **LEL**

Undetermined

#### **UEL**

Undetermined

### **NFPA Classification**

Class IIIB Combustible Liquid

### **Extinguishing Media**

Water Spray, Foam, Dry Chemical, CO2.

### **Fire Fighting Instructions**

Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures.

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, and flame.

### **Initial Containment**

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

### **Spill Clean Up**

Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.

## **HANDLING AND STORAGE**

### **Handling (Personnel)**

Avoid breathing vapors or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

(Continued)

**HANDLING AND STORAGE** (Continued)**Handling (Physical Aspects)**

Close container after each use. Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container. Empty container retains residue (liquid and/or vapor) and may explode in heat of a fire.

**Storage**

Store in accordance with National Fire Protection Association recommendations. Store in a well ventilated place. Store in a clean, dry place. Store away from oxidizers, heat, sparks and flames.

**EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls****VENTILATION**

Normal shop ventilation.

**Personal Protective Equipment****RESPIRATORY PROTECTION**

None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protective equipment when exposed to sprays or mists. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure, and published respirator protection factors.

**PROTECTIVE GLOVES**

Should be worn when the potential exists for prolonged or repeated skin contact. NBR or neoprene recommended.

**EYE PROTECTION**

Safety glasses with side shields.

**OTHER PROTECTIVE EQUIPMENT**

Coveralls with long sleeves if splashing is probable.

**# Exposure Guidelines****Applicable Exposure Limits**

If oil mist is generated, exposure limits apply.

PEL (OSHA)

5 mg/m<sup>3</sup>, 8 Hr. TWA

TLV (ACGIH)

5 mg/m<sup>3</sup>, 8 Hr. TWA, STEL 10 mg/m<sup>3</sup>

Notice of Intended Changes (1995-1996)

5 mg/m<sup>3</sup>, 8 Hr. TWA, severely refined

AEL \* (DuPont)

5 mg/m<sup>3</sup>, 8 Hr. TWA

\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

(Continued)

## PHYSICAL AND CHEMICAL PROPERTIES

### Physical Data

Boiling Point	>555-1060 F (291-571 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air=1.0)
% Volatiles	Nil
Evaporation Rate	Nil
Solubility in Water	Insoluble
Odor	Petroleum Hydrocarbon (mild).
Form	Liquid.
Color	Yellow, Amber to Brown.
Specific Gravity	0.86-0.88 @ 60 F (16 C)
Density	7.16-7.35 lb/gal @ 60 F (16 C)

## STABILITY AND REACTIVITY

### Chemical Stability

Stable at normal temperatures and storage conditions.

### Conditions to Avoid

Heat, sparks, and flames.

### Incompatibility with Other Materials

Incompatible or can react with strong oxidizers.

### Decomposition

Normal combustion forms oxides of carbon and may produce minor quantities of oxides of nitrogen, phosphorus, sulfur, and zinc.

### Polymerization

Polymerization will not occur.

## TOXICOLOGICAL INFORMATION

### Animal Data

Mouse skin painting studies have shown that highly solvent refined petroleum distillates similar to ingredients in this product have not caused skin tumors.

Animal skin exposure studies show high concentrations of zinc organic phosphates cause testicular atrophy, but this effect appears related to stress from the chemical causing severe skin irritation. Low concentrations of the zinc component, as occurs in lubricant products, would not have caused testicular damage.

(Continued)

## ECOLOGICAL INFORMATION

Ecotoxicological Information  
No specific aquatic data available for this product.

## 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.

### Container Disposal

Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

## TRANSPORTATION INFORMATION

### Shipping Information

DOT

Not regulated.

ICAO/IMO

Not restricted.

### Shipping Information -- Canada

This material is Not Regulated.

## REGULATORY INFORMATION

### U.S. Federal Regulations

#### OSHA HAZARD DETERMINATION

Under normal conditions of use, this material is not known to be 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 : No  
Chronic : No  
Fire : No  
Reactivity : No

(Continued)

## REGULATORY INFORMATION(Continued)

Pressure : No

### SARA, TITLE III, 313

This material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements:

Toxic Chemical	Zinc Compound.
----------------	----------------

### TSCA

Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

### RCRA

This material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable, or reactive according to U.S. definitions (40 CFR 261). This material could also 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 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	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 may contain the following ingredient(s) subject to the Pennsylvania and Community Right to Know Hazardous Substances List.

Ingredient	Zinc Compound.
Category	Environmental Hazard.

### Canadian Regulations

This is not a WHMIS Controlled Product.

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

(Continued)



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## OTHER INFORMATION

### NFPA, NPCA-HMIS

NFPA Rating	
Health	0
Flammability	1
Reactivity	0

### NPCA-HMIS Rating

Health	1
Flammability	1
Reactivity	0

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

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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 : 1-713-293-5550

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# Indicates updated section.

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End of MSDS

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

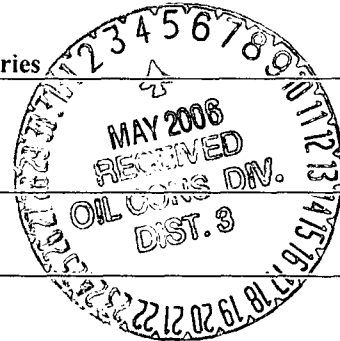
State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised March 17, 1999

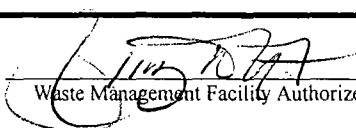
Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> <i>1524-0000</i> <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		4. Generator: <b>Burlington Resources</b>
		5. Originating Site: <b>San Juan 29-7 #86 M</b>
2. Management Facility Destination <b>JFJ Landfarm L.L.C.</b>	6. Transporter: <b>Riley Industries</b>	
3. Address of Facility Operator: <b>Industrial Ecosystems Inc. #81 County Road 3150 Aztec, New Mexico 87410</b>	8. State: <b>New Mexico</b>	
7. Location of Material (Street Address or ULSTR) <b>UL-L, Section 17, T29, R07</b>		
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: **Disposal of contaminated spilled hydraulic oil est.10 gallons and soil, hydraulic hose broke on drilling rig.**

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_

SIGNATURE   
Waste Management Facility Authorized Agent

TITLE: Business Manager

DATE: 4/6/06

TYPE OR PRINT NAME: Vince Scott

TELEPHONE NO.: 505-632-1782

E-MAIL: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY: _____	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**Bill Richardson**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenberg**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Burlington Resources 3401 E 30 <sup>th</sup> St. Farmington, New Mexico 87499	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-632-1876
3. Originating Site (name): San Juan 29-7 # 86 MUL- <u>h</u> S- <u>17</u> T- <u>29</u> R- <u>7</u> or attach list Street Address: _____ AWS Drilling Rig 449 attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): _____
4. Source and Description of Waste Spilled hydraulic oil est. 10 gallons and soil. Hydraulic hose broke on Rig.	
5. Bill to: Drilling Dept. Darren Kirkpatrick	

I. Gregg Wurtz representative for:  
Print Name

Burlington Resources 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): Gregg Wurtz

Title: Env. Rep

Date: 4/3/06



HYDC0180

Revised 29-NOV-1995

Printed 24-JAN-1996

## SUPER HYDRAULIC OIL 22, 32, 46, 68

### CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Use  
Antiwear Hydraulic Fluid

Tradenames and Synonyms  
7447, 7448, 7449, 7450 - Conoco Base Codes

Company Identification  
MANUFACTURER/DISTRIBUTOR  
Conoco, Inc.  
PO Box 2197  
Houston, TX 77252

#### PHONE NUMBERS

Product Information 1-713-293-5550  
Transport Emergency 1-800-424-9300 (Canada 1-613-348-3616)  
Medical Emergency 1-800-441-3637 (Canada 1-613-348-3616)

### COMPOSITION/INFORMATION ON INGREDIENTS

Components Material	CAS Number	%
Highly Refined Base Oils		95-100
*Zinc Compound	68649-42-3	0-1
Proprietary Additives		<5

If oil mist is generated, exposure limits apply.

\* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

(Continued)

## HAZARDS IDENTIFICATION

### Potential Health Effects

#### Primary Route of Entry: Skin

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper personal protective equipment and sufficient ventilation can provide adequate protection.

#### 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.

If injected under the skin, necrosis could occur. See physician.

### EYE CONTACT

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

### INGESTION

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.

High velocity injection under the skin can cause a bloodless puncture wound and result in necrosis. Immediate attention by a surgical specialist is recommended.

(Continued)

## **FIRE FIGHTING MEASURES**

### **Flammable Properties**

Flash Point

355 F (179 C) (Minimum, Grade 22)  
375 F (191 C) (Minimum, Grade 32)  
385 F (196 C) (Minimum, Grade 46)  
400 F (204 C) (Minimum, Grade 68)

Method

Cleveland Open Cup - COC.

Autoignition

650 F (343 C)

Flammable limits in Air, % by Volume

LEL

Undetermined

UEL

Undetermined

NFPA Classification

Class IIIB Combustible Liquid

### **Extinguishing Media**

Water Spray, Foam, Dry Chemical, CO2.

### **Fire Fighting Instructions**

Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures.

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, and flame.

### **Initial Containment**

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

### **Spill Clean Up**

Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.

## **HANDLING AND STORAGE**

### **Handling (Personnel)**

Avoid breathing vapors or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

(Continued)

**HANDLING AND STORAGE (Continued)****Handling (Physical Aspects)**

Close container after each use. Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container. Empty container retains residue (liquid and/or vapor) and may explode in heat of a fire.

**Storage**

Store in accordance with National Fire Protection Association recommendations. Store in a well ventilated place. Store in a clean, dry place. Store away from oxidizers, heat, sparks and flames.

**EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls****VENTILATION**

Normal shop ventilation.

**Personal Protective Equipment****RESPIRATORY PROTECTION**

None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protective equipment when exposed to sprays or mists. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure, and published respirator protection factors.

**PROTECTIVE GLOVES**

Should be worn when the potential exists for prolonged or repeated skin contact. NBR or neoprene recommended.

**EYE PROTECTION**

Safety glasses with side shields.

**OTHER PROTECTIVE EQUIPMENT**

Coveralls with long sleeves if splashing is probable.

**# Exposure Guidelines****Applicable Exposure Limits**

If oil mist is generated, exposure limits apply.

PEL (OSHA)

5 mg/m<sup>3</sup>, 8 Hr. TWA

TLV (ACGIH)

5 mg/m<sup>3</sup>, 8 Hr. TWA, STEL 10 mg/m<sup>3</sup>

Notice of Intended Changes (1995-1996)

5 mg/m<sup>3</sup>, 8 Hr. TWA, severely refined

AEL \* (DuPont)

5 mg/m<sup>3</sup>, 8 Hr. TWA

\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

(Continued)

## PHYSICAL AND CHEMICAL PROPERTIES

Physical Data	
Boiling Point	>555-1060 F (291-571 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air=1.0)
% Volatiles	Nil
Evaporation Rate	Nil
Solubility in Water	Insoluble
Odor	Petroleum Hydrocarbon (mild)
Form	Liquid
Color	Yellow, Amber to Brown
Specific Gravity	0.86-0.88 @ 60 F (16 C)
Density	7.16-7.35 lb/gal @ 60 F (16 C)

## STABILITY AND REACTIVITY

### Chemical Stability

Stable at normal temperatures and storage conditions.

### Conditions to Avoid

Heat, sparks, and flames.

### Incompatibility with Other Materials

Incompatible or can react with strong oxidizers.

### Decomposition

Normal combustion forms oxides of carbon and may produce minor quantities of oxides of nitrogen, phosphorus, sulfur, and zinc.

### Polymerization

Polymerization will not occur.

## TOXICOLOGICAL INFORMATION

### Animal Data

Mouse skin painting studies have shown that highly solvent refined petroleum distillates similar to ingredients in this product have not caused skin tumors.

Animal skin exposure studies show high concentrations of zinc organic phosphates cause testicular atrophy, but this effect appears related to stress from the chemical causing severe skin irritation. Low concentrations of the zinc component, as occurs in lubricant products, would not have caused testicular damage.

(Continued)



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## ECOLOGICAL INFORMATION

### Ecotoxicological Information

No specific aquatic data available for this product.

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## 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.

### Container Disposal

Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

---

## TRANSPORTATION INFORMATION

### Shipping Information

DOT

Not regulated.

ICAO/IMO

Not restricted.

### Shipping Information -- Canada

This material is Not Regulated.

---

## REGULATORY INFORMATION

### U.S. Federal Regulations

#### OSHA HAZARD DETERMINATION

Under normal conditions of use, this material is not known to be 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 : No  
Chronic : No  
Fire : No  
Reactivity : No

(Continued)

**REGULATORY INFORMATION**(Continued)

Pressure : No

**SARA, TITLE III, 313**

This material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements:

Toxic Chemical	Zinc Compound.
----------------	----------------

**TSCA**

Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

**RCRA**

This material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable, or reactive according to U.S. definitions (40 CFR 261). This material could also 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 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	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 may contain the following ingredient(s) subject to the Pennsylvania and Community Right to Know Hazardous Substances List.

Ingredient	Zinc Compound.
Category	Environmental Hazard.

**Canadian Regulations**

This is not a WHMIS Controlled Product.

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

(Continued)

## OTHER INFORMATION

### NFPA, NPCA-HMIS

NFPA Rating	
Health	0
Flammability	1
Reactivity	0

### NPCA-HMIS Rating

Health	1
Flammability	1
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 : 1-713-293-5550

# Indicates updated section.

End of MSDS

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
9 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

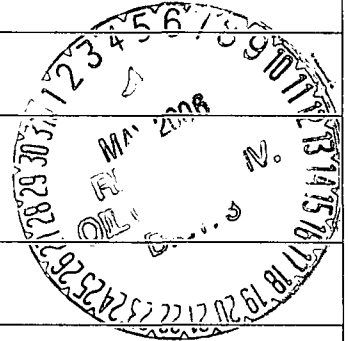
State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <b>ok by Denny 4/26/2006 @ 10:35am</b>	4. Generator BP America Production Co.
2. Management Facility Destination JFJ Landfarm L.L.C.	5. Originating Site State G.C. AA #1
3. Address of Facility Operator: JFJ Landfarm C/o Industrial Ecosystems Inc. P.O. Box 2043 Farmington, N.M. 87499	6. Transporter: TBA
7. Location of Material (Street Address or ULSTR) UL-K, Section 36, T30N, R08W	8. State: New Mexico
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:

*Disposal of lube oil contaminated soil from clean up around pump jack engine; this is used lube oil from leaks on or around the engine.*

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) to be announced

SIGNATURE   
Waste Management Facility Authorized Agent

TITLE: \_\_\_\_\_ Manager \_\_\_\_\_ DATE: 04-28-2006

TYPE OR PRINT NAME: Vince Scott TELEPHONE NO. (505) 632-1782

EMAIL ADDRESS: vince@industrialecosystems.com

(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

**Betty Rivera**  
Cabinet Secretary

**Lori Wrotenberg**

Director

Oil Conservation Division

*OC 4/26/06  
Perbary W  
Dewey @ 10:35AM*

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address BP America Production Company 200 Energy Court Farmington, NM 87401	2. Destination Name: J.F.J. Landfarm C/o Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone#: 505-632-1782 Fax#: 505-334-1003
3. Originating Site (name): <i>State GC AA 1</i>	Location of the Waste (Street address &/or ULSTR): <i>UL - K S - 36 T - 30N R - 8W</i> or
attach list of originating sites as appropriate Street Address -	
4. Source and Description of Waste <i>Lube oil contaminated soil from cleanup around pump jack engine. This is used lube oil from leaks on or around the engine</i>	

I, *Kevin Hunsford*  
Print Name

representative for :

BP America 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): *Kevin Hunsford*

Phone Contact: *505-336-9279*

Title: *Field Environmental Coordinator*

Pay Key/Workorder: *ZDWB07ENV1*

Date: *4/26/06*

**ENVIROTECH LABS****PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****TRACE METAL ANALYSIS**

Client:	Blagg / BP	Project #:	94034-010
Sample ID:	Soil Stockpile	Date Reported:	03-20-06
Laboratory Number:	36469	Date Sampled:	03-16-06
Chain of Custody:	15681	Date Received:	03-17-06
Sample Matrix:	Soil	Date Analyzed:	03-20-06
Preservative:	N/A	Date Digested:	03-17-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.052	0.001	5.0
Barium	6.45	0.001	100
Cadmium	0.009	0.001	1.0
Chromium	0.205	0.001	5.0
Lead	0.244	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

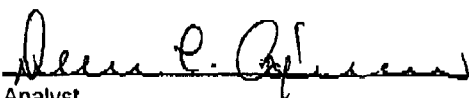
ND - Parameter not detected at the stated detection limit.

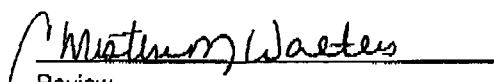
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: State GC AA #1 5-Point Composite.

  
Analyst

  
Review

15681

Apr-26-2006 08:35am From-BF

**505-328-8262**

T-887 P. 003/003 F-123

San Juan reproduction 578-129

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
70 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

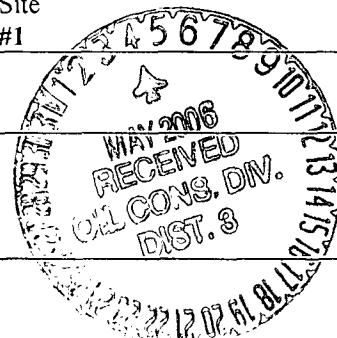
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised March 17, 1999

**COPY** Submit Original  
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**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

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**BRIEF DESCRIPTION OF MATERIAL:**

*Disposal of lube oil contaminated soil from clean up around pump jack engine; this is used lube oil from leaks on or around the engine.*

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) to be announced

SIGNATURE [Signature] TITLE: Manager DATE: 04-28-2006  
Waste Management Facility Authorized Agent  
TYPE OR PRINT NAME: Vince Scott TELEPHONE NO. (505) 632-1782  
EMAIL ADDRESS: vince@industrialecosystems.com

*(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

Betty Rivera

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

COPY

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3. Originating Site (name): <u>State GC AA 1</u>	Location of the Waste (Street address &/or ULSTR): <u>UL - K S - 36 T - 30N R - 8W</u> or
attach list of originating sites as appropriate	Street Address -
4. Source and Description of Waste <u>Lube oil contaminated soil from cleanup around pump jack engine. This is used lube oil from leaks on or around the engine</u>	

I, Kevin Hansford representative for :  
Print Name

BP America 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

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☐ 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): Kevin Hansford

Phone Contact: 505-326-9279

Title: Field Environmental Coordinator

Pay Key/Workorder: 20WB07ENV1

Date: 4/26/06

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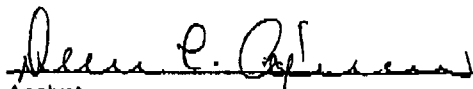
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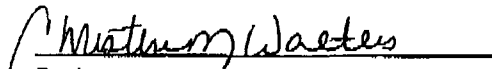
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Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

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

Comments: State GC AA #1 5-Point Composite.

  
Analyst

  
Review

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T-887 P.003/003 F-123

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1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>  <input type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Note: <u>Got phone approval with Ed Martin 5/3/2006 @ 7:15am</u>		4. Generator: Dennis Beasley XTO Energy Inc. 2700 Farmington Ave, Bldg K, Ste 1 Farmington, NM 8740
2. Management Facility Destination JFJ Landfarm L.L.C.		5. Originating Site: Finney 4-12U
3. Address of Facility Operator: <b>Industrial Ecosystems Inc. #81 County Road 3150 Aztec, New Mexico 87410</b>		6. Transporter: IEI, Unit # 202
7. Location of Material (Street Address or ULSTR) Section 12L - 34N - 08W, La Plata County, Colorado		8. State: New Mexico
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:

Used motor oil mixed in with production pit contents (approx. 10 bbls)

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) 10 bbls

SIGNATURE [Signature]  
Waste Management Facility Authorized Agent

TITLE: Business Manager

DATE: 5-3-2006

TYPE OR PRINT NAME: Vince Scott

TELEPHONE NO: 505-632-1782

E-MAIL: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY: _____	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address XTO Energy Inc. 2700 Farmington Ave., Bldg K, Ste 1 Farmington, New Mexico 87401	2. Destination Name: J. F. J. Landfarm C/o Industrial Ecosystems Inc #81 CR 3150 Aztec, New Mexico 87410
3. Originating Site (name):  Finney 4-12U	Location of the Waste (Street address &/or ULSTR):  Sec. 12L—34N—8W La Plata County, Colorado
attach list of originating sites as appropriate	
4. Source and Description of Waste  Used motor oil mixed with production pit contents (<10 bbl total).	
Contact Person : Dennis Beasley (970) 759-9550	

I, **Kim Champlin, Torey Cardona, and/or Lisa Winn** representative for **XTO Energy 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

☐ 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): Kim Champlin

*Kim Champlin*

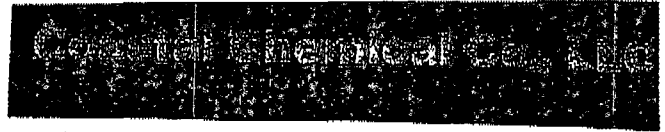
Title: **EH&S Assistant**

Phone Number: **505-566-7954**

Date: **05/03/2006**

Oil Conservation Division \* 1000 Rio Brazos Road \* Aztec, New Mexico 87410  
Phone: (505) 334-6178 \* Fax (505) 334-6170 \* <http://www.emnrd.state.nm.us>

Farmington, NM 87401  
505-327-9280 Telephone  
505-327-9302 Fax



# Fax

To: Vince From: JoDon  
Fax: \_\_\_\_\_ Pages: \_\_\_\_\_  
Phone: \_\_\_\_\_ Date: \_\_\_\_\_  
Re: \_\_\_\_\_ CC: \_\_\_\_\_

☐ Urgent ☐ For Review ☐ Please Comment  
☐ Please Reply ☐ Please Recycle

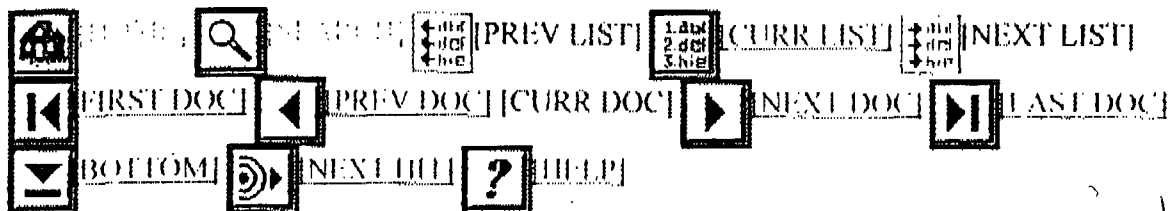
• Comments:

MSDS FOR  
Mobil Pegasus 15W40

Requested by Jason.

5/3/06 GWT Verbae  
OK w/ Ed  
to vacuum @ Santa Fe!  
7:00 am

USED ENCLAVE OR  
thru spill  
Assess  
Sample dump  
post



**Mobil**<sup>®</sup> The energy  
to make a difference™ [Print View](#)

# From 4-12 W.  
Dunngs

605840-00

605840-00 MOBIL PEGASUS SPECIAL 15W-40  
MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL  PEGASUS SPECIAL 15W-40

SUPPLIER: MOBIL OIL CORP.

NORTH AMERICA MARKETING AND REFINING  
3225 GALLOWES RD.  
FAIRFAX, VA 22037

24 - Hour Emergency (call collect): 609-737-4411

Product and MSDS Information: 800-662-4525 609-224-4644

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: Dark 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.

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## 5. FIRE-FIGHTING MEASURES

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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): > 200(392) (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

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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

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## 7. HANDLING AND STORAGE

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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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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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: Dark Amber  
ODOR: Mild  
ODOR THRESHOLD-ppm: NE  
pH: NA  
BOILING POINT C(F): > 316(600)  
MELTING POINT C(F): NA  
FLASH POINT C(F): > 200(392) (ASTM D-92)  
FLAMMABILITY: NE  
AUTO FLAMMABILITY: NE  
EXPLOSIVE PROPERTIES: NA  
OXIDIZING PROPERTIES: NA  
VAPOR PRESSURE-mmHg 20 C: & lt; 0.1  
VAPOR DENSITY: > 2.0  
EVAPORATION RATE: NE  
RELATIVE DENSITY, 15/4 C: 0.875  
SOLUBILITY IN WATER: Negligible  
PARTITION COEFFICIENT: > 3.5  
VISCOSITY AT 40 C, cSt: 103.0  
VISCOSITY AT 100 C, cSt: 13.7  
POUR POINT C(F): & lt; -33(-28)  
FREEZING POINT C(F): NE  
VOC: & lt; 5.00 (Wt. %); 0.358 lbs/gal  
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.

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## 12. ECOLOGICAL INFORMATION

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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.

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## 13. DISPOSAL CONSIDERATIONS

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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, MITI, 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 reportable under 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
CI-14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDEP) (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 5c	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: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBs.

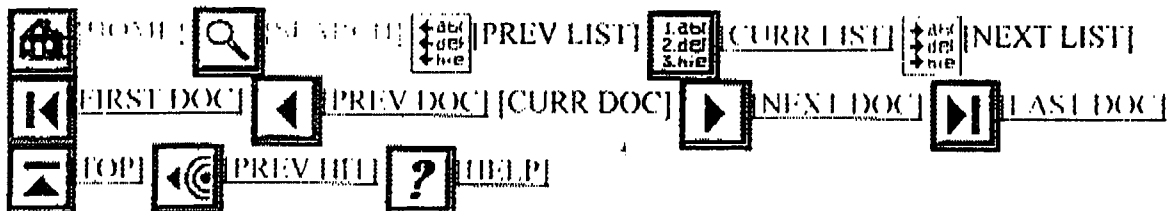
Please call the Customer Response Center on 800-662-4525 for formulation disclosure.

For Internal Use Only: MHC: 1\* 1\* 0\* 1\* 1\*, MPPEC: A, TRN: 605840-00, CMCS97: 971867, REQ: US - MARKETING, SAFE USE: L  
EHS Approval Date: 14SEP1999

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.

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District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

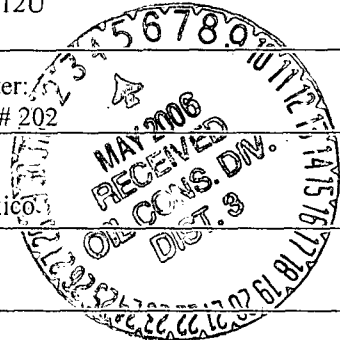
**COPY**

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"/>  <input type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Note: <u>Got phone approval with Ed Martin 5/3/2006 @ 7:15am</u>		4. Generator: Dennis Beasley XTO Energy Inc. 2700 Farmington Ave, Bldg K, Ste 1 Farmington, NM 8740
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: Finney 4-12U
3. Address of Facility Operator: <b>Industrial Ecosystems Inc.</b> <b>#81 County Road 3150</b> <b>Aztec, New Mexico 87410</b>		6. Transporter: IEI, Unit # 202
7. Location of Material (Street Address or ULSTR) Section 12L - 34N - 08W, La Plata County, Colorado		8. State: New Mexico
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:**

Used motor oil mixed in with production pit contents (approx. 10 bbls)

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) 10 bbls

SIGNATURE [Signature]  
Waste Management Facility Authorized Agent

TITLE: Business Manager

DATE: 5-3-2006

TYPE OR PRINT NAME: Vince Scott

TELEPHONE NO: 505-632-1782

E-MAIL: vince@industrialecosystems.com

*(This space for State Use)*

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

# COPY

**BILL RICHARDSON**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address XTO Energy Inc. 2700 Farmington Ave., Bldg K, Ste 1 Farmington, New Mexico 87401	2. Destination Name: J. F. J. Landfarm C/o Industrial Ecosystems Inc #81 CR 3150 Aztec, New Mexico 87410
3. Originating Site (name):  Finney 4-12U	Location of the Waste (Street address &/or ULSTR):  Sec. 12L—34N—8W La Plata County, Colorado
attach list of originating sites as appropriate	
4. Source and Description of Waste  Used motor oil mixed with production pit contents (<10 bbl total).  Contact Person : Dennis Beasley (970) 759-9550	

I, **Kim Champlin, Torey Cardona, and/or Lisa Winn** representative for **XTO Energy 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): **Kim Champlin**

*Kim Champlin*

Title: **EH&S Assistant**

Phone Number: **505-566-7954**

Date: **05/03/2006**

Farmington, NM 87401  
505-327-9280 Telephone  
505-327-9302 Fax

Coastal Chemical Co., LLC

**Fax**

**COPY**

To: Vince From: JoDon  
Fax: Pages:  
Phone: Date:  
Re: 116 CC:  
☐ Urgent ☐ For Review ☐ Please Comment  
☐ Please Reply ☐ Please Recycle

• Comments:

Need C-138  
Register &  
Got verbal  
OK from  
State of N.M.  
(Ed Martin)

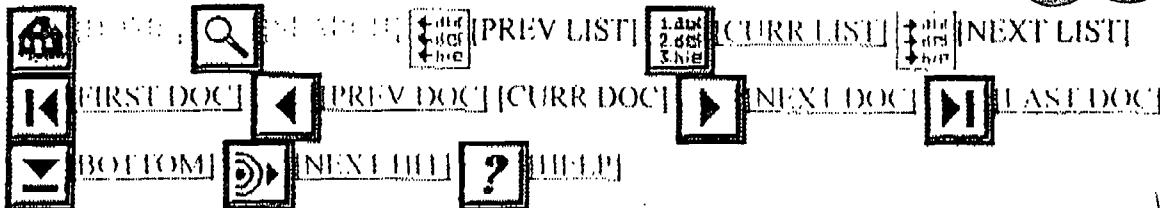
MSDS FOR  
Mobil Pegasus 15W40

Requested by Jason.

5/3/06 (Got Verbal  
OK w/ Ed  
to re issue  
@ Santa Fe  
10mch  
7:00 AM)

USED EX-100B  
that spill?  
Assess  
Sumbler  
dump  
OK

**COPY**



**Mobil**® The energy  
to make a difference™ [Print View](#)

# From 4-12-06  
Dunne/S

605840-00

605840-00 MOBIL PEGASUS SPECIAL 15W-40  
MATERIAL SAFETY DATA BULLETIN

**1. PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: MOBIL PEGASUS SPECIAL 15W-40

SUPPLIER: MOBIL OIL CORP.  
NORTH AMERICA MARKETING AND REFINING  
3225 GALLOWAY RD.  
FAIRFAX, VA 22037

24 - Hour Emergency (call collect): 609-737-4411  
Product and MSDS Information: 800-662-4525 609-224-4644  
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: Dark Amber Liquid. DOT ERG No. - NA

**4. FIRST AID MEASURES**



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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.

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## 5. FIRE-FIGHTING MEASURES

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EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water tog.  
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): > 200(392) (ASTM D-92). Flammable limits - LEL: NA, UEL: NA.  
NFPA HAZARD 10: Health: 0, Flammability: 1, Reactivity: 0  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Metal oxides, Elemental oxides.

---

## 6. ACCIDENTAL RELEASE MEASURES

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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

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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.

**COPY**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

APPEARANCE: Liquid

COLOR: Dark Amber

ODOR: Mild

ODOR THRESHOLD-ppm: NE

pH: NA

BOILING POINT C(F): > 316(600)

MELTING POINT C(F): NA

FLASH POINT C(F): > 200(392) (ASTM D-92)

FLAMMABILITY: NE

AUTO FLAMMABILITY: NE

EXPLOSIVE PROPERTIES: NA

OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-mmHg 20 C: & lt; 0.1

VAPOR DENSITY: > 2.0

EVAPORATION RATE: NE

RELATIVE DENSITY, 15/4 C: 0.875

SOLUBILITY IN WATER: Negligible

PARTITION COEFFICIENT: > 3.5

VISCOSITY AT 40 C, cSt: 103.0

VISCOSITY AT 100 C, cSt: 13.7

POUR POINT C(F): & lt; -33(-28)

FREEZING POINT C(F): NE

VOC: & lt; 5.00 (Wt. %); 0.358 lbs/gal

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. (Iraize score:

**COPY**

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.

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## 12. ECOLOGICAL INFORMATION

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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.

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## 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.

**COPY**

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SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.  
This product contains no chemicals reportable under SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
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01-14-ALKYL ESTERS, ZINC SALTS (2:1) (ZDEP) (0.26%)		

#### --- REGULATORY LISTS SEARCHED ---

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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: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBs.

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

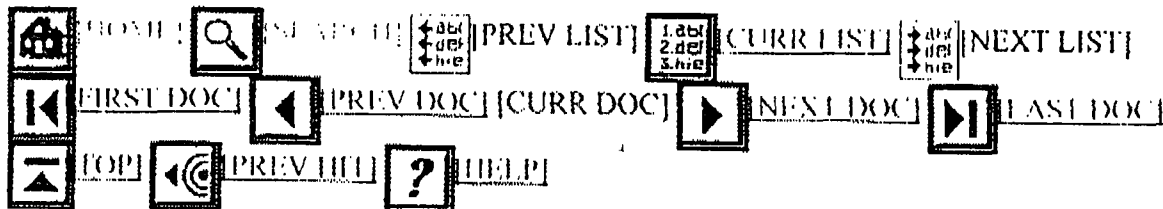
For Internal Use Only: MHC: 1\* 1\* 0\* 1\* 1\*, MFEC: A, TRN: 605840-00, CMCS97: 971867, REQ: US - MARKETING, SAFE USE: L  
EHS Approval Date: 14SEP1999

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State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <b>(Verbal Approval w/ Ed Martin @ 10:50am, 5/2/06)</b>		4. Generator: Sheldon Montoya Burlington Resource/Conoco Phillips 3401 E 30th Street Farmington, NM 87499 505-320-2857
2. Management Facility Destination JFJ Landfarm L.L.C.		5. Originating Site: Grambling C3M
3. Address of Facility Operator: <b>Industrial Ecosystems Inc. #81 County Road 3150 Aztec, New Mexico 87410</b>		6. Transporter: To Be Announced
7. Location of Material (Street Address or ULSTR) <b>UL - A, Section 13, T-30, R10W</b>		8. State: New Mexico
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>B.</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: Disposal of contaminated No.2 diesel fuel, in process of moving drilling equipment and fuel storage tank an estimate of diesel fuel was released on location; the fuel then impacted on location and was excavated.

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) Approx. 60 Yards

SIGNATURE   
Waste Management Facility Authorized Agent

TITLE: Business Manager

DATE: 5-2-2006

TYPE OR PRINT NAME: Vince Scott

TELEPHONE NO: **505-632-1782**

E-MAIL: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**Bill Richardson**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address ConocoPhillips 3401 E 30 <sup>th</sup> St. Farmington, New Mexico 87499	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-632-1876
3. Originating Site (name): Grambling C3M	Location of the Waste (Street address &/or ULSTR): UL- <u>A</u> S- <u>013</u> T- <u>30 N</u> R- <u>10 W</u> or attach list Street Address: _____
4. Source and Description of Waste No. 2 Diesel Fuel. In the process of moving drilling equipment and fuel storage tank an estimated amount of diesel fuel was released on location. The fuel was impacted soils on location and was excavated. Approximately 60 cu yds of soil.	
5. Attn: Sheldon Montoya 320-2857 Bill to: PID 85427101 AFE # 22151 Drilling	

I, Gregg Wartz representative for :  
Print Name

Burlington Resources 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 attached  
☐ 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): Gregg Wartz

Title: Env. Rep  
Date: May 2, 2006

## **MSDS SUMMARY SHEET**

**Manufacturer:**

**Name:** PHILLIPS PETROLEUM COMPANY

**Address 1:**

**Address 2:**

**Address 3:**

**CSZ:** BARTLESVILLE **State:** OK **Zipcode:** 74004

**Emergency phone:** (800) 424-9300

**Business phone:** 800-762-0942

**Product:**

**Ferndale MSDS#:** 1354 **Version #:** 6

**Manufacturer MSDS#:** 0041

**Current?:** 2002

**Name:**

**NO. 2 DIESEL FUEL**

**Synonyms:**

CARB Diesel TF3

CARB Diesel

CARB Diesel 10%

Diesel Fuel Oil

EPA Low Sulfur Diesel Fuel

EPA Low Sulfur Diesel Fuel - Dyed

EPA Off Road High Sulfur Diesel - Dyed

Fuel Oil No. 2 - CAS # 68476-30-2

No. 2 Diesel Fuel Oil

No. 2 Fuel Oil - Non Hiway - Dyed

No. 2 High Sulfur Diesel - Dyed

No. 2 Low Sulfur Diesel - Dyed

No. 2 Low Sulfur Diesel - Undyed

Crude column 3<sup>rd</sup> IR

Crude column 3<sup>rd</sup> side cut

Atmospheric tower 3<sup>rd</sup> side cut

Ultra Low Sulfur Diesel No. 2

Finished Diesel

DHT Reactor Feed

Straight Run Diesel

Diesel

Middle Distillate

**Product/Catalog Numbers:**

**MSDS Date:** 01/01/2002 (received: 01/14/2002)

**NFPA codes:**

**Health:** 0 **Flammability:** 2 **Reactivity:** 0



**No. 2 Diesel Fuel (MSDS #0041)**

Page 2 of 9

**MATERIAL SAFETY DATA SHEET  
No. 2 Diesel Fuel****1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** No. 2 Diesel Fuel  
**Product Code:** Multiple  
**SAP Code:**  
**Synonyms:** 1354  
CARB Diesel TF3  
CARB Diesel  
CARB Diesel 10%  
Diesel Fuel Oil  
EPA Low Sulfur Diesel Fuel  
EPA Low Sulfur Diesel Fuel - Dyed  
EPA Off Road High Sulfur Diesel - Dyed  
Fuel Oil No. 2 - CAS # 68476-30-2  
No. 2 Diesel Fuel Oil  
No. 2 Fuel Oil - Non Hiway - Dyed  
No. 2 High Sulfur Diesel - Dyed  
No. 2 Low Sulfur Diesel - Dyed  
No. 2 Low Sulfur Diesel - Undyed  
No. 2 Ultra Low Sulfur Diesel - Dyed  
No. 2 Ultra Low Sulfur Diesel - Undyed  
Fuel  
**Intended Use:**  
**Chemical Family:**  
**Responsible Party:** Phillip's Petroleum Company  
Bartlesville, Oklahoma 74004  
**For Additional MSDSs:** 800-762-0942  
**Technical Information:**

The intended use of this product is indicated above. If any additional use is known, please contact us at the Technical Information number listed.

**EMERGENCY OVERVIEW****24 Hour Emergency Telephone Numbers:**

Spill, Leak, Fire or Accident

California Poison Control System: 800-356-3120

Call CHEMTREC

North America: (800) 424-9300

Others: (703) 527-3887 (collect)

**Health Hazards/Precautionary Measures:** Causes severe skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Flammable liquid and vapor. Keep away from heat, sparks, flames, static electricity or other sources of ignition.

**Appearance:** Straw-colored to dyed red  
**Physical Form:** Liquid  
**Odor:** Characteristic petroleum

**No. 2 Diesel Fuel (MSDS #0041)**

Page 3 of 9

**HFPA Hazard Class:**

Health: 0 (Least)  
 Flammability: 2 (Moderate)  
 Reactivity: 0 (Least)

**HMIS Hazard Class**

Not Evaluated

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>HAZARDOUS COMPONENTS</u>	<u>% VOLUME</u>	<u>EXPOSURE GUIDELINE</u>		
		<u>Limits</u>	<u>Agency</u>	<u>Type</u>
Diesel Fuel No. 2 CAS# 68476-34-6	100	100* mg/m3	ACGIH	TWA-SKIN
Naphthalene CAS# 91-20-3	<1	10ppm	ACGIH	TWA
		15ppm	ACGIH	STEL
		10ppm	OSHA	TWA
		250ppm	NIOSH	IDLH

All components are listed on the TSCA inventory

Tosco Low Sulfur No. 2 Diesel meets the specifications of 40 CFR 60.41 for low sulfur diesel fuel.

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

\*Proposed ACGIH (1999)

**3. HAZARDS IDENTIFICATION****Potential Health Effects:**

**Eye:** Contact may cause mild eye irritation including stinging, watering, and redness.

**Skin:** Severe skin irritant. Contact may cause redness, itching, burning, and severe skin damage. Prolonged or repeated contact can worsen irritation by causing drying and cracking of the skin, leading to dermatitis (inflammation). Not actually toxic by skin absorption, but prolonged or repeated skin contact may be harmful (see Section 11).

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** Low degree of toxicity by ingestion. ASPIRATION HAZARD – This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea, diarrhea and transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

**Cancer:** Possible skin cancer hazard (see Sections 11 and 14).

**Target Organs:** There is limited evidence from animal studies that overexposure may cause injury to the kidney (see Section 11).

**Developmental:** Inadequate data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders and kidney disorders.

**No. 2 Diesel Fuel (MSDS #0041)****Page 4 of 9****4. FIRST AID MEASURES**

**Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin:** Immediately remove contaminated shoes, clothing, and constrictive jewelry and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek immediate medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek immediate medical attention.

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** Aspiration hazard; Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

**5. FIRE FIGHTING MEASURES****Flammable Properties:**

Flash Point: &gt;125°F/&gt;52°

OSHA Flammability Class: Combustible liquid

LEL %: 0.3 / UEL %: 10.0

Autoignition Temperature: 500°F/260°C

**Unusual Fire & Explosion Hazards:** This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

**No. 2 Diesel Fuel (MSDS #0041)****Page 5 of 9****6. ACCIDENTAL RELEASE MEASURES**

**Flammable.** Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

**7. HANDLING AND STORAGE**

**Handling:** Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharged. The use of explosion-proof equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing or high pressure hydraulic oil equipment.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1 and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentration below the established exposure limits (see Section 2), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

**No. 2 Diesel Fuel (MSDS #0041)**

Page 6 of 9

**Personal Protective Equipment (PPE):**

**Respiratory:** A NIOSH certified air purifying respirator with an organic vapor cartridge maybe used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is a potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrants a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eyes/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1atm).

Appearance: Straw-colored to dyed red

Physical State: Liquid

Odor: Characteristic petroleum

pH: unavailable

Vapor Pressure (mm Hg): 0.40

Vapor Density (air=1): >3

Boiling Point/Range: 320-700°F / 160-371°C

Freezing/Melting Point: No Data

Solubility in Water: Negligible

Specific Gravity: 0.81-0.88 @ 60°F

Percent Volatile: Negligible

Evaporation Rate (nBuAc=1): <1

Viscosity: 32.6-40.0 SUS @ 100°F

Bulk Density: 7.08 lbs/gal

Flash Point: >125°F / >52°C

Flammable/Explosive Limits (%): LEL: 0.3 / UEL: 10.0

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Flammable liquid and vapor. Vapor can cause flash fire.

**Conditions To Avoid:** Avoid all possible sources of ignition (see Sections 5 and 7).

**Materials to Avoid (Incompatible Materials):** Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

**No. 2 Diesel Fuel (MSDS #0041)****Page 7 of 9**

**Hazardous Decomposition Products:** The use of hydrocarbon fuels in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. ACGIH has included a TLV of 0.05 mg/m<sup>3</sup> TWA for diesel exhaust particulate on its 1999 Notice of Intended Changes. See Section 11 for additional information on hazards of engine exhaust.

**Hazardous Polymerization:** Will not occur.

**11. TOXICOLOGICAL INFORMATION****Diesel Fuel No. 2 (CAS# 68476-34-6)**

**Carcinogenicity:** Chronic dermal application of certain middle distillate streams contained in diesel fuel No. 2 resulted in an increased incidence of skin tumors in mice. This material has not been identified as carcinogen by NTP, IARC, or OSHA. Diesel exhaust is a probable cancer hazard based on tests with laboratory animals.

**Target Organ(s):** Limited evidence of renal impairment has been noted from a few case reports involving excessive exposure to diesel fuel No. 2.

**Naphthalene (CAS# 91-20-3)**

**Carcinogenicity:** Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has not been identified as a carcinogen by IARC or OSHA.

**12. ECOLOGICAL INFORMATION**

Not evaluated at this time

**13. DISPOSAL CONSIDERATIONS**

This material, if discarded as produced, would be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001) and benzene (D018). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. Further, this material, once it becomes a waste, is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment prior to disposal to meet specific standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.

Container contents should be completely used and containers should be emptied prior to discard. Container <sup>insate?</sup> could be considered a RCRA hazardous waste and must be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller containers, consult with state and local regulations and disposal authorities.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** Diesel Fuel, NA1983  
**Non-Bulk Package Marking:** Diesel Fuel, 3, NA 1993, III

**No. 2 Diesel Fuel (MSDS #0041)**

Page 8 of 9

**15. REGULATORY INFORMATION****EPA SARA 311/312 (Title III Hazard Categories):**

Acute Health:	Yes
Chronic Health:	Yes
Fire Hazard:	Yes
Pressure Hazard:	No
Reactive Hazard:	No

**SARA 313 and 40 CFR 372:**

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

Component	CAS Number	Weight %
-----------	------------	----------

-- None known --

**California Proposition 65:**

**Warning:** This material contains the following chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Component	Effect
Benzene	Cancer, Developmental and Reproductive Toxicant
Toluene	Developmental Toxicant

Diesel engine exhaust, while not a component of this material, is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

**Carcinogen Identification:**

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any. Diesel exhaust is a probable cancer hazard based on tests in laboratory animals. It has been identified as carcinogen by IARC.

**EPA (CERCLA Reportable Quantity):** None

**16. OTHER INFORMATION**

Issue Date: 01/01/02

Previous Issue Date: 05/15/01

Product Code: Multiple

Revised Sections: None

Previous Product Code: Multiple

MSDS Number: 0041

**Disclaimer of Expressed and Implied Warranties:**

The information presented in this Material Data Safety Sheet is based on data believed to be accurate as of the date this Material Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THE PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

**No. 2 Diesel Fuel (MSDS #0041)**

Page 9 of 9

**Tosco Refining Company****Ferndale Refinery****UltraLow Sulfur Diesel Product Specification**

Ferndale Product Code: 34380xx (5) Product Code: ULSD2

**(COMETS)**

Specification	Unit	Limit	Test Procedure	Typical
Appearance				
Water & Sediment	Vol %	0.05 Max	D 2709	
Color	Number	3.0 Max	D 1500	
Haze Rating	Rating	2 Max	D 4176	
Composition				
Carbon Residue (Ramsbottom)	Wt %	0.35 Max	D 524, D 189	
Volatility				
90% Recovered	Deg; F	540 Min	D 86	
	Deg; F	640 Min	D 86	
Flash Point	Deg; F	125 Min (1)	D 93	130 F
Gravity	API	30 Min	D 287, D4052	
Fluidity				
Pour Point	Deg; F	See Season Table (6)	D 97	
Cloud Point	Deg; F	See Season Table (6)	D 2500	10 F
Viscosity @ 104F	cSt	1.9 Min	D 445	
	cSt	4.1 Max	D 445	
Lubricity, SLBOCLE	grams	3100 Min	D 6078	3300gm
Lubricity, IIFRR	mm	.45	D 6079	
Combustion				
Cetane Index or Cetane Number (3,4)	Number	40.0 Min	D 976, D613	47.0
Corrosion				
Copper Strip, 3hr @ 50 deg C	Number	3 Max (2)	D 130	
Aromatics (4)	Vol %	35 Max	D 1319	25 %
Contaminants				
Total Sulfur	PPM	30 Max	D 2622, D4294	15-20ppm
Water & Sediment	Vol %	0.05 Max	D 1796	
Ash	Wt %	0.01 Max	D 482	
Additives				
Cetane Improver	Lb/MBbl	675 Max		
Dye		Undyed		

1. Minimum release specification is 125 deg. F. The refinery should target 135 deg. F.
2. Test result reported as a number and letter (e.g. 1a). Any letter is allowable as long as the number meets the spec shown.
3. Either specification must be met.
4. Either cetane index minimum or aromatics maximum must be met.
5. Winter cloud and pour specifications may be relaxed to the summer specifications by agreement with the customer.
6. Season Table

**Month**

Jan, Feb, Nov, Dec

Mar - Oct

**Product Code Pour Point Cloud Point**

WI

0 max (5) 14 max (5)

SU

15 max 24 max



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

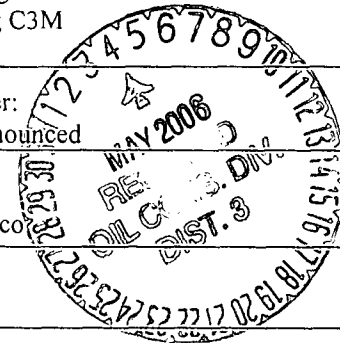
**COPY**

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"/> <b>(Verbal Approval w/ Ed Martin @ 10:50am, 5/2/06)</b>		4. Generator: Sheldon Montoya Burlington Resource/Conoco Phillips 3401 E 30th Street Farmington, NM 87499 505-320-2857
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: Grambling C3M
3. Address of Facility Operator: <b>Industrial Ecosystems Inc.</b> <b>#81 County Road 3150</b> <b>Aztec, New Mexico 87410</b>		6. Transporter: To Be Announced
7. Location of Material (Street Address or ULSTR) <b>UL - A, Section 13, T-30, R10W</b>		8. State: New Mexico
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>B.</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: Disposal of contaminated No.2 diesel fuel, in process of moving drilling equipment and fuel storage tank an estimate of diesel fuel was released on location; the fuel then impacted on location and was excavated.

Estimated Volume \_\_\_\_\_ Known Volume (to be entered by the operator at the end of the haul) Approx. 60 Yards

SIGNATURE

Waste Management Facility Authorized Agent

TITLE: Business Manager

DATE: 5-2-2006

TYPE OR PRINT NAME: Vince Scott

TELEPHONE NO: 505-632-1782

E-MAIL: vince@industrialecosystems.com

(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**Bill Richardson**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## COPY

### CERTIFICATE OF WASTE STATUS

1. Generator Name and Address ConocoPhillips 3401 E 30 <sup>th</sup> St. Farmington, New Mexico 87499	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-632-1876
3. Originating Site (name): Gambling C3M	Location of the Waste (Street address &/or ULSTR): UL- <u>A</u> S- <u>013</u> T- <u>30 N</u> R- <u>10 W</u> or attach list Street Address: _____
4. Source and Description of Waste No. 2 Diesel Fuel. In the process of moving drilling equipment and fuel storage tank an estimated amount of diesel fuel was released on location. The fuel was impacted soils on location and was excavated. Approximately 60 cu yds of soil.	
5. Attn: Sheldon Montoya 320-2857 Bill to: PID 85427101 AFE # 22151 Drilling	

I, Gregg Wurtz representative for :  
Print Name

Burlington Resources 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 attached  
☐ 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): Gregg Wurtz

Title: Env. Rep

Date: May 2, 2006

## MSDS SUMMARY SHEET

**Manufacturer:**

**Name:** PHILLIPS PETROLEUM COMPANY

**Address 1:**

**Address 2:**

**Address 3:**

**CSZ:** BARTLESVILLE **State:** OK

**Zipcode:** 74004

**Emergency phone:** (800) 424-9300

**Business phone:** 800-762-0942

**COPY**

**Product:**

**Ferndale MSDS#:** 1354 **Version # :** 6

**Manufacturer MSDS#:** 0041

**Current? :** 2002

**Name:**

**NO. 2 DIESEL FUEL**

**Synonyms:**

CARB Diesel TF3

CARB Diesel

CARB Diesel 10%

Diesel Fuel Oil

EPA Low Sulfur Diesel Fuel

EPA Low Sulfur Diesel Fuel – Dyed

EPA Off Road High Sulfur Diesel – Dyed

Fuel Oil No. 2 – CAS # 68476-30-2

No. 2 Diesel Fuel Oil

No. 2 Fuel Oil – Non Hiway – Dyed

No. 2 High Sulfur Diesel – Dyed

No. 2 Low Sulfur Diesel - Dyed

No. 2 Low Sulfur Diesel - Undyed

Crude column 3<sup>rd</sup> IR

Crude column 3<sup>rd</sup> side cut

Atmospheric tower 3<sup>rd</sup> side cut

Ultra Low Sulfur Diesel No. 2

Finished Diesel

DHT Reactor Feed

Straight Run Diesel

Diesel

Middle Distillate

**Product/Catalog Numbers:**

**MSDS Date:** 01/01/2002 (received: 01/14/2002)

**NFPA codes:**

**Health:** 0 **Flammability:** 2 **Reactivity:** 0

**No. 2 Diesel Fuel** (MSDS #0041)

Page 2 of 9

**MATERIAL SAFETY DATA SHEET**  
**No. 2 Diesel Fuel****1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** No. 2 Diesel Fuel  
**Product Code:** Multiple  
**SAP Code:**  
**Synonyms:** 1354  
CARB Diesel TF3  
CARB Diesel  
CARB Diesel 10%  
Diesel Fuel Oil  
EPA Low Sulfur Diesel Fuel  
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No. 2 Diesel Fuel Oil  
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No. 2 Low Sulfur Diesel - Dyed  
No. 2 Low Sulfur Diesel - Undyed  
No. 2 Ultra Low Sulfur Diesel - Dyed  
No. 2 Ultra Low Sulfur Diesel - Undyed  
**Intended Use:** Fuel  
**Chemical Family:**  
**Responsible Party:** Phillip's Petroleum Company  
Bartlesville, Oklahoma 74004  
**For Additional MSDSs:** 800-762-0942  
**Technical Information:**

**COPY**

The intended use of this product is indicated above. If any additional use is known, please contact us at the Technical Information number listed.

**EMERGENCY OVERVIEW****24 Hour Emergency Telephone Numbers:**

Spill, Leak, Fire or Accident

California Poison Control System: 800-356-3120

Call CHEMTREC

North America: (800) 424-9300

Others: (703) 527-3887 (collect)

**Health Hazards/Precautionary Measures:** Causes severe skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Flammable liquid and vapor. Keep away from heat, sparks, flames, static electricity or other sources of ignition.

**Appearance:** Straw-colored to dyed red  
**Physical Form:** Liquid  
**Odor:** Characteristic petroleum

**No. 2 Diesel Fuel (MSDS #0041)**

Page 3 of 9


**HFPA Hazard Class:**

Health: 0 (Least)  
Flammability: 2 (Moderate)  
Reactivity: 0 (Least)

**HMIS Hazard Class**

Not Evaluated

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>HAZARDOUS COMPONENTS</u>	<u>% VOLUME</u>	<u>Limits</u>	<u>EXPOSURE GUIDELINE</u>	
			<u>Agency</u>	<u>Type</u>
Diesel Fuel No. 2 CAS# 68476-34-6	100	100* mg/m3	ACGIH	TWA-SKIN
Naphthalene CAS# 91-20-3		10ppm	ACGIH	TWA
		15ppm	ACGIH	STEL
		10ppm	OSHA	TWA
		250ppm	NIOSH	IDLH

All components are listed on the TSCA inventory

Tosco Low Sulfur No. 2 Diesel meets the specifications of 40 CFR 60.41 for low sulfur diesel fuel.

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

\*Proposed ACGIH (1999)

**3. HAZARDS IDENTIFICATION****Potential Health Effects:**

**Eye:** Contact may cause mild eye irritation including stinging, watering, and redness.

**Skin:** Severe skin irritant. Contact may cause redness, itching, burning, and severe skin damage. Prolonged or repeated contact can worsen irritation by causing drying and cracking of the skin, leading to dermatitis (inflammation). Not actually toxic by skin absorption, but prolonged or repeated skin contact may be harmful (see Section 11).

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** Low degree of toxicity by ingestion. **ASPIRATION HAZARD** – This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea, diarrhea and transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

**Cancer:** Possible skin cancer hazard (see Sections 11 and 14).

**Target Organs:** There is limited evidence from animal studies that overexposure may cause injury to the kidney (see Section 11).

**Developmental:** Inadequate data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders and kidney disorders.

**No. 2 Diesel Fuel (MSDS #0041)**

Page 4 of 9

**4. FIRST AID MEASURES**

**Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin:** Immediately remove contaminated shoes, clothing, and constrictive jewelry and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek immediate medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek immediate medical attention.

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** Aspiration hazard; Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

**COPY****5. FIRE FIGHTING MEASURES****Flammable Properties:**

Flash Point: &gt;125°F/&gt;52°

OSHA Flammability Class: Combustible liquid

LEL %: 0.3 / UEL %: 10.0

Autoignition Temperature: 500°F/260°C

**Unusual Fire & Explosion Hazards:** This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

**No. 2 Diesel Fuel (MSDS #0041)****COPY** Page 5 of 9**6. ACCIDENTAL RELEASE MEASURES**

**Flammable.** Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

**7. HANDLING AND STORAGE**

**Handling:** Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharged. The use of explosion-proof equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing or high pressure hydraulic oil equipment.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1 and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentration below the established exposure limits (see Section 2), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

**No. 2 Diesel Fuel (MSDS #0041)**Page 6 of 9  
**COPY****Personal Protective Equipment (PPE):**

**Respiratory:** A NIOSH certified air purifying respirator with an organic vapor cartridge maybe used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is a potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrants a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eyes/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1atm).

Appearance: Straw-colored to dyed red

Physical State: Liquid

Odor: Characteristic petroleum

pH: unavailable

Vapor Pressure (mm Hg): 0.40

Vapor Density (air=1): >3

Boiling Point/Range: 320-700°F / 160-371°C

Freezing/Melting Point: No Data

Solubility in Water: Negligible

Specific Gravity: 0.81-0.88 @ 60°F

Percent Volatile: Negligible

Evaporation Rate (nBuAc=1): <1

Viscosity: 32.6-40.0 SUS @ 100°F

Bulk Density: 7.08 lbs/gal

Flash Point: >125°F / >52°C

Flammable/Explosive Limits (%): LEL: 0.3 / UEL: 10.0

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Flammable liquid and vapor. Vapor can cause flash fire.

**Conditions To Avoid:** Avoid all possible sources of ignition (see Sections 5 and 7).

**Materials to Avoid (Incompatible Materials):** Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.



**No. 2 Diesel Fuel** (MSDS #0041)

Page 7 of 9

**Hazardous Decomposition Products:** The use of hydrocarbon fuels in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. ACGIH has included a TLV of 0.05 mg/m<sup>3</sup> TWA for diesel exhaust particulate on its 1999 Notice of Intended Changes. See Section 11 for additional information on hazards of engine exhaust.

**Hazardous Polymerization:** Will not occur.

**COPY****11. TOXICOLOGICAL INFORMATION****Diesel Fuel No. 2 (CAS# 68476-34-6)**

**Carcinogenicity:** Chronic dermal application of certain middle distillate streams contained in diesel fuel No. 2 resulted in an increased incidence of skin tumors in mice. This material has not been identified as carcinogen by NTP, IARC, or OSHA. Diesel exhaust is a probable cancer hazard based on tests with laboratory animals.

**Target Organ(s):** Limited evidence of renal impairment has been noted from a few case reports involving excessive exposure to diesel fuel No. 2.

**Naphthalene (CAS# 91-20-3)**

**Carcinogenicity:** Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has not been identified as a carcinogen by IARC or OSHA.

**12. ECOLOGICAL INFORMATION**

Not evaluated at this time

**13. DISPOSAL CONSIDERATIONS**

This material, if discarded as produced, would be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001) and benzene (D018). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. Further, this material, once it becomes a waste, is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment prior to disposal to meet specific standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.

Container contents should be completely used and containers should be emptied prior to discard. Container insate? could be considered a RCRA hazardous waste and must be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller containers, consult with state and local regulations and disposal authorities.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** Diesel Fuel, NA1983  
**Non-Bulk Package Marking:** Diesel Fuel, 3, NA 1993, III

**No. 2 Diesel Fuel (MSDS #0041)**

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**COPY****15. REGULATORY INFORMATION****EPA SARA 311/312 (Title III Hazard Categories):**

Acute Health:	Yes
Chronic Health:	Yes
Fire Hazard:	Yes
Pressure Hazard:	No
Reactive Hazard:	No

**SARA 313 and 40 CFR 372:**

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

Component	CAS Number	Weight %
-----------	------------	----------

— None known —

**California Proposition 65:**

**Warning:** This material contains the following chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

**Component**

Benzene  
Toluene

**Effect**

Cancer, Developmental and Reproductive Toxicant  
Developmental Toxicant

Diesel engine exhaust, while not a component of this material, is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

**Carcinogen Identification:**

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any. Diesel exhaust is a probable cancer hazard based on tests in laboratory animals. It has been identified as carcinogen by IARC.

**EPA (CERCLA Reportable Quantity):** None

**16. OTHER INFORMATION**

Issue Date: 01/01/02

Previous Issue Date: 05/15/01

Product Code: Multiple

Revised Sections: None

Previous Product Code: Multiple

MSDS Number: 0041

**Disclaimer of Expressed and Implied Warranties:**

The information presented in this Material Data Safety Sheet is based on data believed to be accurate as of the date this Material Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THE PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

**No. 2 Diesel Fuel (MSDS #0041)**

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**Tosco Refining Company****Ferndale Refinery** **COPY****UltraLow Sulfur Diesel Product Specification**

Ferndale Product Code:34380xx (5) Product Code: ULSD2

**(COMETS)**

Specification	Unit	Limit	Test Procedure	Typical
Appearance				
Water & Sediment	Vol %	0.05 Max	D 2709	
Color	Number	3.0 Max	D 1500	
Haze Rating	Rating	2 Max	D 4176	
Composition				
Carbon Residue (Ramsbottom)	Wt %	0.35 Max	D 524, D 189	
Volatility				
90% Recovered	Deg; F	540 Min	D 86	
	Deg; F	640 Min	D 86	
Flash Point	Deg; F	125 Min (1)	D 93	130 F
Gravity	API	30 Min	D 287, D4052	
Fluidity				
Pour Point	Deg; F	See Season Table (6)	D 97	
Cloud Point	Deg; F	See Season Table (6)	D 2500	10 F
Viscosity @ 104F	cSt	1.9 Min	D 445	
	cSt	4.1 Max	D 445	
Lubricity, SLBOCLE	grams	3100 Min	D 6078	3300gm
Lubricity, IIFRR	mm	.45	D 6079	
Combustion				
Cetane Index or Cetane Number (3,4)	Number	40.0 Min	D 976, D613	47.0
Corrosion				
Copper Strip, 3hr @ 50 deg C	Number	3 Max (2)	D 130	
Aromatics (4)	Vol %	35 Max	D 1319	25 %
Contaminants				
Total Sulfur	PPM	30 Max	D 2622, D4294	15-20ppm
Water & Sediment	Vol %	0.05 Max	D 1796	
Ash	Wt %	0.01 Max	D 482	
Additives				
Cetane Improver	Lb/MBbl	675 Max		
Dye		Undyed		

1. Minimum release specification is 125 deg. F. The refinery should target 135 deg. F.
2. Test result reported as a number and letter (e.g. 1a). Any letter is allowable as long as the number meets the spec shown.
3. Either specification must be met.
4. Either cetane index minimum or aromatics maximum must be met.
5. Winter cloud and pour specifications may be relaxed to the summer specifications by agreement with the customer.
6. Season Table

Month	Product Code	Pour Point	Cloud Point
Jan, Feb, Nov, Dec	WI	0 max (5)	14 max (5)
Mar - Oct	SU	15 max	24 max

District I -  
1625 N. French Dr., Hobbs, NM 88240  
District II -  
1301 W. Grand Avenue, Artesia, NM 88210  
District III -  
900 Rio Brazos Road, Aztec, NM 87410  
District IV -  
20 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised June 10, 2003

RECEIVED

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

JAN 30 2006

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒  
☒ Verbal Approval Received: Yes ☐ No ☐

4. Generator: St. Francis Drive  
Dugan Production Co. NM 87505

5. Originating Site  
Redfern #2

2. Management Facility Destination JFJ Landfarm

6. Transporter  
TRC Construction

3. Address of Facility Operator P. O. Box 420, Farmington, NM 87499-0420

8. State  
New Mexico

7. Location of Material (Street Address or ULSTR) P-8-28N-11W

9. Circle One:

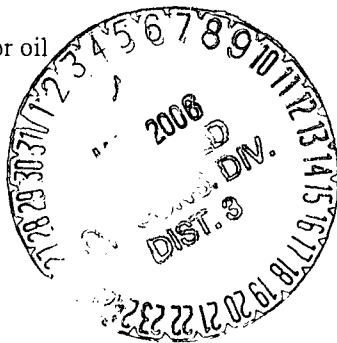
- A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.  
B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous 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 by used motor and compressor oils. Excavated with backhoe. (notice of written order by BLM for cleanup action with deadline date of 1-30-06).

See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE [Signature]  
Waste Management Facility Authorized Agent

TITLE: Business Manager

DATE: 1/25/06

TYPE OR PRINT NAME: Paul S. Koenig

TELEPHONE NO. 325-1821

E-MAIL ADDRESS VINCESOUTH@industrial.co-systems.com

space for State Use

APPROVED BY: [Signature]

TITLE: Enviro/Engr

DATE: 1/27/06

APPROVED BY: [Signature]

TITLE: ENVIRO. ENGR.

DATE: 2-1-06

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised June 10, 2003

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

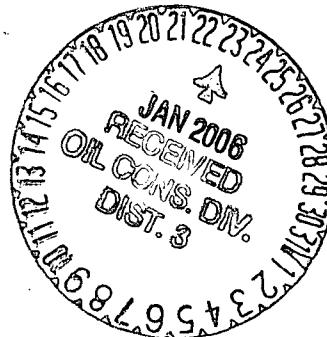
**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Verbal Approval Received: <u>Yes</u> <input type="checkbox"/> No <input type="checkbox"/>	4. Generator Dugan Production Corp.
2. Management Facility Destination JFJ Landfarm	5. Originating Site Redfern #2
3. Address of Facility Operator P. O. Box 420, Farmington, NM 87499-0420	6. Transporter TRC Construction
7. Location of Material (Street Address or ULSTR) P-8-28N-11W	8. State New Mexico
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.	

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See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: \_\_\_\_\_ TELEPHONE NO. \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

(This space for State Use)		
APPROVED BY: <u>Wendy Fart</u>	TITLE: _____	DATE: <u>1/27/06</u>
APPROVED BY: _____	TITLE: _____	DATE: _____



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Bill Richardson  
Governor  
Joanne Prukop  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address <b>Dugan Production Corp</b> 709 E. Murray Drive Farmington, NM 87499-0420 505-325-1821	2. Destination Name: <b>J.F.J. Landfarm</b> C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone: 505-632-1782 Fax: 505-632-1876
3. Originating Site (name): Redfern #2	Location of the Waste (Street address &/or ULSTR): UL <u>P</u> , SECTION <u>8</u> , T- <u>28N</u> , R- <u>11W</u> or Street Address:
4. Source and Description of Waste Soil impacted by used motor and compressor oils	

I, Paul Sikora representative for :  
Print Name

Dugan Production Corp 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

XX 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):

X 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] Phone No: 505-325-1821

Title: Senior Production Foreman Pay Key/P.O.:

Date: 1-18-10

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Redfern 2	Date Reported:	01-16-06
Laboratory Number:	35729	Date Sampled:	01-12-06
Chain of Custody:	15364	Date Received:	01-12-06
Sample Matrix:	Solid	Date Analyzed:	01-16-06
Preservative:	N/A	Date Digested:	01-16-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.169	0.001	5.0
Barium	4.48	0.001	100
Cadmium	0.040	0.001	1.0
Chromium	0.559	0.001	5.0
Lead	1.83	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

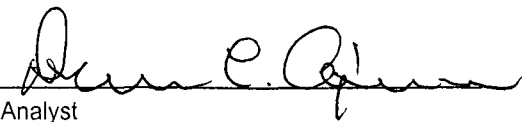
ND - Parameter not detected at the stated detection limit.

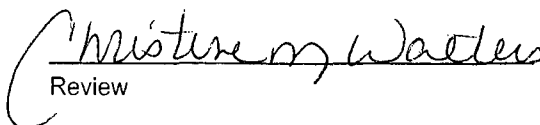
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: **Compressor Overflow.**

  
Analyst

  
Review

Multigrade oils  
motor

602466-00 MOBIL PEGASUS 805  
MATERIAL SAFETY DATA BULLETIN

---

## 1. PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: MOBIL PEGASUS 805

SUPPLIER: MOBIL OIL CORP.

NORTH AMERICA MARKETING AND REFINING

3225 GALLOWES RD.

FAIRFAX, VA 22037

24 - Hour Emergency (call collect): 609-737-4411

Product and MSDS Information:

800-662-4525

609-224-4644

CHEMTREC:

800-424-9300

702-483-7616

---

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

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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).

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## 3. HAZARDS IDENTIFICATION

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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: Light Amber Liquid. DOT ERG No. - NA

---

## 4. FIRST AID MEASURES

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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 when ingested. If uncomfortable seek medical assistance.

---

## 5. FIRE-FIGHTING MEASURES

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

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 for fire control or dilution from entering streams, sewers, etc.



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): 245(473) (ASTM D-92). Flammable limits - LEL: NE, UEL: NE.

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

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide. Possibly hydrocarbon fragments. Sulfur oxides and compounds.

---

## 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:** Light Amber

**ODOR:** Marketable

**ODOR THRESHOLD-ppm:** NE

pH: NA  
BOILING POINT C(F): NE  
MELTING POINT C(F): NA  
FLASH POINT C(F): 245(473) (ASTM D-92)  
FLAMMABILITY: NE  
AUTO FLAMMABILITY: NE  
EXPLOSIVE PROPERTIES: NA  
OXIDIZING PROPERTIES: NA  
VAPOR PRESSURE-mmHg 20 C: < 11; 0.1  
VAPOR DENSITY: > 2.0  
EVAPORATION RATE: NE  
RELATIVE DENSITY, 15/4 C: 0.89  
SOLUBILITY IN WATER: Negligible  
PARTITION COEFFICIENT: NE  
VISCOSITY AT 40 C, cSt: 130.0  
VISCOSITY AT 100 C, cSt: 13.5  
POUR POINT C(F): -12(10)  
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

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STABILITY (THERMAL, LIGHT, ETC.): Stable.  
CONDITIONS TO AVOID: Extreme heat.  
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Possibly hydrocarbon fragments. Sulfur oxides and compounds.  
HAZARDOUS POLYMERIZATION: Will not occur.

---

## 11. TOXICOLOGICAL DATA

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### ---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): Not applicable ---Harmful concentrations of mists and/or vapors are unlikely to be encountered through any customary or reasonably foreseeable handling, use, or misuse of this product.

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.

### ---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Severely solvent refined and severely hydrotreated mineral base oils have been tested at Mobil Environmental and Health Sciences laboratory by dermal application 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.

### ---CHRONIC TOXICOLOGY (SUMMARY)---

The base oils in this product are severely solvent refined; a

severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects.

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## 12. ECOLOGICAL INFORMATION

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ENVIRONMENTAL FATE AND EFFECTS: Not established.

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## 13. DISPOSAL CONSIDERATIONS

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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.

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## 14. TRANSPORT INFORMATION

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USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

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## 15. REGULATORY INFORMATION

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

EU Labeling:

Symbol: \* EU labeling not required..

Risk Phrase(s): R.

NA

Safety Phrase(s): Not applicable.

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 reportable under

SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
XYLENES (0.03%)	1330-20-7	22
ZINC (ELEMENTAL ANALYSIS) (4 lt; 0.04%)	7440-66-6	22
PHOSPHORODITHOIC ACID, O,O-DI	68649-42-3	22
CI-14-ALKYL ESTERS, ZINC SALTS (2:		
1) (ZDDP) (0.33%)		

--- 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 253
3=ACGIH A2	8=IARC 2B	13=TSCA 5c	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NI RTK
5=NTP SUS	10=OSHA 7	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RJ RTK

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

16. OTHER INFORMATION

USE: ENGINE LUBRICANT

NOTE: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBs.

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

For Internal Use Only: MHC: 0\* 0\* NA 1\* 1\*, MPPEC: A, TRN: 602466-00, GLIS: 400795, CMCS97: 970936, REQ: US - MARKETING, SAFE USE: 1.  
EHS Approval Date: 10OCT1999

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.

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**CORAL ENERGY RESOURCES, L.P.**

Contract#: 010-NG-PS-07102  
 Contract Date: 04/01/2000  
 Deal Maker: John Tracy

Trade Date: 12/21/2005

Deal #: 104217

**CONFIRMATION**

**DUGAN PRODUCTION CORP**  
 Attention: Contract Administration

PO BOX 420  
 FARMINGTON, NM 87499-0420

Date: January 5, 2006

Fax: 1(505) 327-4613

Phone: (505) 325-1821

This Confirmation ("Confirmation") shall confirm and effectuate the agreement between CORAL ENERGY RESOURCES, L.P. and DUGAN PRODUCTION CORP ("Counterparty") regarding the purchase and sale of natural gas under the following terms.

Seller: DUGAN PRODUCTION CORP

Buyer: CORAL ENERGY RESOURCES, L.P.

<u>Period of Delivery Start /End Date</u>	<u>Transporter/ Delivery Point(s)</u>	<u>Level of Service</u>	<u>Designated Quantity (MMBtu Per Day)</u>	<u>Contract Price (USD per MMBtu )</u>
01/01/06 - 01/31/06	WILLMSFLD KUTZ PLANT Stn/Mtr # KUTZ	Firm	55 MMBTU	Inside F.E.R.C GAS Market Report ElPaso Ntrl Gas SanJuan minus .02

Other Costs:

Special Terms:

Comments:

This Confirmation is being provided pursuant to and in accordance with the above referenced gas purchase and /or sale agreement between Counterparty and CORAL ENERGY RESOURCES, L.P. (the "Agreement") and constitutes part of and is subject to all of the provisions of the Agreement. With respect to the above stated deal identification number ( Deal# ) identifying this specific "Transaction", this Confirmation shall supersede any prior confirmations of this specific Transaction.

If no facsimile objection to this Confirmation is received by CORAL ENERGY RESOURCES, L.P. at (713) 265-2171, Attn: Energy Administration, from Counterparty by 5:00 p.m., Houston, Texas time, two (2) Business Days after delivery of this Confirmation to Counterparty, then this Confirmation shall be the final expression of all the terms hereof and shall be binding and enforceable against Seller and Buyer regardless of whether executed by Counterparty.

**DUGAN PRODUCTION CORP****CORAL ENERGY RESOURCES, L.P.**

Per: \_\_\_\_\_

Name/Title: \_\_\_\_\_

Date: \_\_\_\_\_

Per: 

Name/Title: Patricia Butler - Contracts Manager

Date: January 5, 2006

Please return the signed confirmation to **Fax: (713) 265-2171**

Questions and concerns can be directed to Energy Administration at: CORAL ENERGY RESOURCES, L.P. 909 FANNIN PLAZA LEVEL 1 HOUSTON, TX 77010  
 PHONE: (713) 230-7505 FAX: (713) 265-2171

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
20 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised June 10, 2003

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"/> <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	4. Generator Dugan Production Corp.
2. Management Facility Destination: JFJ Landfarm	5. Originating Site Gentle #2
3. Address of Facility Operator: P. O. Box 420, Farmington, NM 87499-0420	6. Transporter TRC Construction
7. Location of Material (Street Address or ULSTR) L-9-28N-11W	8. State New Mexico
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 used motor and compressor oils. Excavated with backhoe. (notice of written order by BLM for cleanup action with deadline date of 1-30-06).

See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE [Signature] TITLE: Business Manager DATE: 1/25/06  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: [Signature] TELEPHONE NO. 328-1827

E-MAIL ADDRESS \_\_\_\_\_

APPROVED BY: <u>[Signature]</u>	TITLE: <u>Enviro/Engr</u>	DATE: <u>1/27/06</u>
APPROVED BY: <u>[Signature]</u>	TITLE: <u>Enviro. ENGR.</u>	DATE: <u>2-1-06</u>

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
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Revised June 10, 2003

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"/> <input checked="" type="checkbox"/> Verbal Approval Received: <u>1/19/06</u> Yes <input type="checkbox"/> No <input type="checkbox"/>	4. Generator Dugan Production Corp.
2. Management Facility Destination JFJ Landfarm	5. Originating Site Gentle #2
3. Address of Facility Operator P. O. Box 420, Farmington, NM 87499-0420	6. Transporter TRC Construction
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### BRIEF DESCRIPTION OF MATERIAL:

Soil impacted by used motor and compressor oils. Excavated with backhoe. (notice of written order by BLM for cleanup action with deadline date of 1-30-06).

See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Paul S. Kora TELEPHONE NO. 325-1821

E-MAIL ADDRESS \_\_\_\_\_

(This space for State Use)

APPROVED BY: Denny Faint TITLE: Enviro/Engr DATE: 1/23/06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Bill Richardson  
Governor  
Joanne Prukop  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address <b>Dugan Production Corp</b> 709 E. Murray Drive Farmington, NM 87499-0420 505-325-1821	2. Destination Name: <b>J.F.J. Landfarm</b> C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone: 505-632-1782 Fax: 505-632-1876
3. Originating Site (name): Gentle #2	Location of the Waste (Street address &/or ULSTR): UL <u>L</u> , SECTION <u>9</u> , T- <u>28N</u> , R- <u>11W</u> or Street Address:
4. Source and Description of Waste Soil impacted by used motor and compressor oils	

I, Paul Sikora representative for :  
Print Name

Dugan Production Corp 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

XX 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):

X 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):

Phone No:

Title:

Pay Key/P.O.:

Date:



Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Gentle 2	Date Reported:	01-16-06
Laboratory Number:	35727	Date Sampled:	01-12-06
Chain of Custody:	15364	Date Received:	01-12-06
Sample Matrix:	Solid	Date Analyzed:	01-16-06
Preservative:	N/A	Date Digested:	01-16-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.060	0.001	5.0
Barium	0.597	0.001	100
Cadmium	0.162	0.001	1.0
Chromium	0.150	0.001	5.0
Lead	1.20	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

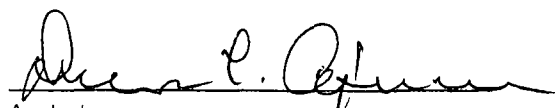
ND - Parameter not detected at the stated detection limit.

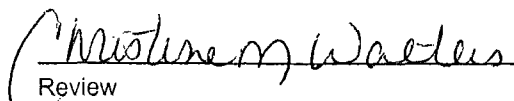
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: **Compressor Overflow.**

  
Analyst

  
Review

Multi-cyl oils  
motor

602466-00 MOBIL PEGASUS 805  
MATERIAL SAFETY DATA BULLETIN

---

## 1. PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: MOBIL PEGASUS 805  
SUPPLIER: MOBIL OIL CORP.  
NORTH AMERICA MARKETING AND REFINING  
1225 GALLOWES RD.  
FAIRFAX, VA 22037  
24 - Hour Emergency (call collect): 609-737-4411  
Product and MSDS Information: 800-662-4525 609-224-4644  
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).

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## 3. HAZARDS IDENTIFICATION

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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: Light 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 when ingested. If uncomfortable seek medical assistance.

---

## 5. FIRE-FIGHTING MEASURES

---

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water (eq.  
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, etc.

drinking water supply.

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

**UNUSUAL FIRE AND EXPLOSION HAZARD5:** None. Flash Point C(F): 245(473) (ASTM D-92). Flammable limits - LEL: NE, UEL: NE.

**NEPA HAZARD 10:** Health: 0, Flammability: 1, Reactivity: 0

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide. Possibly hydrocarbon fragments. Sulfur oxides and compounds.

---

## 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:** Light Amber

**ODOR:** Marketable

**ODOR THRESHOLD-ppm:** NE

pH: NA  
BOILING POINT C(F): NE  
MELTING POINT C(F): NA  
FLASH POINT C(F): 245(4/3) (ASTM D-92)  
FLAMMABILITY: NE  
AUTO FLAMMABILITY: NE  
EXPLOSIVE PROPERTIES: NA  
OXIDIZING PROPERTIES: NA  
VAPOR PRESSURE-mmHg 20 C: & 11; 0.1  
VAPOR DENSITY: > 2.0  
EVAPORATION RATE: NE  
RELATIVE DENSITY, 15/4 C: 0.89  
SOLUBILITY IN WATER: Negligible  
PARTITION COEFFICIENT: NE  
VISCOSITY AT 40 C, cSt: 130.0  
VISCOSITY AT 100 C, cSt: 13.5  
POUR POINT C(F): -12(10)  
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. Possibly hydrocarbon fragments. Sulfur oxides and compounds.  
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): Not applicable ---Harmful concentrations of mists and/or vapors are unlikely to be encountered through any customary or reasonably foreseeable handling, use, or misuse of this product.

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.

### ---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Severely solvent refined and severely hydrotreated mineral base oils have been tested at Mobil Environmental and Health Sciences Laboratory by dermal application 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.

### ---CHRONIC TOXICOLOGY (SUMMARY)---

The base oils in this product are severely solvent refined:

severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects.

## 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: Not established.

## 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:

Symbol: \* EU labeling not required..

Risk Phrase(s): R.

NA

Safety Phrase(s): Not applicable.

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 reportable under

SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
XYLENES (0.03%)	1330-20-7	22
ZINC (ELEMENTAL ANALYSIS) (4 lt; 0.04%)	7440-66-6	22
PHOSPHORODITHOIC ACID, O,O-DI	68649-42-3	22
CI-14-ALKYL ESTERS, ZINC SALTS (2:		
1) (ZDDP) (0.33%)		

--- 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=M1 29.1
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-RJ RTK	

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

16. OTHER INFORMATION

USE: ENGINE LUBRICANT

NOTE: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBs.

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

For Internal Use Only: MHC: 0\* 0\* NA 1\* 1\*, MPPEC: A, TRN: 602466-00, GLIS: 400795, CMCS97: 970936, REQ: US - MARKETING, SAFE USE: 1.  
EHS Approval Date: 10OCT1999

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.

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**CORAL ENERGY RESOURCES, L.P.**

Contract#: 010-NG-PS-07102

Contract Date: 04/01/2000

Deal Maker: John Tracy

Trade Date: 12/21/2005

Deal #: 104217

**CONFIRMATION****DUGAN PRODUCTION CORP**

Attention: Contract Administration

PO BOX 420

FARMINGTON, NM 87499-0420

Date: January 5, 2006

Fax: 1(505) 327-4613

Phone: (505) 325-1821

This Confirmation ("Confirmation") shall confirm and effectuate the agreement between CORAL ENERGY RESOURCES, L.P. and DUGAN PRODUCTION CORP ("Counterparty") regarding the purchase and sale of natural gas under the following terms.

Seller: DUGAN PRODUCTION CORP

Buyer: CORAL ENERGY RESOURCES, L.P.

<u>Period of Delivery</u> <u>Start /End Date</u>	<u>Transporter/ Delivery Point(s)</u>	<u>Level of Service</u>	<u>Designated Quantity</u> (MMBtu Per Day)	<u>Contract Price</u> (USD per MMBtu)
01/01/06 - 01/31/06	WILLMSFLD KUTZ PLANT Str/Mtr # KUTZ	Firm	55 MMBTU	Inside F.E.R.C GAS Market Report El Paso Ntrl Gas San Juan minus .02

Other Costs:

Special Terms:

Comments:

This Confirmation is being provided pursuant to and in accordance with the above referenced gas purchase and/or sale agreement between Counterparty and CORAL ENERGY RESOURCES, L.P. (the "Agreement") and constitutes part of and is subject to all of the provisions of the Agreement. With respect to the above stated deal identification number ( Deal# ) identifying this specific "Transaction", this Confirmation shall supersede any prior confirmations of this specific Transaction.

If no facsimile objection to this Confirmation is received by CORAL ENERGY RESOURCES, L.P. at (713) 265-2171, Attn: Energy Administration, from Counterparty by 5:00 p.m., Houston, Texas time, two (2) Business Days after delivery of this Confirmation to Counterparty, then this Confirmation shall be the final expression of all the terms hereof and shall be binding and enforceable against Seller and Buyer regardless of whether executed by Counterparty.

**DUGAN PRODUCTION CORP****CORAL ENERGY RESOURCES, L.P.**

Per: \_\_\_\_\_

Name/Title: \_\_\_\_\_

Date: \_\_\_\_\_

Per: 

Name/Title: Patricia Butler - Contracts Manager

Date: January 5, 2006

Please return the signed confirmation to Fax: (713) 265-2171

Questions and concerns can be directed to Energy Administration at: CORAL ENERGY RESOURCES, L.P. 909 FANNIN PLAZA LEVEL 1 HOUSTON, TX 77010  
PHONE: (713) 230-7505 FAX: (713) 265-2171

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
20 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised June 10, 2003

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

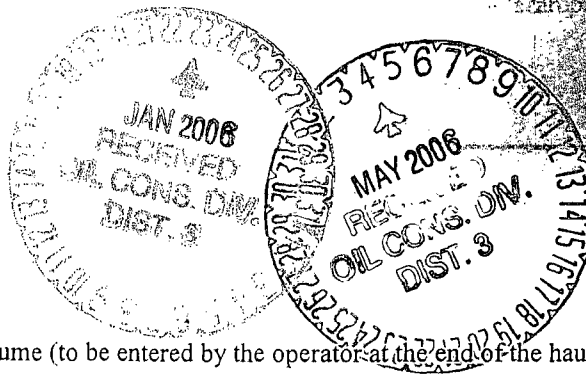
REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/> 1/19/06	4. Generator Dugan Production Corp.
2. Management Facility Destination JFJ Landfarm	5. Originating Site Gentle #3
3. Address of Facility Operator P. O. Box 420, Farmington, NM 87499-0420	6. Transporter TRC Construction
7. Location of Material (Street Address or ULSTR) P-8-28N-11W	8. State New Mexico
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 used motor and compressor oils. Excavated with backhoe. (notice of written order by BLM for cleanup action with deadline date of 1-30-06).

See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE [Signature]  
Waste Management Facility Authorized Agent

TITLE: BUSINESS MANAGER

DATE: 1/25/06

TYPE OR PRINT NAME: VINCE SCOTT

TELEPHONE NO. \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

space for State Use)

APPROVED BY: [Signature]

TITLE: Enviro/Engr

DATE: 1/27/06

APPROVED BY: [Signature]

TITLE: ENVIRO. ENGR.

DATE: 2-1-06



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
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State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised June 10, 2003

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

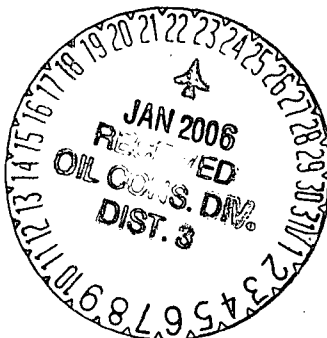
## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Verbal Approval Received? Yes <input type="checkbox"/> No <input type="checkbox"/> <i>1/27/06</i>	4. Generator Dugan Production Corp.
2. Management Facility Destination JFJ Landfarm	5. Originating Site Gentle #3
3. Address of Facility Operator P. O. Box 420, Farmington, NM 87499-0420	6. Transporter TRC Construction
7. Location of Material (Street Address or ULSTR) P-8-28N-11W	8. State New Mexico
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See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: \_\_\_\_\_ TELEPHONE NO. \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

(This space for State Use)

APPROVED BY: Wenny Faust TITLE: \_\_\_\_\_ DATE: 1/27/06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Bill Richardson  
Governor  
Joanne Prukop  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Dugan Production Corp 709 E. Murray Drive Farmington, NM 87499-0420 505-325-1821	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone: 505-632-1782 Fax: 505-632-1876
3. Originating Site (name): Gentle #3	Location of the Waste (Street address &/or ULSTR): UL <u>P</u> , SECTION <u>8</u> , T- <u>28N</u> , R- <u>11W</u> or Street Address:
4. Source and Description of Waste Soil impacted by used motor and compressor oils	

I, Paul Sikora representative for :

Print Name

**Dugan Production Corp**

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 1402.C and D.

Name (Original Signature):

Phone No:

505-325-1821

Title: Senior Production Foreman Pay Key/P.O.:

Date:

1-18-10

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Gentle 3	Date Reported:	01-16-06
Laboratory Number:	35726	Date Sampled:	01-12-06
Chain of Custody:	15364	Date Received:	01-12-06
Sample Matrix:	Solid	Date Analyzed:	01-16-06
Preservative:	N/A	Date Digested:	01-16-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.130	0.001	5.0
Barium	0.437	0.001	100
Cadmium	0.036	0.001	1.0
Chromium	0.454	0.001	5.0
Lead	1.19	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

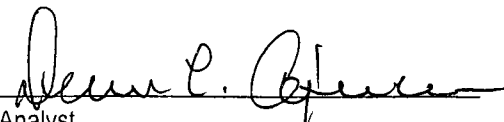
ND - Parameter not detected at the stated detection limit.

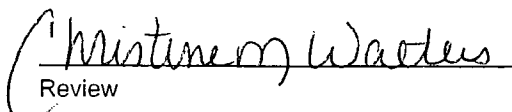
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: **Compressor Overflow.**

  
Analyst

  
Review

Multigrade oils  
motor

602466-00 MOBIL PEGASUS 805  
MATERIAL SAFETY DATA BULLETIN

---

## 1. PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: MOBIL PEGASUS 805  
SUPPLIER: MOBIL OIL CORP.  
NORTH AMERICA MARKETING AND REFINING  
3225 GALLOWAY RD.  
FAIRFAX, VA 22037  
24 - Hour Emergency (call collect): 609-737-4411  
Product and MSDS information: 800-662-4525 609-224-4644  
CHEMTREC: 800-424-9300 202-463-7616

---

## 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).

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## 3. HAZARDS IDENTIFICATION

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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: Light Amber Liquid. DOT ERG No. - NA

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## 4. FIRST AID MEASURES

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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 when ingested. If uncomfortable seek medical assistance.

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## 5. FIRE-FIGHTING MEASURES

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EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water (eq).  
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 for fire control or dilution from entering streams, sewers, etc.

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): 245(473) (ASTM D-92). Flammable limits - LEL: NE, UEL: NE.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Possibly hydrocarbon fragments. Sulfur oxides and compounds.

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## 6. ACCIDENTAL RELEASE MEASURES

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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

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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

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

APPEARANCE: Liquid

COLOR: Light Amber

ODOR: Marketable

ODOR THRESHOLD-ppm: NE

pH: NA  
BOILING POINT C(F): NE  
MELTING POINT C(F): NA  
FLASH POINT C(F): 245(473) (ASTM D-92)  
FLAMMABILITY: NE  
AUTO FLAMMABILITY: NE  
EXPLOSIVE PROPERTIES: NA  
OXIDIZING PROPERTIES: NA  
VAPOR PRESSURE-mmHg 20 C: 4.1; 0.1  
VAPOR DENSITY: > 2.0  
EVAPORATION RATE: NE  
RELATIVE DENSITY, 15/4 C: 0.89  
SOLUBILITY IN WATER: Negligible  
PARTITION COEFFICIENT: NE  
VISCOSITY AT 40 C, cSt: 130.0  
VISCOSITY AT 100 C, cSt: 13.5  
POUR POINT C(F): -12(10)  
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. Possibly hydrocarbon fragments. Sulfur oxides and compounds.  
HAZARDOUS POLYMERIZATION: Will not occur.

---

## 11. TOXICOLOGICAL DATA

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### ---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): Not applicable ---Harmful concentrations of mists and/or vapors are unlikely to be encountered through any customary or reasonably foreseeable handling, use, or misuse of this product.

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.

### ---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Severely solvent refined and severely hydrotreated mineral base oils have been tested at Mobil Environmental and Health Sciences Laboratory by dermal application 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.

### ---CHRONIC TOXICOLOGY (SUMMARY)---

The base oils in this product are severely solvent refined:

severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects.

---

## 12. ECOLOGICAL INFORMATION

---

ENVIRONMENTAL FATE AND EFFECTS: Not established.

---

## 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:

Symbol: \* EU labeling not required..

Risk Phrase(s): R.

NA

Safety Phrase(s): Not applicable.

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 reportable under

SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
XYLENES (0.03%)	1330-20-7	22
ZINC (ELEMENTAL ANALYSIS) (4 lt; 0.04%)	7440-66-6	22
PHOSPHORODITHIOIC ACID, O,O-DI	68649-42-3	22
CI-14-ALKYL ESTERS, ZINC SALTS (2:		
1) (ZDDP) (0.33%)		

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL	6 IARC 1	11=TSCA 4	16=CA P65 CARC	21=LA RTK
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3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
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5=NTP SUS	10=OSHA 7	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: ENGINE LUBRICANT

NOTE: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBS.

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

For Internal Use Only: MHC: 0' 0' NA 1\* 1\*, MPPEC: A, TRN: 602466-00, GLIS: 400795, CMCS97: 970936, REQ: US - MARKETING, SAFE USE: 1.  
EHS Approval Date: 10OCT1999

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**CORAL ENERGY RESOURCES, L.P.**

Contract#: 010-NG-PS-07102  
 Contract Date: 04/01/2000  
 Deal Maker: John Tracy

Trade Date: 12/21/2005  
 Deal #: 104217

**CONFIRMATION**

**DUGAN PRODUCTION CORP**  
 Attention: Contract Administration  
 PO BOX 420  
 FARMINGTON, NM 87499-0420

Date: January 5, 2006  
 Fax: 1(505) 327-4613  
 Phone: (505) 325-1821

This Confirmation ("Confirmation") shall confirm and effectuate the agreement between CORAL ENERGY RESOURCES, L.P. and DUGAN PRODUCTION CORP ("Counterparty") regarding the purchase and sale of natural gas under the following terms.

Seller: **DUGAN PRODUCTION CORP**

Buyer: **CORAL ENERGY RESOURCES, L.P.**

<u>Period of Delivery Start/End Date</u>	<u>Transporter/ Delivery Point(s)</u>	<u>Level of Service</u>	<u>Designated Quantity (MMBtu Per Day)</u>	<u>Contract Price (USD per MMBtu )</u>
01/01/06 - 01/31/06	WILLMSFLD KUTZ PLANT Stn/Mtr # KUTZ	Firm	55 MMBTU	Inside F.E.R.C GAS Market Report El Paso Ntrl Gas San Juan minus .02

Other Costs:

Special Terms:

Comments:


This Confirmation is being provided pursuant to and in accordance with the above referenced gas purchase and /or sale agreement between Counterparty and CORAL ENERGY RESOURCES, L.P. (the "Agreement") and constitutes part of and is subject to all of the provisions of the Agreement. With respect to the above stated deal identification number ( Deal# ) identifying this specific "Transaction", this Confirmation shall supersede any prior confirmations of this specific Transaction.

If no facsimile objection to this Confirmation is received by CORAL ENERGY RESOURCES, L.P. at (713) 265-2171, Attn: Energy Administration, from Counterparty by 5:00 p.m., Houston, Texas time, two (2) Business Days after delivery of this Confirmation to Counterparty, then this Confirmation shall be the final expression of all the terms hereof and shall be binding and enforceable against Seller and Buyer regardless of whether executed by Counterparty.

**DUGAN PRODUCTION CORP**

**CORAL ENERGY RESOURCES, L.P.**

Per: \_\_\_\_\_  
 Name/Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

Per:   
 Name/Title: **Patricia Butler - Contracts Manager**  
 Date: **January 5, 2006**

Please return the signed confirmation to Fax: (713) 265-2171

Questions and concerns can be directed to Energy Administration at: CORAL ENERGY RESOURCES, L.P. 909 FANNIN PLAZA LEVEL 1 HOUSTON, TX 77010  
 PHONE: (713) 230-7505 FAX: (713) 265-2171

District I  
1625 N. First St. Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
30 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised June 10, 2003

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒

Verbal Approval Received: Yes ☐ No ☐

4. Generator  
Dugan Production Corp.

5. Originating Site  
Aloha #1

2. Management Facility Destination JFJ Landfarm

6. Transporter  
TRC Construction

3. Address of Facility Operator P. O. Box 420, Farmington, NM 87499-0420

8. State  
New Mexico

7. Location of Material (Street Address or ULSTR) L-16-28N-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 by used motor and compressor oils. Excavated with backhoe. (notice of written order by BLM for cleanup action with deadline date of 1-30-06).

See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE [Signature]  
Waste Management Facility Authorized Agent

TITLE: Business Manager DATE: 1/25/06

TYPE OR PRINT NAME: Vincent J. [Signature] TELEPHONE NO. \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

(This space for State Use)

APPROVED BY: [Signature] TITLE: Enviro/Engl DATE: 1/27/06  
APPROVED BY: [Signature] TITLE: ENVIRO. ENGR. DATE: 2-1-06

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
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## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <u>1/23/06</u>	4. Generator Dugan Production Corp.
2. Management Facility Destination JFJ Landfarm	5. Originating Site Aloha #1
3. Address of Facility Operator P. O. Box 420, Farmington, NM 87499-0420	6. Transporter TRC Construction
7. Location of Material (Street Address or ULSTR) L-16-28N-11W	8. State New Mexico
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.	

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See attached MSDS sheet on motor oil & compressor oil



Estimated Volume less than 10 yards cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: ~~Paul~~ TELEPHONE NO. \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

(This space for State Use)

APPROVED BY: Denny Faut TITLE: \_\_\_\_\_ DATE: 1/27/06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Bill Richardson  
Governor  
Joanne Prukop  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Dugan Production Corp 709 E. Murray Drive Farmington, NM 87499-0420 505-325-1821	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone: 505-632-1782 Fax: 505-632-1876
3. Originating Site (name): Aloha #1	Location of the Waste (Street address &/or ULSTR): UL <u>L</u> , SECTION <u>16</u> , T- <u>28N</u> , R- <u>11W</u> or Street Address:
4. Source and Description of Waste Soil impacted by used motor and compressor oils	

I, Paul Sikora representative for :  
Print Name

Dugan Production Corp 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

XX 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):

X 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): Paul Sikora Phone No: 505-325-1821

Title: Senior Production Foreman Pay Key/P.O.:

Date: 1-18-6

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Aloha 1	Date Reported:	01-16-06
Laboratory Number:	35728	Date Sampled:	01-12-06
Chain of Custody:	15364	Date Received:	01-12-06
Sample Matrix:	Solid	Date Analyzed:	01-16-06
Preservative:	N/A	Date Digested:	01-16-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.151	0.001	5.0
Barium	4.79	0.001	100
Cadmium	0.127	0.001	1.0
Chromium	0.277	0.001	5.0
Lead	1.35	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

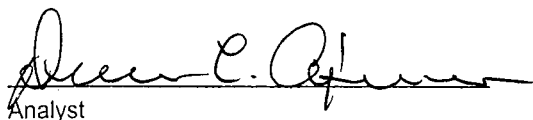
ND - Parameter not detected at the stated detection limit.

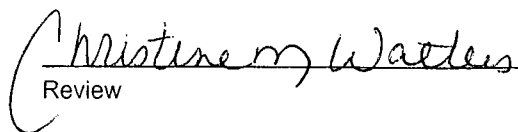
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.  
SW-846, USEPA, December 1996.

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: **Compressor Overflow.**

  
Analyst

  
Review

Multigrade oils  
motor

602466-00 MOBIL PEGASUS 805  
MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL PEGASUS 805  
SUPPLIER: MOBIL OIL CORP.  
NORTH AMERICA MARKETING AND REFINING  
4225 GALLOWAY RD.  
FAIRFAX, VA 22037  
24 - Hour Emergency (call collect): 609-737-4411  
Product and MSDS Information: 800-662-4525 609-224-4644  
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: Light 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 when ingested. If uncomfortable seek medical assistance.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water (eq.  
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, etc.

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): 245(473) (ASTM D-92). Flammable limits - LEL: NE, UEL: NE.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Possibly hydrocarbon fragments. Sulfur oxides and compounds.

---

## 6. ACCIDENTAL RELEASE MEASURES

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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

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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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

APPEARANCE: Liquid

COLOR: Light Amber

ODOR: Marketable

ODOR THRESHOLD-ppm: NE

pH: NA  
BOILING POINT C(F): NE  
MELTING POINT C(F): NA  
FLASH POINT C(F): 245(473) (ASTM D-92)  
FLAMMABILITY: NE  
AUTO FLAMMABILITY: NE  
EXPLOSIVE PROPERTIES: NA  
OXIDIZING PROPERTIES: NA  
VAPOR PRESSURE-mmHg 20 C: < 10; 0.1  
VAPOR DENSITY: > 2.0  
EVAPORATION RATE: NE  
RELATIVE DENSITY, 15/4 C: 0.89  
SOLUBILITY IN WATER: Negligible  
PARTITION COEFFICIENT: NE  
VISCOSITY AT 40 C, cSt: 130.0  
VISCOSITY AT 100 C, cSt: 13.5  
POUR POINT C(F): -12(10)  
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

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STABILITY (THERMAL, LIGHT, ETC.): Stable.  
CONDITIONS TO AVOID: Extreme heat.  
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Possibly hydrocarbon fragments. Sulfur oxides and compounds.  
HAZARDOUS POLYMERIZATION: Will not occur.

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## 11. TOXICOLOGICAL DATA

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### ---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): Not applicable ---Harmful concentrations of mists and/or vapors are unlikely to be encountered through any customary or reasonably foreseeable handling, use, or misuse of this product.

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.

### ---SUBCHRONIC TOXICOLOGY (SUMMARY)---

Severely solvent refined and severely hydrotreated mineral base oils have been tested at Mobil Environmental and Health Sciences laboratory by dermal application 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.

### ---CHRONIC TOXICOLOGY (SUMMARY)---

The base oils in this product are severely solvent refined and



severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects.

## 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: Not established.

## 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:

Symbol: \* EU labeling not required..

Risk Phrase(s): R.

NA

Safety Phrase(s): Not applicable.

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 reportable under

SARA (313) toxic release program.

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
XYLENES (0.03%)	1330-20-7	22
ZINC (ELEMENTAL ANALYSIS) (4 lt; 0.04%)	7440-66-6	22
PHOSPHORODITHOIC ACID, O,O-DI	68649-42-3	22
C1-14-ALKYL ESTERS, ZINC SALTS (2:		
1) (ZDDP) (0.33%)		

--- 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=RJ RTK	

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

-----  
**16. OTHER INFORMATION**  
-----

USE: ENGINE LUBRICANT

NOTE: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBs.

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

\*\*\*\*\*  
For Internal Use Only: MHC: 0\* 0\* NA 1\* 1\*, MPPEC: A, TRN: 602466-00,  
GLIS: 400795, CMCS97: 970936, REQ: US - MARKETING, SAFE USE: 1.  
EHS Approval Date: 10OCT1999  
\*\*\*\*\*

\*\*\*\*\*  
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  
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**CORAL ENERGY RESOURCES, L.P.**

Contract#: 010-NG-PS-07102  
 Contract Date: 04/01/2000  
 Deal Maker: John Tracy

Trade Date: 12/21/2005

Deal #: 104217

**CONFIRMATION****DUGAN PRODUCTION CORP**

Attention: Contract Administration

PO BOX 420  
 FARMINGTON, NM 87499-0420

Date: January 5, 2006

Fax: 1(505) 327-4613

Phone: (505) 325-1821

This Confirmation ("Confirmation") shall confirm and effectuate the agreement between CORAL ENERGY RESOURCES, L.P. and DUGAN PRODUCTION CORP ("Counterparty") regarding the purchase and sale of natural gas under the following terms.

Seller: DUGAN PRODUCTION CORP

Buyer: CORAL ENERGY RESOURCES, L.P.

<u>Period of Delivery Start/End Date</u>	<u>Transporter/ Delivery Point(s)</u>	<u>Level of Service</u>	<u>Designated Quantity (MMBtu Per Day)</u>	<u>Contract Price (USD per MMBtu)</u>
01/01/06 - 01/31/06	WILLMSFLD KUTZ PLANT Stn/Mtr # KUTZ	Firm	55 MMBTU	Inside F.E.R.C GAS Market Report El Paso Ntrl Gas San Juan minus .02

Other Costs:

Special Terms:

Comments:

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**DUGAN PRODUCTION CORP****CORAL ENERGY RESOURCES, L.P.**

Per: \_\_\_\_\_

Name/Title: \_\_\_\_\_

Date: \_\_\_\_\_

Per: 

Name/Title: Patricia Butler - Contracts Manager

Date: January 5, 2006

Please return the signed confirmation to Fax: (713) 265-2171

Questions and concerns can be directed to Energy Administration at: CORAL ENERGY RESOURCES, L.P. 909 FANNIN PLAZA LEVEL 1 HOUSTON, TX 77010  
 PHONE: (713) 230-7505 FAX: (713) 265-2171

RECEIVED

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State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> From Brandon Powell - OCO	4. Generator: Conoco-Phillips (Burlington Resources)  5. Originating Site: Ute 31-11 # 101
2. Management Facility Destination: JFJ Landfarm L.L.C.	6. Transporter:
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	8. State: NM
7. Location of Material (Street Address or ULSTR) U-B, S-01, 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. <input checked="" type="checkbox"/> 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 up of impacted soil from spill of unused antifreeze (MSDS attached)

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

SIGNATURE Joel Owens TITLE: Operations Manager DATE: 9/21/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: <u>Brandon Powell</u>	TITLE: <u>Enviro/spec</u>	DATE: <u>9/21/06</u>
APPROVED BY: <u>[Signature]</u>	TITLE: <u>Enviro Eng</u>	DATE: <u>9/26/06</u>

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/>  Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> <i>From Brandon Powell - OGD</i>		4. Generator: Conoco Phillips (Burlington Resources)
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: Ute 31-11 # 101
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		6. Transporter:
7. Location of Material (Street Address or ULSTR) U-B, S-01, T-32N, R-11W		8. State: NM
9. <u>Circle One</u> :  A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>		

**BRIEF DESCRIPTION OF MATERIAL:** clean up of impacted soil from spill of unused antifreeze (MSDS attached)

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

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 9/21/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

**COPY**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**Bill Richardson**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
**Oil Conservation Division**

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address ConocoPhillips (Formerly Burlington Resources) 3401 E 30 <sup>th</sup> St. Farmington, New Mexico 87499	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-632-1876
3. Originating Site (name): Ute 32-11 #101 hBR	Location of the Waste (Street address &/or ULSTR): U- B S- 01 T- 32N R- 11W La Plata County, Colorado
4. Source and Description of Waste Clean up of impacted soil from spill of unused antifreeze.	
5.	

I, Ed Hasely representative for :  
Print Name

Burlington Resources 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: Env. Rep  
Date: 9/20/06

**MATERIAL SAFETY DATA SHEET****COASTALGUARD 50 ANTIFREEZE/COOLANT (REPROCESSED)**

1 HMIS HEALTH  
1 HMIS FLAMMABILITY  
0 HMIS REACTIVITY  
B HMIS PERSONAL PROTECTION

**SECTION I - IDENTIFICATION**

DISTRIBUTED BY..... COASTAL CHEMICAL CO., INC  
(318)893-3862  
EMERGENCY PHONE NUMBER... CHEMTREC (800)424-9300  
EFFECTIVE DATE..... 2/06/1996  
MANUFACTURER'S NAME..... COASTAL CHEMICAL CO., INC.  
TRADE NAME..... COASTALGUARD 50 ANTIFREEZE/COOLANT (REPROCESSED)  
CHEMICAL FAMILY..... INHIBITED ETHYLENE GLYCOL SOLUTION  
CAS NUMBER..... Blended Product  
CHEMICAL FORMULA..... Blended Product

**SECTION II - HAZARDOUS INGREDIENTS**

HAZARDOUS COMPONENTS	%	TLV (Units)	PROD. CAS #
ETHYLENE GLYCOL	50 %	ACGIH CEILING 50ppm	107-21-1

**SECTION III - PHYSICAL DATA**

FREEZING POINT (F)..... APPROX. -34 DEG F  
VAPOR PRESSURE (mm Hg)... 0.12 MMHG @ 25 C  
VAPOR DENSITY (Air=1).... 2.14  
SOLUBILITY IN H2O..... COMPLETELY MISCIBLE  
APPEARANCE/ODOR..... PINK, PRACTICALLY ODORLESS  
SPECIFIC GRAVITY (H2O=1). 1.06 typical  
PH..... 10.5 - 11.0

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

FLASH POINT..... WATER BLEND, NO FLASH AT BOILING POINT OF 212 DEG F.  
AFTER WATER EVAPORATES FLASH APPROX. 247 DEG F.  
LOWER FLAME LIMIT..... N/D  
HIGHER FLAME LIMIT..... N/D  
EXTINGUISH MEDIA..... Water fog or spray, Foam, Dry Powder, Carbon Dioxide (CO2).  
UNUSUAL FIRE HAZARD..... NONE KNOWN Approach fire from upwind side. Avoid breathing smoke, fumes, mist or vapors on the downwind side.

**SECTION V - HEALTH HAZARD DATA**

**MATERIAL SAFETY DATA SHEET****COASTALGUARD 50 ANTIFREEZE/COOLANT (REPROCESSED)**

=====

THRESHOLD LIMIT VALUE.... 50 PPM BASED ON ETHYLENE GLYCOL

**ROUTES OF ENTRY****INHALATION?**IRRITANT, POSSIBLY  
NARCOTIC**SKIN?**Not expected to  
cause significant  
health hazard**INGESTION?**Ingestion of very  
large amounts  
could  
cause serious  
injury, or even  
death.

**HEALTH HAZARDS.....** ACUTE: Vapors may be irritating to eyes, or mucous membranes. Avoid inhalation or eye contact. CHRONIC: Kidney and liver damage possible. May cause reproductive disorders.

**CARCINOGENICITY**

NO

**NTP?**

NO

**IARC MONOGRAPHS?**

NO

**OSHA REGULATED**

NO

**OVER EXPOSURE EFFECTS....** Skin irritation develops slowly after contact. Eye irritation develops immediately upon contact. Symptoms of overexposure: headache, fatigue, nausea, irritation of respiratory tract, dizziness, staggering gait, confusion, unconsciousness.

**FIRST AID PROCEDURES.....** In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention. If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person.

## =====

**SECTION VI - REACTIVITY DATA**

=====

**CHEMICAL STABILITY.....** Product is stable**CONDITIONS TO AVOID.....** Heat may cause internal pressure which could rupture container.**INCOMPATIBLE MATERIALS...** OXIDIZING MATERIALS & OXIDIZERS**DECOMPOSITION PRODUCTS...** From fire; Smoke, Carbon dioxide, & Carbon Monoxide**HAZARDOUS POLYMERIZATION.** Will not occur**POLYMERIZATION AVOID.....** None

## =====

**SECTION VII - SPILL OR LEAK PROCEDURE**



# **MATERIAL SAFETY DATA SHEET**

## **COASTALGUARD 50 ANTIFREEZE/COOLANT (REPROCESSED)**

**FOR SPILL.....** In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations

**WASTE DISPOSAL METHOD....** Industrial Waste. Follow Federal, State and local laws.

### **SECTION VIII - SPECIAL PROTECTION**

**RESPIRATORY PROTECTION...** When ventilation is not adequate, use of NIOSH approved organic vapor/acid gas cartridge respirator is recommended.

**VENTILATION.....** Required in closed areas

**MECHANICAL EXHAUST.....** Required in closed areas

**LOCAL EXHAUST.....** Desired

**PROTECTIVE GLOVES.....** Wear impervious gloves

**EYE PROTECTION.....** Use chemical goggles or full face shield.

**OTHER PROTECTIVE EQUIPMENT.....** Chemical type apron recommended

### **SECTION IX - SPECIAL HANDLING**

**HANDLING AND STORAGE.....** Store away from oxidizers or materials bearing a yellow "DOT" label. Keep out of sun and away from heat. Clean up leaks immediately to prevent soil or water contamination.

**PRECAUTIONARY MEASURES...** Avoid contact with skin, eyes, and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown in Section V. Use with adequate ventilation.

**HAZARD CLASS.....** Drums - NOT REGULATED  
Bulk - Class 9

**DOT SHIPPING NAME.....** Drums - NOT REGULATED  
Bulk - Other regulated substances, liquid, n.o.s. (ethylene glycol)

**REPORTABLE QUANTITY (RQ)...** 10,000 pounds

**UN NUMBER.....** None

**NA #.....** Drums - None; Bulk - NA3082

**PACKAGING SIZE.....** N/A

### **SECTION X - REGULATORY**

**FDA ACUTE.....** YES

**CHRONIC.....** YES

**IGNITABILITY.....** NO

**REACTIVITY.....** NO

**MATERIAL SAFETY DATA SHEET**

**COASTALGUARD 50 ANTIFREEZE/COOLANT (REPROCESSED)**

HAZARD IDENTIFICATION

HAZARD STATEMENT..... NO

HAZARD RQ VALUE..... 10,000 pounds for ethylene glycol

HAZARD TPO..... None

HAZARD RQ..... None

SECTION 313..... YES, ETHYLENE GLYCOL 107-21-1 50% (1/1/87)

HAZARD HAZARD WASTE #..... None

HAZARD AIR..... Yes, Section 111 Volatile Organic Compounds & Section 112 Statutory Air Pollutants (1990 Amendments)

HAZARD WATER..... No

FOOT NOTES N/A - not applicable N/D - no data available

< - means less than > - means greater than

App. - approximate Est. - estimated

PREPARED BY:..... David Trahan, C.F.T. - 318-898-0001

THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.

### REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>	4. Generator: BP America Production Co. 5. Originating Site: Alva Short GV B #1 6. Transporter: 8. State: NM
2. Management Facility Destination: JFJ Landfarm L.L.C.	
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	
7. Location of Material (Street Address or ULSTR) S-18, T-33N, R-09W	
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="checkbox"/> 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: 2 Esch 50 lb. bags of Sodium Carbonate (Soda Ash), weathered open & hardened from rainwater. Listed as EPA Non-Hazardous Waste. MSDS attached.

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

SIGNATURE: [Signature] TITLE: Operations Manager DATE: 9/28/2006  
Waste Management Facility Authorized Agent  
TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-3782  
E-MAIL ADDRESS: jowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: <u>[Signature]</u>	TITLE: <u>Environ. Sec.</u>	DATE: <u>9-27-06</u>
APPROVED BY: <u>[Signature]</u>	TITLE: <u>Environ. Sec.</u>	DATE: <u>10-18-06</u>

RECEIVED

OCT 11 2006

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505



## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON  
Governor  
Betty Rivera  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

### CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: BP AMERICA PROD. CO. 580 ARBURY RD. DURANGO, CO 81301 (773) 247-4400	2. Destination Name: JFJ LANDFARM C/O Ind. Ecosystems Inc. P.O. Box 2043 Artesia, NM 87410
3. Originating Site (name): ALVA SHORT GV B #1	Location of the Waste (Street address &/or ULSTR): SE4 NW4 SEC. 18 - T33N - R9W LA PLATA COUNTY, COLORADO
attach list of originating sites as appropriate	
4. Source and Description of Waste: 2 Esch 50 lb BGS SODIUM CARBONATE (SODA ASH), BAGS WEATHERED OPEN & HARDENED WITH RAW WATER. LISTED AS EPA NON-HAZARDOUS WASTE.	

1. JEFF OLIVER representative for:  
Print Name

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised March 17, 1999

Submit Original  
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District Office

**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

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2. Management Facility Destination: JFJ Landfarm L.L.C.	
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	
7. Location of Material (Street Address or ULSTR) S-18, T-33N, R-09W	
9. <u>Circle One</u> :  A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>	

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

SIGNATURE Joel Owens TITLE: Operations Manager DATE: 9/28/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: BP TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

DUPLICATE

SEP 2006



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address BP AMERICA PROD. CO. 380 AIRPORT RD. DURANGO, CO 81301 (970) 247-6800	2. Destination Name: JFJ LANDFARM C/O IND. ECOSYSTEM INC. #81 CR 3150 AZTEC, NM 87410
3. Originating Site (name): ALVA SHORT GU B #1	Location of the Waste (Street address &/or ULSTR): SE/4 NW/4 SEC. 18 - T33N - R9W LA PLATA COUNTY, COLORADO
attach list of originating sites as appropriate	
4. Source and Description of Waste 2 EACH 50 # BAGS SODIUM CARBONATE (SODA ASH), BAGS WEATHERED OPEN & HARDENED WITH RAIN WATER. LISTED AS EPA NON-HAZARDOUS WASTE.	

I, JEFF BLAGG representative for :  
Print Name

BP - AMERICA PRODUCTION 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): Jeff Blagg

Title: AGENT

Date: SEPT 27, 2006


**OCI CHEMICAL CORPORATION**


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**OUR PRODUCTS**
**Specification Sheets**

The specification sheet below is provided for your reference. To access specification sheets for other OCI soda ash products, click one of the links at left. To download PDF, right-click on icon and select the "Save..." option

**PRODUCT  
DATA**


To download PDF, right-click on icon and select "Save..." option.

- ▶ [Technical Grade](#)
- ▶ [High Purity](#)
- ▶ [Dense Grade](#)

**SODA ASH (SODIUM CARBONATE, ANHYDROUS)  
TECHNICAL GRADE**

FORMULA	Na <sub>2</sub> CO <sub>3</sub>
NOMENCLATURE	Sodium Carbonate, Anhydrous Soda Ash
CAS NUMBER	497-19-8
CAS INDEX NAME	Carbonic Acid Disodium Salt
GRADE	Technical
MOLECULAR WEIGHT	106.0
DESCRIPTION	Sodium carbonate, anhydrous, is a white odorless, granular material, free of visible contamination. Meets federal specification O-S-571 G, Type II (Light) and Type III (Dense). Meets AWWA Std. B201-92. Meets chemical requirements of ASTM Specification D458-79. It has been certified by NSF International to ANSI/NSF Std. 60-1988 for use in the treatment of drinking water at a maximum dosage of 100mg/L.
CONTAINERS	50- and 100-lb. net weight paper bags Jumbo hopper rail cars Bulk trucks Ocean vessels Super Sacks

**SPECIFICATIONS:**
**DENSE:**

PROPERTY	SPECIFICATION	TYPICAL
Sodium Carbonate (% Na <sub>2</sub> CO <sub>3</sub> )	99.6 minimum	99.90

Sodium Oxide (%Na <sub>2</sub> O)	58.30 minimum	58.50
Sodium Sulfate (% Na <sub>2</sub> SO <sub>4</sub> )	0.15 maximum	0.04
Sodium Chloride (%NaCl)	0.08 maximum	0.01
Water Insolubles, %	0.05 maximum	0.02
Bulk Density, Lbs/ft <sup>3</sup>	56.2-65.0	60.00
Sieving, % (Cumulative):		
On 20 mesh	0.4 maximum	0.20
On 30 mesh	5.0 maximum	1.90
On 100 mesh	85.0 minimum	96.20
Through 200 mesh	2.0 maximum	0.70

**LITE®:**

PROPERTY	SPECIFICATION	TYPICAL
Sodium Carbonate (% Na <sub>2</sub> CO <sub>3</sub> )	99.2 minimum	99.80
Sodium Oxide (%Na <sub>2</sub> O)	58.1 minimum	58.40
Sodium Sulfate (% Na <sub>2</sub> SO <sub>4</sub> )	0.15 maximum	0.085
Sodium Chloride (%NaCl)	0.09 maximum	0.03
Water Insolubles, %	0.05 maximum	0.03
Bulk Density, Lbs/ft <sup>3</sup>	44.0-54.0	48.00
Sieving, % (Cumulative):		
On 20 mesh	5.0 maximum	1.50
On 30 mesh	10.0 maximum	4.00
On 100 mesh	80.0 minimum	89.70
Through 200 mesh	5.0 maximum	1.40

**Some common uses for sodium carbonate:**

INDUSTRY	APPLICATIONS
Agriculture	Water pond sealant
Ceramics and Glass	In the manufacture of ceramics and glass
Chemical	In the manufacture of sodium compounds; in photographic materials; in the neutralization of acids, for pH adjustment; for stack gas scrubbing
Metallurgy	In aluminum production; in metal processing
Petroleum	In petroleum refining; in drilling muds
Pulp and Paper	In the manufacture of pulp and paper
Soap and Synthetic	In the manufacture of soaps, cleaners, and

Detergents	detergents; for saponification of fatty acids
Textiles	In the manufacture of textiles; in cotton/fabric bleaching
Water and Waste Treatment	pH and alkalinity control, softener (recarbonation), ion exchange regeneration
Gas Treatment	Flue gas scrubbing for removal of SO <sub>3</sub>

**OCI CHEMICAL  
CORPORATION**

1/99

Two Corporate Drive, PO Box  
902  
Shelton, CT 06484  
(203) 225-3100

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## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 1. CHEMICAL PRODUCT AND COMPANY DESCRIPTION

---

**OCI Chemical Corp.**  
Two Corporate Drive  
Shelton, CT 06484

**Emergency Phone Numbers:**

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT  
CONTACT: CHEMTREC (800-424-9300) IN THE UNITED STATES OR OCI (1-203-225-3100  
or 1-888-278-1657); IN CANADA CONTACT CANUTEC (613) 996-6666.

**For Product Information:**

(800) 865-1774

**Chemical Name or Synonym:**

DISODIUM CARBONATE; SODA ASH; CARBONIC ACID, DISODIUM SALT

**Molecular Formula:**

Na<sub>2</sub>CO<sub>3</sub>

---

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

---

Component	CAS Reg Number	OSHA Hazard	Percentage
SODIUM CARBONATE	497-19-8	Y	100

---

### 3. HAZARDS IDENTIFICATION

---

**A. Physical Appearance and Odor:**

White granules solid, odorless

**Warning Statements:**

**WARNING: CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION**

**B. POTENTIAL HEALTH EFFECTS**

End of Page 1

Continued on Next Page



OCI CHEMICAL CORP.

## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 3. HAZARDS IDENTIFICATION (Continued)

---

**Acute Eye:**

Causes irritation.

**Acute Skin:**

May cause redness, swelling.

**Acute Inhalation:**

May cause upper respiratory tract irritation, lung irritation.

**Acute Ingestion:**

Low acute oral toxicity. May cause nausea, vomiting, diarrhea, irritation, corrosion.

**Chronic Effects:**

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

---

### 4. FIRST AID MEASURES

---

**FIRST AID MEASURES FOR ACCIDENTAL:**

**Eye Exposure:**

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention.

**Skin Exposure:**

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

**Inhalation:**

Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek immediate medical attention.

End of Page 2

Continued on Next Page

## **SODA ASH (SODIUM CARBONATE, ANHYDROUS)**

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

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### **4.    *FIRST AID MEASURES (Continued)***

---

#### **Ingestion:**

If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

#### **MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:**

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

#### **NOTES TO PHYSICIAN:**

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

---

### **5.    *FIRE FIGHTING MEASURES***

---

#### **FIRE HAZARD DATA:**

##### **Flash Point:**

Not Applicable

##### **Extinguishing Media:**

Not combustible. Use extinguishing method suitable for surrounding fire.

##### **Special Fire Fighting Procedures:**

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

##### **Unusual Fire and Explosion Hazards:**

Not combustible.

##### **Hazardous Decomposition Materials (Under Fire Conditions)**

Carbon dioxide

## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 6. ACCIDENTAL RELEASE MEASURES

---

#### **Evacuation Procedures and Safety:**

Ventilate closed spaces before entering. Wear appropriate protective gear for situation. See Personal Protection information in Section 8.

#### **Containment of Spill:**

Follow procedure described below under Cleanup and Disposal of Spill.

#### **Cleanup and Disposal of Spill:**

Scrape up and place in appropriate closed container (see Section 7: Handling and Storage). Collect washings for disposal. Decontaminate tools and equipment following cleanup. Clean up residual material by washing area with water. Avoid creation of dusty conditions.

#### **Environmental and Regulatory Reporting:**

Do not flush to drain. If spilled on the ground, the affected area should be scraped clean placed in an appropriate container for disposal. Prevent material from entering public sewer system or any waterways. Large spills should be handled according to a predetermined plan. For assistance in developing a plan contact with the Technical Service Department using the Product Information phone number in Section 1.

---

### 7. HANDLING AND STORAGE

---

#### **Minimum/Maximum Storage Temperatures:**

Not Available

#### **Handling**

Do not get in eyes. Do not breathe dusts. Avoid direct or prolonged contact with skin.

#### **Storage**

Store in an area that is cool, dry, well-ventilated

End of Page 4

Continued on Next Page

## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

#### **Introductory Remarks:**

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

#### **Exposure Guidelines:**

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting OSHA requirements. The following limits (AGGIH, OSHA and other) apply to this material, where, if indicated, S=skin and C=ceiling limit:

#### **PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION**

	Notes	TWA	STEL
OSHA		5 mg / cu m	

#### **Engineering Controls:**

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

#### **Respiratory Protection:**

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the latest OSHA standard (29 CFR 1910.134) and/or ANSI Z88.2 recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by OSHA / ANSI: Air-purifying (half-mask / full-face) respirator with cartridges / canister approved for use against dusts, mists and fumes.



## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

---

#### Eye / Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

It is generally regarded as good practice to wear a minimum of safety glasses with side shields when working in industrial environments.

#### Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

#### Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

---

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

#### Physical Appearance:

White granules solid.

#### Odor:

Odorless

End of Page 6

Continued on Next Page

## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

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### 9.    *PHYSICAL AND CHEMICAL PROPERTIES ( Continued )*

---

**pH:**

11.3 at 1 wt / wt %

**Specific Gravity:**

2.53 at 20°C (68 F)

**Water Solubility:**

Soluble

7 Wt / Wt % at 25°C (77 F)

**Melting Point Range:**

851°C (1564 F)

**Boiling Point Range:**

Not Available

**Vapor Density:**

Not Available

**Molecular Weight:**

105.99

---

### 10.   *STABILITY AND REACTIVITY*

---

**Chemical Stability:**

This material is stable under normal handling and storage conditions described in Section 7.

**Conditions To Be Avoided:**

Extreme Heat

**Materials / Chemicals To Be Avoided:**

Aluminum

Fluorine

Humid Air

Moisture

Sulfuric Acid

Acids

Magnesium

Phosphorus Pentoxide

*End of Page 7*

*Continued on Next Page*

## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 10. STABILITY AND REACTIVITY ( Continued )

---

**Decomposition Temperature Range:**  
400°C (752 F)

The Following Hazardous Decomposition Products Might Be Expected:

**Decomposition Type:** Thermal  
Carbon Dioxide

**Hazardous Polymerization Will Not Occur.**

**Avoid The Following To Inhibit Hazardous Polymerization:**  
Not Applicable

---

### 11. TOXICOLOGICAL INFORMATION

---

**Acute Eye Irritation:**

**Toxicological Information and Interpretation**

Eye - Eye Irritation, 50 mg, Rabbit.  
Severely Irritating.

**Acute Skin Irritation:**

**Toxicological Information and Interpretation**

Skin - Skin Irritation, Rabbit.  
Mildly Irritating.

**Acute Dermal Toxicity:**

No Test Data Found For Product.

**Acute Respiratory Irritation:**

No Test Data Found For Product.

**Acute Inhalation Toxicity:**

**Toxicological Information and Interpretation**

LC50 - Lethal Concentration. 50% Of Test Species, 2300 mg/cu m/2hr, rat.

**Acute Oral Toxicity:**

**Toxicological Information and Interpretation**

LD50 - Lethal Dose 50% Of Test Species, 4090 mg/kg, rat.

End of Page 8

Continued on Next Page



## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 11. TOXICOLOGICAL INFORMATION ( Continued )

---

**Chronic Toxicity:**

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

*No additional test data found for product.*

---

### 12. ECOLOGICAL INFORMATION

---

**Ecotoxicological Information:**

No data found for product.

**Chemical Fate Information:**

No data found for product.

---

### 13. DISPOSAL CONSIDERATIONS

---

**Waste Disposal Method:**

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

**Container Handling and Disposal:**

Rinse containers before disposal.

EPA Hazardous Waste - NO

---

### 14. TRANSPORTATION INFORMATION

---

**Transportation Status:**

US Department of Transportation

**DOT Shipping Name:**

NOT REGULATED

End of Page 9

Continued on Next Page

## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

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### 15. REGULATORY INFORMATION

---

#### FEDERAL REGULATIONS

##### TSCA Inventory Status:

All ingredients of this product are listed on the TSCA Inventory.

##### SARA Title III Hazard Classes:

Fire Hazard	- NO
Reactive Hazard	- NO
Release of Pressure	- NO
Acute Health Hazard	- YES
Chronic Health Hazard	- NO

##### STATE REGULATIONS:

This product does not contain any components that are regulated under California Proposition 65.

---

### 16. OTHER INFORMATION

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#### National Fire Protection Association Hazard Ratings - NFPA(R):

2	Health Hazard Rating - - Moderate
0	Flammability Rating - - Minimal
0	Reactivity Rating - - Minimal

#### National Paint & Coating Hazardous Materials Identification System - HMIS(R):

2	Health Hazard Rating - - Moderate
0	Flammability Rating - - Minimal
0	Reactivity Rating - - Minimal

**Certified to ANSI/NSF 60** – Soda Ash Dense Bulk: This product is certified ANSI/NSF 60 when used in treatment of drinking water at maximum dosage of 100 mg/L.

#### Reason for Revisions:

Change and / or addition made to Section 1.

## SODA ASH (SODIUM CARBONATE, ANHYDROUS)

Material Safety Data Sheet    Date Prepared: 5/23/01    Supersedes Date: 1/29/98

---

### 16. OTHER INFORMATION ( Continued )

---

#### Key Legend Information:

NAV	- Not Available
NAP	- Not Applicable
ND	- Not Determined
ACGIH	- American Conference of Governmental Industrial Hygienists
OSHA	- Occupational Safety and Health Administration
TLV	- Threshold Limit Value
PEL	- Permissible Exposure Limit
TWA	- Time Weighted Average
STEL	- Short Term Exposure Limit
NTP	- National Toxicology Program
IARC	- International Agency for Research on Cancer

#### Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> <i>9/27/06 from Brandon Rowe - OCU</i>	4. Generator: Key Energy Services, Inc.
2. Management Facility Destination: JFJ Landfarm L.L.C.	5. Originating Site: Peoples Energy: Gardner # 13
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	6. Transporter:
7. Location of Material (Street Address or ULSTR) S-35, T-30N, R-14W	8. State: NM
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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: 2% KCL water w/trace amount of Hydrochloric acid. Water had backflowed into an (empty) transport that had 7.5% Hydrochloric acid and an unknown amount of the fluid overflowed from the transport onto location. -MSDS and Analyticals to measure Total Cyanide and Total Sulfide.

Estimated Volume 1000 bbls Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE Joel Owens TITLE: Operations Manager DATE: 9/27/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)		
APPROVED BY: <u>Brandon Rowe</u>	TITLE: <u>Enviro/Spec</u>	DATE: <u>9-27-06</u>
APPROVED BY: <u>[Signature]</u>	TITLE: <u>Enviro Engr</u>	DATE: <u>10-18-06</u>

RECEIVED

OCT 11 2006

Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
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Form C-138  
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**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>		4. Generator: <u>Key Energy Services, Inc.</u>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> <u>Received verbal 9/27/06 from Brandon Powell</u>		5. Originating Site: <u>Peoples Energy: Gardner # 13</u>
2. Management Facility Destination: <u>JFJ Landfarm L.L.C.</u>		6. Transporter:
3. Address of Facility Operator: <u>JFJ Landfarm</u> <u>C/o. Industrial Ecosystems Inc.</u> <u>P.O. Box 2043</u> <u>Farmington, NM 87499</u>		8. State: <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>S-35, T-30N, R-14W</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="checkbox"/> 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  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>		

**BRIEF DESCRIPTION OF MATERIAL:** 2% KCL water w/trace amount of Hydrochloric acid. Water had backflowed into an (empty) transport that had 7.5% Hydrochloric acid and an unknown amount of the fluid overflowed from the transport onto location. -MSDS and Analyticals to measure Total Cyanide and Total Sulfide.

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

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 9/27/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: *BP* TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

COPY



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON  
Governor  
Joanne Prukop  
Cabinet Secretary

Lori Wrotebery  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Key Energy Services, Inc. Pressure Pumping Services 708 S. Tucker Farmington, NM 87401	2. Destination Name: J.F.J. Landfarm C/o Industrial Ecosystems Inc. #81 CR 3250 Aztec, NM 87410
3. Originating Site (name): Peoples Energy; Well Name Gardner #13 San Juan County	Location of the Waste (Street address &/or ULSTR): <b>S-35, T-30N, R-14W</b>
attach list of originating sites as appropriate	
4. Source and Description of Waste 2% KCL water with a trace amount of Hydrochloric acid. Water had back flowed into an (empty) transport that had 7.5% Hydrochloric acid and an unknown amount of the fluid overflowed from the transport onto location	

I, Craig Fortney, District Safety Coordinator, representative for :  
Print Name

Key Energy Services, Inc. Pressure Pumping 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

X 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):

X 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):

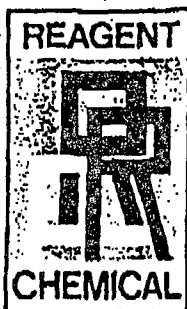
*Craig Fortney*

320-7421

Title: District Safety Coordinator for Key Energy Services Pressure Pumping Services

Date:

8-21-06

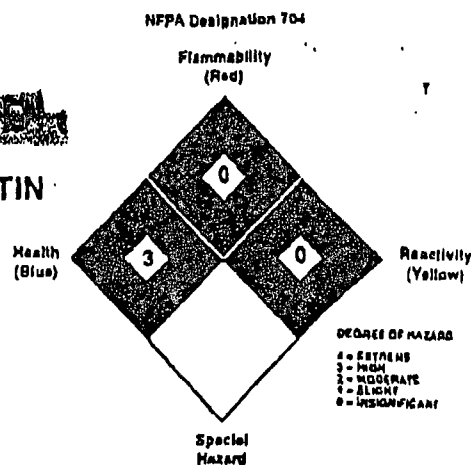


**HYDROCHLORIC ACID**

**MATERIAL SAFETY DATA BULLETIN**  
(CONFORMS TO CFR 1910, 1200g AMENDED)

**REAGENT CHEMICAL  
& RESEARCH INC.**

124 River Road  
Middlesex, New Jersey 08846



**EMERGENCY PHONE**  
800-231-1807 - 24 HOUR  
800-424-9300 - (CHEMTREC)

**EMERGENCY RESPONSE GUIDEBOOK NUMBER**  
ID# 1789, Guide 60

**PRODUCT NAME**  
Hydrochloric Acid, 20° or 22° Baumé

**PRODUCT CAS NUMBER**  
7647-01-0

**CHEMICAL FORMULA**  
HCl

**TRADE NAME & SYNONYMS**  
Hydrochloric Acid - Muriatic Acid

**TRANSPORTATION INFORMATION**  
Proper Shipping Name - Hydrochloric Acid  
Hazard Class - Corrosive Liquid  
UN/NA Identification - UN1789  
Hazard Class - 8  
Packaging Group - II  
HM 181 Poison? - NO  
Reportable Quantity - RQ 5000 lbs.  
DOT Labels Required - Corrosive  
HMIS Labeling - 3-0-0-X

**SARA TITLE III** ☒ Yes  
Section 312 ☒ Yes Section 313 ☒ Yes

**RCRA WASTE NUMBER**  
D002

**CHEMICAL FAMILY**  
Inorganic Acid

**HAZARDOUS INGREDIENTS**

COMPONENTS	%	THRESHOLD LIMIT VALUE
Hydrogen Chloride	31.45 - 37.0	Ceiling-5.0 ppm

**PHYSICAL DATA**

<b>APPEARANCE</b> (Solid, Liquid, Gas) Liquid @ 20° C, 1 atm	<b>MOLECULAR WEIGHT</b> 36.5	<b>FREEZING TEMP.</b> -53° C; -63° F	<b>SPECIFIC GRAVITY</b> 1.1600 - 1.1884
<b>VAPOR DENSITY</b> (AIR =1) N.A.	<b>COLOR</b> Clear/Slightly Yellow	<b>BULK DENSITY</b> 9.671-9.908 lb/gal	<b>BOILING POINT</b> 110° C/230° F
<b>VAPOR PRESSURE</b> 50 - 60 mm Hg @ 20° C	<b>SOLUBILITY</b> (Water) Very Soluble	<b>ODOR</b> Sharp, Pungent, Irritant	<b>% VOLATILE BY VOL.</b> N.A.

**FIRE & EXPLOSION DATA**

<b>FLASH POINT</b> (Method Used) N.A.	<b>FLAMMABLE LIMIT</b> Non-flammable	<b>EXTINGUISHING MEDIA</b> N.A.
--	---	------------------------------------

**SPECIAL FIRE FIGHTING PROCEDURES, UNUSUAL FIRE OR EXPLOSION HAZARDS**

Non-flammable, but Hydrochloric Acid reacts with all metals, except gold and platinum, with rapid evolution of Hydrogen which is flammable and explosive in air. Firefighters exposed to Hydrochloric Acid vapors should wear Scott Air-Pak or equivalent. Hydrogen Chloride vapors are extremely irritating to the respiratory tract and may cause breathing difficulty.

612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496

*iina' ba'*

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

**iina' ba'**

Date: 19-Sep-06

---

**CLIENT:** Souder, Miller & Associates  
**Project:** Key Energy  
**Lab Order:** 0609008

## CASE NARRATIVE

---

Test America analyzed for Corrosivity (pH), Ignitability, and Reactivity as Total Cyanide and Total Sulfide. Their report is attached.

Note that the Reactive Cyanide and Reactive Sulfide methods are no longer recognized by the EPA. The sample was analyzed for Total Cyanide and Total Sulfide.



# TestAmerica

ANALYTICAL TESTING CORPORATION

2950 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client Tina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn Jeff Engel

Work Order: NP10556  
Project Name: Tina Ba, LTD  
Project Number: 0609008  
Received: 09/07/06 08:00

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NP10556-01 (0609008-001A - Soil) Sampled: 09/06/06 13:15								
General Chemistry Parameters								
Cyanide	ND		mg/kg	2.00	1	09/15/06 15:50	SW846 9012A	6092639
Ignitability	>200		°F	80.0	1	09/07/06 11:28	ASTM D4982B	6090992
Sulfide	ND		mg/kg	20.0	1	09/13/06 17:20	W846 9030B/903	6092088
pH	10.0	HTT	pH Units	NA	1	09/19/06 14:35	SW846 9045C	6093247

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client lina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn Jeff Engel

Work Order: NP10556  
Project Name: lina Ba, LTD  
Project Number: 0609008  
Received: 09/07/06 08:00

## PROJECT QUALITY CONTROL DATA

### Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
<b>General Chemistry Parameters</b>						
<b>6090992-BLK1</b> Ignitability	<40.0		°F	6090992	6090992-BLK1	09/07/06 11:28
<b>6092088-BLK1</b> Sulfide	<10.0		mg/kg	6092088	6092088-BLK1	09/13/06 17:20
<b>6092639-BLK1</b> Cyanide	<0.840		mg/kg	6092639	6092639-BLK1	09/15/06 15:50
<b>6093247-BLK1</b> pH	<0.00	HTI	pH Units	6093247	6093247-BLK1	09/19/06 14:35

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client lina Ba, LTD (3130)  
612 E. Munay Drive  
Farmington, NM 87401  
Attn Jeff Engel

Work Order: NPI0556  
Project Name: lina Ba, LTD  
Project Number: 0609008  
Received: 09/07/06 08:00

## PROJECT QUALITY CONTROL DATA

### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>General Chemistry Parameters</b>									
<b>6090992-DUP1</b>									
Ignitability	ND	ND		°F		200	6090992	NPI0448-01	09/07/06 11:28
<b>6092088-DUP1</b>									
Sulfide	ND	ND		mg/kg		41	6092088	NPI1134-01	09/13/06 17:20
<b>6092639-DUP1</b>									
Cyanide	ND	ND		mg/kg		50	6092639	NPI0556-01	09/15/06 15:50
<b>6093247-DUP1</b>									
pH	10.0	10.0	HTI	pH Units	0	200	6093247	NPI0556-01	09/19/06 14:35

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client iina Ba, LTD (3130)  
612 E. Munay Drive  
Farmington, NM 87401  
Attn Jeff Engel

Work Order: NP10556  
Project Name: iina Ba, LTD  
Project Number: 0609008  
Received: 09/07/06 08:00

## PROJECT QUALITY CONTROL DATA

### Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
<b>General Chemistry Parameters</b>										
<b>6092088-MS1</b>										
Sulfide	ND	16.2		ug/mL	20.0	81%	10 - 154	6092088	NP10556-01	09/13/06 17:20
<b>6092639-MS1</b>										
Cyanide	0.00210	0.101		ug/mL	0.100	99%	8 - 176	6092639	NP10470-01	09/15/06 15:50

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client iina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn Jeff Engel

Work Order: NP10556  
Project Name: iina Ba, LTD  
Project Number: 0609008  
Received: 09/07/06 08:00

## PROJECT QUALITY CONTROL DATA

### Matrix Spike Dup

Analyte	Orig. Val	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>General Chemistry Parameters</b>												
<b>6092088-MSD1</b>												
Sulfide	ND	16.2		ug/mL	20.0	81%	10 - 154	0	41	6092088	NP10556-01	09/13/06 17:20
<b>6092639-MSD1</b>												
Cyanide	0.00210	0.0737		ug/mL	0.100	72%	8 - 176	31	50	6092639	NP10470-01	09/15/06 15:50

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client Iina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401

Attn Jeff Engel

Work Order: NP10556  
Project Name: Iina Ba, LTD  
Project Number: 0609008  
Received: 09/07/06 08:00

## DATA QUALIFIERS AND DEFINITIONS

&gt;200

&gt;200

HTI

The holding time for this test is immediate. The laboratory measurement, therefore, may not be suitable for compliance purposes.

## METHOD MODIFICATION NOTES

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

NOV 12 2006

Oil Conservation Division  
1220 S. St. Francis Dr.

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"/> <i>From Brandon Powell w/OCN on 10/17/06</i>	4. Generator: BP America  5. Originating Site: State Gas Com AA 1
2. Management Facility Destination: JFJ Landfarm L.L.C.	6. Transporter:
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499	8. State: NM
7. Location of Material (Street Address or ULSTR) UL-K, S-36, T-30, R-08	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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: contaminated soil around pump jack (lube oil from engine)-RCRA 8 Attached

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

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 10/17/06  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)		
APPROVED BY: <u><i>Brandon Powell</i></u>	TITLE: <u>Enviro/spec</u>	DATE: <u>10/19/06</u>
APPROVED BY: <u><i>[Signature]</i></u>	TITLE: <u>Enviro Engr</u>	DATE: <u>11/13/06</u>

District I  
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**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>		4. Generator: BP America
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> <i>Verbal Given By Brandon Powell w/OCV</i>		5. Originating Site: State Gas Com AA 1
2. Management Facility Destination: JFJ Landfarm L.L.C.		6. Transporter:
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		8. State: NM
7. Location of Material (Street Address or ULSTR) UL-K, S-36, T-30, R-08		
9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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:** contaminated soil around pump jack (lube oil from engine)-RCRA 8 Attached

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

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 10/17/06  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)

APPROVED BY: <u><i>BP</i></u>	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____

DUPLICATE





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

Joanna Prukop  
Cabinet Secretary

Lori Wrotenberg

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address <b>BP America Production Company</b> 200 Energy Court Farmington, NM 87401	2. Destination Name: <b>J.F.J. Landfarm C/O Industrial Ecosystems Inc.</b> #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name): <b>State Gas Com AA 1</b> Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): <b>UL- K S- 36 T- 30 R- 8</b> or attach list Street Address:
4. Source and Description of Waste <b>Contaminated Soil Around pump Jack (Lube oil from engine)</b>	

I, Billy Herbaugh representative for:  
Print Name

BP America 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): Billy HerbaughPhone Contact: 486-0974Title: Construction SpecialistP.O# / Pay key No: ZBUDOLSELDate: 10/18/06200611498

**ENVIROTECH LABS****TRACE METAL ANALYSIS**

Client:	Blegg / BP	Project #:	94034-010
Sample ID:	Soil Stockpile	Date Reported:	03-20-06
Laboratory Number:	36489	Date Sampled:	03-16-06
Chain of Custody:	15681	Date Received:	03-17-06
Sample Matrix:	Soil	Date Analyzed:	03-20-06
Preservative:	N/A	Date Digested:	03-17-06
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.052	0.001	5.0
Barium	6.45	0.001	100
Cadmium	0.008	0.001	1.0
Chromium	0.206	0.001	5.0
Lead	0.244	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

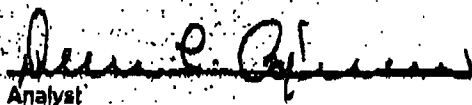
ND - Parameter not detected at the stated detection limit.

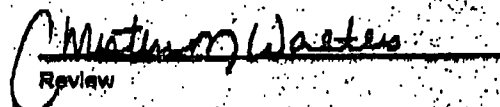
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils,  
SW-846, USEPA, December 1996.

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: State GC AA #1 5-Point Composite.

  
Analyst

  
Review

# CHAIN OF CUSTODY RECORD

15681

and / Project Name <b>BLAGE / BP</b>			Project Location <b>STATE GC AA #1</b>		ANALYSIS / PARAMETERS							
Sample: <b>J-C BLAGE</b>			Client No. <b>94034-010</b>		No. of Containers <b>8 RCRA METALS</b>	<b>X</b>						Remarks <b>5-Point Composite</b>
Sample No / Identification <b>SOIL STOCK PILE</b>	Sample Date <b>3/14/06</b>	Sample Time <b>0920</b>	Lab Number <b>36469</b>	Sample Matrix <b>SOIL</b>								

Acquired by: (Signature) <b>J-C BLAGE</b>	Date <b>3/17/06</b>	Time <b>1130</b>	Received by: (Signature) <b>Daniel C. [Signature]</b>	Date <b>3/17/06</b>	Time <b>1120</b>
Acquired by: (Signature)			Received by: (Signature)		
Acquired by: (Signature)			Received by: (Signature)		

**ENVIROTECH INC.**

5796 U.S. Highway 64  
 Farmington, New Mexico 87401  
 (505) 632-0615

Sample Receipt

	Y	N	N/A
Received intact	<input checked="" type="checkbox"/>		
Cool - Ice/Blue Ice	<input checked="" type="checkbox"/>		

See plan reproduction 578-129

Oct-18-2006 08:47am

From BP

505-326-9262

T-792 P.003/003 F-041

RECEIVED

District I  
1625 N. French Dr., Hobbs, NM 88240  
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1301 W. Grand Avenue, Artesia, NM 88210  
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1000 Rio Brazos Road, Aztec, NM 87410  
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State of New Mexico  
Energy Minerals and Natural Resources

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Form C-138  
Revised March 17, 1999

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

Submit Original  
Plus 1 Copy  
to Appropriate  
District Office

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: Non-Exempt: <input checked="" type="checkbox"/> XX		4. Generator: Aztec Well Service	
Verbal Approval Received: Yes <input checked="" type="checkbox"/> XX No: <input type="checkbox"/> <i>from Brandon Russell OGD 10/30/06</i>		5. Originating Site: Forrest Road 314 and Hwy 64	
2. Management Facility Destination: JFJ Landfarm L.L.C.		6. Transporter: Rosenbaum Construction	
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		8. State: NM	
7. Location of Material (Street Address or ULSTR) Forrest Road 314 and Hwy 64.			
9. Circle One: <p>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.</p> <p><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.</p> <p>All transporters must certify the wastes delivered are only those consigned for transport.</p>			

BRIEF DESCRIPTION OF MATERIAL: Diesel from rig saddle tanks that contaminated soil due to vehicle accident of Aztec Well Service Rig #545

Estimated Volume 48 cubic yards Known Volume: (to be entered by the operator at the end of the haul)

SIGNATURE *Joel Owens* TITLE: Operations Manager DATE: 10/30/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)

APPROVED BY <u><i>Brandon Russell</i></u>	TITLE: <u>Enviro Spcc</u>	DATE: <u>10/30/06</u>
APPROVED BY <u><i>[Signature]</i></u>	TITLE: <u>Enviro Engr</u>	DATE: <u>11/3/06</u>

District I  
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State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
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Revised March 17, 1999

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District Office

**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. RCRA Exempt: Non-Exempt: <b>XX</b>		4. Generator: <b>Aztec Well Service</b>
Verbal Approval Received: <b>Yes XX</b> No: <input type="checkbox"/> <b>10/30/06</b> <i>from Brandon Powell - OCD</i>		5. Originating Site: <b>Forrest Road 314 and Hwy 64</b>
2. Management Facility Destination: <b>JFJ Landfarm L.L.C.</b>		6. Transporter: <b>Rosenbaum Construction</b>
3. Address of Facility Operator: <b>JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499</b>		8. State: <b>NM</b>
7. Location of Material (Street Address or ULSTR) <b>Forrest Road 314 and Hwy 64</b>		
9. <u>Circle One</u> : 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.		
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**BRIEF DESCRIPTION OF MATERIAL:** Diesel from rig saddle tanks that contaminated soil due to vehicle accident of Aztec Well Service Rig #545

Estimated Volume 48 cubic yards Known Volume: (to be entered by the operator at the end of the haul)

SIGNATURE *Joel Owens*  
Waste Management Facility Authorized Agent

TITLE: Operations Manager DATE: 10/30/2006

TYPE OR PRINT NAME: Joel Owens

TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)		
APPROVED BY: <u><i>BP</i></u>	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____

**COPY**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Mark Fesmire**  
Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Aztec Well Service 900 S. Main Aztec, NM 87410	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name): Forrest Road 314 and Hwy 64	Location of the Waste (Street address &/or ULSTR):  UL- S- T- R- or attach list Street Address: _____
4. Source and Description of Waste  Diesel from rig saddle tanks that contaminated soil due to vehicle accident of Aztec Well Service Rig #545.	

I, Jason Sandel, representative for: Aztec Well Service, do hereby certify that, according to the New Mexico Administrative Code, 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):

Phone Contact: 505-334-6191

Title: Vice President

P.O# / Pay key No: \_\_\_\_\_

Date: 10/30/2006

Oil Conservation Division / 1000 Rio Brazos Road \* Aztec, New Mexico 87410  
Phone: (505) 334-6178 \* Fax (505) 334-6170 \* <http://www.emnrd.state.nm.us>

MSDS Code: 001847

Status: Final

Page 1/8

Date of Issue: 21-Feb-2006



## MATERIAL SAFETY DATA SHEET

### No. 2 Diesel Fuel

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** No. 2 Diesel Fuel  
**Synonyms:** CARB Diesel TF3; CARB Diesel; CARB Diesel 10%  
CARB Diesel Ultra Low Sulfur - Dyed and Undyed  
EPA Low Sulfur Diesel Fuel - Dyed and Undyed  
EPA Off Road High Sulfur Diesel - Dyed  
High Sulfur Diesel Fuel; Low Sulfur Diesel Fuel  
No. 2 Diesel Fuel Oil  
No. 2 High Sulfur Diesel - Dyed  
No. 2 Low Sulfur Diesel - Dyed; No. 2 Low Sulfur Diesel - Undyed  
No. 2 Low Sulfur Distillate  
No. 2 Ultra Low Sulfur Diesel - Dyed; No. 2 Ultra Low Sulfur Diesel - Undyed  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel; No. 2 Distillate  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel

**Intended Use:** Fuel  
**Chemical Family:** Petroleum Hydrocarbon

**Responsible Party:** ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas 77079-1175

**MSDS Information:** 800-762-0942  
MSDS@conocophillips.com

**Customer Service:** 800-527-5476  
**Technical Information:** 800-527-5476

#### Emergency Overview

##### 24 Hour Emergency Telephone Numbers:

Spill, Leak, Fire or Accident Call CHEMTREC:

North America: (800) 424-9300

Others: (703) 527-3887 (collect)

California Poison Control System: (800) 356-3219

**Health Hazards/Precautionary Measures:** Causes skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use with ventilation adequate to keep exposure below recommended limits, if any. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Flammable liquid and vapor. Keep away from heat, sparks, flames, static electricity or other sources of ignition.

**Appearance:** Straw colored to dyed red  
**Physical Form:** Liquid  
**Odor:** Diesel fuel

##### NFPA 704 Hazard Class:

**Health:** 1 (Slight)  
**Flammability:** 2 (Moderate)  
**Instability:** 0 (Least)

MSDS Code: 001847

Status: Final

Page 2/8

Date of Issue: 21-Feb-2006

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS					
Component / CAS No:	Concentration (wt %)	ACGIH:	OSHA:	NIOSH:	Other:
Diesel Fuel No. 2 68476-34-6	100	100 mg/m <sup>3</sup> TWA- SKIN	NE	NE	—
Naphthalene 91-20-3	<1	10 ppm TWA 52 mg/m <sup>3</sup> TWA 15 ppm STEL 79 mg/m <sup>3</sup> STEL	10 ppm TWA 50 mg/m <sup>3</sup> TWA	250 ppm IDLH	—

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

NE=Not Established

## 3. HAZARDS IDENTIFICATION

### Potential Health Effects

**Eye:** Contact may cause mild eye irritation including stinging, watering, and redness.

**Skin:** Mild to moderate skin irritant. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact may cause drying and cracking of the skin, dermatitis (inflammation), burns, and severe skin damage. No harmful effects from skin absorption have been reported.

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** Low degree of toxicity by ingestion. **ASPIRATION HAZARD** - This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

**Signs and Symptoms:** Effects of overexposure may include irritation of the respiratory tract, irritation of the digestive tract, nausea, diarrhea, transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

**Cancer:** There is inadequate information to evaluate the cancer hazard of this material. See Section 11 for information on the individual components, if any.

**Target Organs:** Inadequate evidence available for this material. See Section 11 for target-organ toxicity information of individual components, if any.

**Developmental:** Inadequate data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders.

## 4. FIRST AID MEASURES

**Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin:** Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention.



MSDS Code: 001847

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Date of Issue: 21-Feb-2006

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** Aspiration hazard. Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

## 5. FIRE-FIGHTING MEASURES

### Flammable Properties:

Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
OSHA Flammability Class:	Combustible liquid
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

**Unusual Fire & Explosion Hazards:** This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

## 6. ACCIDENTAL RELEASE MEASURES

Flammable. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

MSDS Code: 001847

Status: Final

Page 4/8

Date of Issue: 21-Feb-2006

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## 7. HANDLING AND STORAGE

**Handling:** Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

### Personal Protective Equipment (PPE):

**Respiratory:** A NIOSH certified air purifying respirator with an organic vapor cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage. Examples of approved materials are nitrile or Viton® (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Straw colored to dyed red
Physical Form:	Liquid
Odor:	Diesel fuel
Odor Threshold:	No data
pH:	Not applicable
Vapor Pressure (mm Hg):	0.40
Vapor Density (air=1):	> 3
Boiling Point:	300-690°F / 149-366°C
Solubility in Water:	Negligible
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	0.81-0.88@ 60°F (15.6°C)
Bulk Density:	7.08 lbs/gal
Viscosity cSt @ 40°C:	1.7-4.1
Percent Volatile:	Negligible@ ambient conditions
Evaporation Rate (nBuAc=1):	<1
Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Flammable liquid and vapor. Vapor can cause flash fire.

**Conditions to Avoid:** Avoid all possible sources of ignition (see Sections 5 and 7).

**Materials to Avoid (Incompatible Materials):** Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

**Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen and sulfur oxides. The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. See Section 11 for additional information on hazards of engine exhaust. IARC has classified Diesel exhaust as probably carcinogenic in humans.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Chronic Data:

#### **Diesel Fuel No. 2 (68476-34-6)**

**Carcinogenicity:** Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation. Animal studies have also shown that washing the skin with soap and water can reduce the tumor response. Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as a carcinogen by NTP, IARC or OSHA.

**Target Organs:** Limited evidence of renal impairment has been noted from a few older case reports involving excessive exposure to diesel fuel No. 2. However, renal toxicity has not been demonstrated to be a consistent finding of diesel fuel exposure.

#### **Naphthalene (91-20-3)**

**Carcinogenicity:** Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

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**14. TRANSPORT INFORMATION**

Labels: Flammable

Placards/Marking (Bulk): Flammable/1202

Packaging - Non-Bulk: P001, LP01

EMS: F-E, S-E

**ICAO/IATA**

UNID #: UN1202

Proper Shipping Name: Diesel fuel

Hazard Class/Division: 3

Packing Group: III

Subsidiary risk: None

Non-Bulk Package Marking: Diesel fuel, UN1202

Labels: Flammable

	LTD. QTY.	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	Y309	309	310
Max. Net Qty. Per Package:	10 L	60 L	220 L

**15. REGULATORY INFORMATION****U.S. Regulations:****EPA SARA 311/312 (Title III Hazard Categories)**

Acute Health: Yes

Chronic Health: No

Fire Hazard: Yes

Pressure Hazard: No

Reactive Hazard: No

**SARA - Section 313 and 40 CFR 372:**

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

Naphthalene.....91-20-3.....&lt;1%

**EPA (CERCLA) Reportable Quantity (in pounds):**

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

**CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPOs (in pounds):**

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:

- None Known -

**California Proposition 65:**

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health &amp; Safety Code Section 25249.5):

Benzene - Cancer, Developmental and Reproductive Toxicant

Naphthalene - Cancer

Toluene - Developmental Toxicant

Diesel engine exhaust, while not a component of this material, is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

**Carcinogen Identification:**

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

Diesel exhaust is a probable cancer hazard based on tests in laboratory animals. It has been identified as a carcinogen by IARC.

**TSCA:**

All components are listed on the TSCA inventory.

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#### **International Regulations:**

##### **Canadian Regulations:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**Domestic Substances List:** Listed

**WHMIS Hazard Class:**

B2 - Flammable Liquids

D2B - Materials Causing Other Toxic Effects - Toxic Material

## **16. OTHER INFORMATION**

<b>Issue Date:</b>	21-Feb-2006
<b>Previous Issue Date:</b>	13-Feb-2003
<b>Product Code:</b>	Multiple
<b>Previous Product Code:</b>	Multiple
<b>Revised Sections or Basis for Revision:</b>	Product Name / Synonyms (Section 1)
<b>MSDS Code:</b>	001847

#### **Disclaimer of Expressed and Implied Warranties:**

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

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**Acute Data:****Diesel Fuel No. 2 (68476-34-6)**

Dermal LD50= &gt;5ml/kg (Rabbit)

LC50= No data available

Oral LD50= 9 ml/kg (Rat)

**Naphthalene (91-20-3)**

Dermal LD50= &gt;2.5 g/kg (rat)

LC50= >340 mg/m<sup>3</sup>/1H (rat)

Oral LD50= 490 mg/kg; 2.6 g/kg (rat)

**12. ECOLOGICAL INFORMATION**

When middle distillate hydrocarbons escape into the environment due to leaks or spills, most of their constituent hydrocarbons will evaporate and be photodegraded by reaction with hydroxyl radicals in the atmosphere. The half-lives in air for many of the individual hydrocarbons is less than one day. Less volatile hydrocarbons can persist in the aqueous environment for longer periods. They remain floating on the surface of the water; those that reach soil or sediment biodegrade relatively slowly. Soil contaminated with middle distillates can develop adapted microbial species able to use the fuel as a carbon source; soil aeration and nutrient supplementation can enhance this biodegradation.

Reported LC50/EC50 values for water-soluble fractions of middle distillates are usually in the range of 10 to 100 mg/liter. Adverse effects on the gills, pseudobranch, kidney and nasal mucosa have been reported in fish involved in spills of middle distillates. Juvenile clams may be particularly sensitive to marine sediments contaminated as a result of spilled material. Direct toxicity and fouling of sea birds can occur if birds dive through floating layers of spilled material.

Phytotoxic effects of middle distillate hydrocarbons have been reported following exposure of plants to sprays or vapors. Lack of seed germination and inhibition of seedling growth may also occur. There is evidence for moderate bioaccumulation of the water-soluble hydrocarbons present in middle distillates.

**13. DISPOSAL CONSIDERATIONS**

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for ignitability (D001) and benzene (D018) prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

**14. TRANSPORT INFORMATION****DOT****Shipping Description:** Diesel Fuel, Combustible liquid, NA1993, III**Non-Bulk Package Marking:** Not regulated in non-bulk quantities**Non-Bulk Package Labelling:** Not regulated in non-bulk quantities**Bulk Package/Placard Marking:** Combustible/1993**Packaging - References (Exceptions, Non-Bulk, Bulk):** 49 CFR 173.150(f), 173.203, 173.241**Hazardous Substance:** None**Emergency Response Guide:** 128**Note:** This product has been reclassified as a Combustible Liquid for domestic land transportation using 49 CFR 173.150(f).**IMDG****Shipping Description:** UN1202, Diesel fuel, 3, III (52°C)**Non-Bulk Package Marking:** Diesel fuel, UN1202

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

RECEIVED  
NOV 07 2006  
OIL CONSERVATION DIVISION  
1220 S. ST. FRANCIS DRIVE  
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: X      Non-Exempt: <input type="checkbox"/>	4. Generator: Aztec Well Service
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: X <i>Brandon Powell - OCA</i>	5. Originating Site: Carson Federal I I C
2. Management Facility Destination: JFJ Landfarm L.L.C.	6. Transporter: <i>Cindy</i> Rosenbaum Trucking <i>325-6367</i>
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499	8. State: NM
7. Location of Material (Street Address or ULSTR) 1/4 NM, S-34, T-27N, R-4W	
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: Diesel Contaminated Soil from ruptured diesel storage tank

Estimated Volume 48 Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE

Waste Management Facility Authorized Agent

TITLE: Operations Manager

DATE: 10/31/2006

TYPE OR PRINT NAME: JOEL OWENS

TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)

APPROVED BY:

*Brandon Powell*

TITLE:

*Enviro Spec*

DATE:

*10/31/06*

APPROVED BY:

*Joel Owens*

TITLE:

*Enviro Engr*

DATE:

*11/3/06*

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

RCV/NDV1'06  
OIL CONS. DIV.  
DIST. 3

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: X      Non-Exempt: <input type="checkbox"/>  Verbal Approval Received:      Yes <input checked="" type="checkbox"/> No: X <i>Brandon Powell - OCA</i>	4. Generator: Aztec Well Service
2. Management Facility Destination: JFJ Landfarm L.L.C.	5. Originating Site: Carson Federal I I C
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o.Box 2043 Farmington, NM 87499	6. Transporter: Rosenbaum Trucking <i>Cindy</i> <i>325-6367</i>
7. Location of Material (Street Address or ULSTR) ¼ NM, S-34, T-27N, R-4W	8. State: NM
9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved  All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL: Diesel Contaminated Soil from ruptured diesel storage tank

Estimated Volume 48 Known Volume (to be entered by the operator at the end of the haul)

SIGNATURE *[Signature]* TITLE: Operations Manager DATE: 10/31/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: JOEL OWENS TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)

APPROVED BY: <u><i>[Signature]</i></u>	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark Fesmire**

Director

**Oil Conservation Division**

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Aztec Well Service 900 S. Main Aztec, NM 87410	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name): Carson Federal I I C	Location of the Waste (Street address &/or ULSTR): UL- 1/4 NM S- 34 T- 27N R- 4 Wor attach list Street Address: _____
Attach list of originating sites as appropriate	
4. Source and Description of Waste  Diesel Contaminated soil from ruptured diesel storage tank	

I, Steve Gathings representative for: Aztec Well Service 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): [Signature]

Phone Contact: 320-5535

Title: HSE Manager

P.O# / Pay key No: \_\_\_\_\_

Date: 10/31/06

Oil Conservation Division \* 1000 Rio Brazos Road \* Aztec, New Mexico 87410  
Phone: (505) 334-6178 \* Fax (505) 334-6170 \* <http://www.emnrd.state.nm.us>

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## MATERIAL SAFETY DATA SHEET

### No. 2 Diesel Fuel

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** No. 2 Diesel Fuel  
**Synonyms:** CARB Diesel TF3; CARB Diesel; CARB Diesel 10%  
CARB Diesel Ultra Low Sulfur - Dyed and Undyed  
EPA Low Sulfur Diesel Fuel - Dyed and Undyed  
EPA Off Road High Sulfur Diesel - Dyed  
High Sulfur Diesel Fuel; Low Sulfur Diesel Fuel  
No. 2 Diesel Fuel Oil  
No. 2 High Sulfur Diesel - Dyed  
No. 2 Low Sulfur Diesel - Dyed; No. 2 Low Sulfur Diesel - Undyed  
No. 2 Low Sulfur Distillate  
No. 2 Ultra Low Sulfur Diesel - Dyed; No. 2 Ultra Low Sulfur Diesel - Undyed  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel; No. 2 Distillate  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel

**Intended Use:** Fuel  
**Chemical Family:** Petroleum Hydrocarbon

**Responsible Party:** ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas 77079-1175  
800-762-0942  
MSDS@conocophillips.com

**MSDS Information:**

**Customer Service:** 800-527-5476  
**Technical Information:** 800-527-5476

#### Emergency Overview

**24 Hour Emergency Telephone Numbers:**  
Spill, Leak, Fire or Accident Call CHEMTREC:  
North America: (800) 424-9300  
Others: (703) 527-3887 (collect)

California Poison Control System: (800) 356-3219

**Health Hazards/Precautionary Measures:** Causes skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use with ventilation adequate to keep exposure below recommended limits, if any. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Flammable liquid and vapor. Keep away from heat, sparks, flames, static electricity or other sources of ignition.

**Appearance:** Straw colored to dyed red  
**Physical Form:** Liquid  
**Odor:** Diesel fuel

**NFPA 704 Hazard Class:**  
**Health:** 1 (Slight)  
**Flammability:** 2 (Moderate)  
**Instability:** 0 (Least)

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS					
Component / CAS No:	Concentration (wt %)	ACGIH:	OSHA:	NIOSH:	Other:
Diesel Fuel No. 2 88476-34-6	100	100 mg/m <sup>3</sup> TWA- SKIN	NE	NE	—
Naphthalene 91-20-3	<1	10 ppm TWA 52 mg/m <sup>3</sup> TWA 15 ppm STEL 79 mg/m <sup>3</sup> STEL	10 ppm TWA 50 mg/m <sup>3</sup> TWA	250 ppm IDLH	---

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

NE=Not Established

## 3. HAZARDS IDENTIFICATION

### Potential Health Effects

**Eye:** Contact may cause mild eye irritation including stinging, watering, and redness.

**Skin:** Mild to moderate skin irritant. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact may cause drying and cracking of the skin, dermatitis (inflammation), burns, and severe skin damage. No harmful effects from skin absorption have been reported.

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** Low degree of toxicity by ingestion. **ASPIRATION HAZARD** - This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

**Signs and Symptoms:** Effects of overexposure may include irritation of the respiratory tract, irritation of the digestive tract, nausea, diarrhea, transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

**Cancer:** There is inadequate information to evaluate the cancer hazard of this material. See Section 11 for information on the individual components, if any.

**Target Organs:** Inadequate evidence available for this material. See Section 11 for target-organ toxicity information of individual components, if any.

**Developmental:** Inadequate data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders.

## 4. FIRST AID MEASURES

**Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin:** Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention.

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**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** Aspiration hazard. Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

## 5. FIRE-FIGHTING MEASURES

### Flammable Properties:

Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
OSHA Flammability Class:	Combustible liquid
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

**Unusual Fire & Explosion Hazards:** This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

## 6. ACCIDENTAL RELEASE MEASURES

**Flammable.** Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

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## 7. HANDLING AND STORAGE

**Handling:** Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

### Personal Protective Equipment (PPE):

**Respiratory:** A NIOSH certified air purifying respirator with an organic vapor cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage. Examples of approved materials are nitrile or Viton® (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

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Status: Final

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Straw colored to dyed red
Physical Form:	Liquid
Odor:	Diesel fuel
Odor Threshold:	No data
pH:	Not applicable
Vapor Pressure (mm Hg):	0.40
Vapor Density (air=1):	> 3
Boiling Point:	300-690°F / 149-366°C
Solubility in Water:	Negligible
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	0.81-0.88@ 60°F (15.6°C)
Bulk Density:	7.08 lbs/gal
Viscosity cSt @ 40°C:	1.7-4.1
Percent Volatile:	Negligible@ ambient conditions
Evaporation Rate (nBuAc=1):	<1
Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Flammable liquid and vapor. Vapor can cause flash fire.

**Conditions to Avoid:** Avoid all possible sources of ignition (see Sections 5 and 7).

**Materials to Avoid (Incompatible Materials):** Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

**Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen and sulfur oxides. The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. See Section 11 for additional information on hazards of engine exhaust. IARC has classified Diesel exhaust as probably carcinogenic in humans.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Chronic Data:

#### **Diesel Fuel No. 2 (68476-34-6)**

**Carcinogenicity:** Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation. Animal studies have also shown that washing the skin with soap and water can reduce the tumor response. Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as a carcinogen by NTP, IARC or OSHA.

**Target Organs:** Limited evidence of renal impairment has been noted from a few older case reports involving excessive exposure to diesel fuel No. 2. However, renal toxicity has not been demonstrated to be a consistent finding of diesel fuel exposure.

#### **Naphthalene (91-20-3)**

**Carcinogenicity:** Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

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**14. TRANSPORT INFORMATION**

Labels: Flammable

Placards/Marking (Bulk): Flammable/1202

Packaging - Non-Bulk: P001, LP01

EMS: F-E, S-E

**ICAO/IATA**

UN/ID #: UN1202

Proper Shipping Name: Diesel fuel

Hazard Class/Division: 3

Packing Group: III

Subsidiary risk: None

Non-Bulk Package Marking: Diesel fuel, UN1202

Labels: Flammable

	LTD. QTY.	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	Y309	309	310
Max. Net Qty. Per Package:	10 L	60 L	220 L

**15. REGULATORY INFORMATION****U.S. Regulations:****EPA SARA 311/312 (Title III Hazard Categories)**

Acute Health: Yes

Chronic Health: No

Fire Hazard: Yes

Pressure Hazard: No

Reactive Hazard: No

**SARA - Section 313 and 40 CFR 372:**

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

Naphthalene.....91-20-3.....&lt;1%

**EPA (CERCLA) Reportable Quantity (in pounds):**

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

**CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPCs (in pounds):**

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:

- None Known -

**California Proposition 65:**

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health &amp; Safety Code Section 25249.5):

Benzene - Cancer, Developmental and Reproductive Toxicant

Naphthalene - Cancer

Toluene - Developmental Toxicant

Diesel engine exhaust, while not a component of this material, is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

**Carcinogen Identification:**

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

Diesel exhaust is a probable cancer hazard based on tests in laboratory animals. It has been identified as a carcinogen by IARC.

**TSCA:**

All components are listed on the TSCA inventory.

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**International Regulations:****Canadian Regulations:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**Domestic Substances List:** Listed**WHMIS Hazard Class:**

B2 - Flammable Liquids

D2B - Materials Causing Other Toxic Effects - Toxic Material

**16. OTHER INFORMATION****Issue Date:**

21-Feb-2006

**Previous Issue Date:**

13-Feb-2003

**Product Code:**

Multiple

**Previous Product Code:**

Multiple

**Revised Sections or Basis for Revision:**

Product Name / Synonyms (Section 1)

**MSDS Code:**

001847

**Disclaimer of Expressed and implied Warranties:**

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.



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**Acute Data:****Diesel Fuel No. 2 (68476-34-6)**

Dermal LD50= &gt;5ml/kg (Rabbit)

LC50= No data available

Oral LD50= 9 ml/kg (Rat)

**Naphthalene (91-20-3)**

Dermal LD50= &gt;2.5 g/kg (rat)

LC50= >340 mg/m<sup>3</sup>/1H (rat)

Oral LD50= 490 mg/kg; 2.6 g/kg (rat)

**12. ECOLOGICAL INFORMATION**

When middle distillate hydrocarbons escape into the environment due to leaks or spills, most of their constituent hydrocarbons will evaporate and be photodegraded by reaction with hydroxyl radicals in the atmosphere. The half-lives in air for many of the individual hydrocarbons is less than one day. Less volatile hydrocarbons can persist in the aqueous environment for longer periods. They remain floating on the surface of the water; those that reach soil or sediment biodegrade relatively slowly. Soil contaminated with middle distillates can develop adapted microbial species able to use the fuel as a carbon source; soil aeration and nutrient supplementation can enhance this biodegradation.

Reported LC50/EC50 values for water-soluble fractions of middle distillates are usually in the range of 10 to 100 mg/liter. Adverse effects on the gills, pseudobranch, kidney and nasal mucosa have been reported in fish involved in spills of middle distillates. Juvenile clams may be particularly sensitive to marine sediments contaminated as a result of spilled material. Direct toxicity and fouling of sea birds can occur if birds dive through floating layers of spilled material.

Phytotoxic effects of middle distillate hydrocarbons have been reported following exposure of plants to sprays or vapors. Lack of seed germination and inhibition of seedling growth may also occur. There is evidence for moderate bioaccumulation of the water-soluble hydrocarbons present in middle distillates.

**13. DISPOSAL CONSIDERATIONS**

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for ignitability (D001) and benzene (D018) prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

**14. TRANSPORT INFORMATION****DOT**

Shipping Description: Diesel Fuel, Combustible liquid, NA1993, III

Non-Bulk Package Marking: Not regulated in non-bulk quantities

Non-Bulk Package Labeling: Not regulated in non-bulk quantities

Bulk Package/Placard Marking: Combustible/1993

Packaging - References (Exceptions, Non-Bulk, Bulk): 49 CFR 173.150(f), 173.203, 173.241

Hazardous Substance: None

Emergency Response Guide: 128

Note: This product has been reclassified as a Combustible Liquid for domestic land transportation using 49 CFR 173.150(f).

**IMDG**

Shipping Description: UN1202, Diesel fuel, 3, III (52°C)

Non-Bulk Package Marking: Diesel fuel, UN1202

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/> Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>		4. Generator: Basin Disposal
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: Basin Disposal
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		6. Transporter: Basin Disposal
7. Location of Material (Street Address or ULSTR) 200 Montana Ave, CR 5046 Bloomfield, NM		8. State: NM
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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.  <b>All transporters must certify the wastes delivered are only those consigned for transport.</b>		

**BRIEF DESCRIPTION OF MATERIAL:**

Mixture of mostly water and lubrication oil from pumps operating the pumphouse sump. Attached – Chain of Custody, TCLP 1311/8081A, TCLP metals 6000/7000, TCLP 8151 & TCLP 1311/8260B.

Request approval for a 6month period.

Known Volume \_\_\_\_\_ bbls (to be entered by the operator at the end of the haul)

SIGNATURE Joel Owens TITLE: Operations Manager DATE: 12/22/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)		
APPROVED BY: <u>BO</u>	TITLE: _____	DATE: <u>12-26</u>
APPROVED BY: _____	TITLE: _____	DATE: _____



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor  
Jonas Frutos  
Cabinet Secretary

**Mark Fesmire**

Director  
Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

<b>1. Generator Name and Address:</b> Basin Disposal 200 Montana Ave, CR 5046 Bloomfield, NM 87413	<b>2. Destination Name:</b> J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
<b>3. Originating Site (name):</b>  Basin Disposal  Attach list of originating sites as appropriate	<b>Location of the Waste (Street address &amp;/or ULSTR):</b>  UL- S- T- R- or attach list Street Address: <u>200 Montana Ave, CR 5046</u>
<b>4. Source and Description of Waste:</b>  <u>Mixture of mostly water and lubrication oil from pumps operating the pump house sump.</u>	

I, John M. Vollerding representative for Basin Disposal do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1983, 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) Full TCLP

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]

Phone Contact: 505-334-3013

Title: General Manager

P.O# / Pay key No: \_\_\_\_\_

Date: 12/26/2006

Oil Conservation Division \* 1000 Rio Brazos Road \* Aztec, New Mexico 87410  
Phone: (505) 334-6178 \* Fax (505) 334-6170 \* <http://www.emnrd.state.nm.us>

612 E. Murray Drive  
Farmington, NM 87401

Off: (505) 327-1072  
Fax: (505) 327-1496

# iiná bá

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

November 20, 2006

John Hagstrom  
Souder, Miller & Associates  
612 E. Murray Dr  
Farmington, NM 87401

TEL: 505-325-5667

FAX: 505-327-1496

RE: Basin Disposal

Order No.: 0611010

Dear John Hagstrom:

iiná bá received 1 sample on 11/8/2006 10:45:00 AM for the analyses presented in the following report.

This certificate of analysis includes the Analytical Report(s) for the sample(s) received by the laboratory. A Quality Control Summary Report, the Sample Receipt Checklist and an executed Chain of Custody are included as an addendum to this report.

Should you have any questions regarding this certificate of analysis, please contact the laboratory at your convenience.

Report Approved By:

Jeffrey L. Engels, Laboratory Manager

Edwina F. Aspaas, Quality Assurance Officer

This certificate of analysis and respective material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the person responsible for delivering this to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify the laboratory immediately at (505) 327-1072.



MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496

# *iiná bá*

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

**iiná bá**

Date: 20-Nov-06

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**CLIENT:** Souder, Miller & Associates  
**Project:** Basin Disposal  
**Lab Order:** 0611010

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## **CASE NARRATIVE**

Test America analyzed for TCLP metals, volatiles, semi-volatiles, pesticides, and herbicides. Their report is attached.

liná bá

### Sample Receipt Checklist

Client Name: **SMA1005**

Date and Time Received: **11/8/2006 10:45:00 AM**

Work Order Number: **0611010**

Received by: **jern**

Checklist completed by: *J. Moore*

*11/8/06*

Reviewed by: *jk*

*11/9/06*

Signature

Date

Initials

Date

Matrix:

Carrier name: John Hagstrom

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	<i>12°C on ice</i>
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Adjusted? \_\_\_\_\_ Checked by: \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted: \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: *Samples received on ice with 2 hours of sampling event.*

Corrective Action: \_\_\_\_\_

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Road Nashville, TN 37204 • 800-765-0980 • Fax 615-726-3404

November 20, 2006

Client: Iina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Iina Ba, LTD  
Project Nbr: 0611010  
P/O Nbr:  
Date Received: 11/10/06

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
0611010-001A	NPK1622-01	11/08/06 09:10

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

*Roxanne L. Connor*

Roxanne Connor

Program Manager - Conventional Accounts

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Foster Creek Road Nashville, TN 37204 • 800-765-0080 • Fax 615-726-3404

Client: Tina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Tina Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
<b>Sample ID: NPK1622-01 (0611010-001A - Water) Sampled: 11/08/06 09:10</b>								
<b>TCLP Metals by 6000/7000 Series Methods</b>								
Arsenic	ND		mg/L	0.100	1	11/13/06 14:57	W846 1311/6010	6112564
Barium	0.143		mg/L	0.100	1	11/13/06 14:57	W846 1311/6010	6112564
Cadmium	ND		mg/L	0.0100	1	11/13/06 14:57	W846 1311/6010	6112564
Chromium	ND		mg/L	0.0500	1	11/13/06 14:57	W846 1311/6010	6112564
Lead	ND		mg/L	0.0500	1	11/13/06 14:57	W846 1311/6010	6112564
Selenium	ND		mg/L	0.100	1	11/13/06 14:57	W846 1311/6010	6112564
Silver	ND		mg/L	0.0500	1	11/13/06 14:57	W846 1311/6010	6112564
Mercury	ND		mg/L	0.0100	1	11/14/06 11:53	W846 1311/7470	6112494
<b>TCLP Chlorinated Herbicides by EPA Method 8151</b>								
2,4-D	ND		mg/L	0.100	1	11/15/06 17:33	W846 1311/8151	6112666
2,4,5-TP (Silvex)	ND		mg/L	0.100	1	11/15/06 17:33	W846 1311/8151	6112666
Surr: Dichloroacetic Acid (27-151%)	74 %					11/15/06 17:33	W846 1311/8151	6112666
<b>TCLP Volatile Organic Compounds by EPA Method 1311/8260B</b>								
Benzene	0.201		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
2-Butanone	ND		mg/L	2.50	10	11/15/06 23:22	W846 1311/8260	6112757
Carbon Tetrachloride	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
Chlorobenzene	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
Chloroform	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
1,2-Dichloroethane	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
1,1-Dichloroethene	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
Tetrachloroethene	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
Trichloroethene	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
Vinyl chloride	ND		mg/L	0.100	10	11/15/06 23:22	W846 1311/8260	6112757
Surr: 1,2-Dichloroethane-d4 (62-142%)	93 %					11/15/06 23:22	W846 1311/8260	6112757
Surr: Dibromofluoromethane (73-123%)	94 %					11/15/06 23:22	W846 1311/8260	6112757
Surr: Toluene-d8 (79-120%)	95 %					11/15/06 23:22	W846 1311/8260	6112757
Surr: 4-Bromofluorobenzene (75-133%)	95 %					11/15/06 23:22	W846 1311/8260	6112757
<b>TCLP Semivolatile Organic Compounds by EPA Method 1311/8270C</b>								
Cresol(s)	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
1,4-Dichlorobenzene	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
2,4-Dinitrotoluene	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
Hexachlorobenzene	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
Hexachlorobutadiene	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
Hexachloroethane	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
Nitrobenzene	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
Pentachlorophenol	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
Pyridine	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
2,4,6-Trichlorophenol	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
2,4,5-Trichlorophenol	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
2-Methylphenol	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
3/4-Methylphenol	ND		mg/L	0.0200	2	11/17/06 11:37	W846 1311/8270	6112655
Surr: Terphenyl-d14 (29-149%)	72 %					11/17/06 11:37	W846 1311/8270	6112655
Surr: 2,4,6-Tribromophenol (40-161%)	76 %					11/17/06 11:37	W846 1311/8270	6112655



Client: Iina Bu, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Ann: Jeff Engels

Work Order: NPK1622  
Project Name: Iina Bu, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPK1622-01 (0611010-001A - Water) - cont. Sampled: 11/08/06 09:10								
TCLP Semivolatile Organic Compounds by EPA Method 1311/8270C - cont.								
Surr: Phenol-d5 (11-76%)	48 %					11/17/06 11:37	WS46 1311/8270	6112655
Surr: 2-Fluorobiphenyl (30-120%)	74 %					11/17/06 11:37	WS46 1311/8270	6112655
Surr: 2-Fluorophenol (20-86%)	58 %					11/17/06 11:37	WS46 1311/8270	6112655
Surr: Nitrobenzene-d5 (24-125%)	69 %					11/17/06 11:37	WS46 1311/8270	6112655
TCLP Pesticides by EPA Method 1311/8081A								
gamma-BHC (Lindane)	ND		mg/L	0.000500	1	11/14/06 21:11	WS46 1311/8081	6112650
Chlordane	ND		mg/L	0.00100	1	11/14/06 21:11	WS46 1311/8081	6112650
Endrin	ND		mg/L	0.000500	1	11/14/06 21:11	WS46 1311/8081	6112650
Heptachlor	ND		mg/L	0.000500	1	11/14/06 21:11	WS46 1311/8081	6112650
Heptachlor epoxide	ND		mg/L	0.000500	1	11/14/06 21:11	WS46 1311/8081	6112650
Methoxychlor	ND		mg/L	0.000500	1	11/14/06 21:11	WS46 1311/8081	6112650
Toxaphene	ND		mg/L	0.0500	1	11/14/06 21:11	WS46 1311/8081	6112650
Surr: Tetrachloro-met-a-xylene (46-127%)	1084 %	25				11/14/06 21:11	WS46 1311/8081	6112650
Surr: Decachlorobiphenyl (25-144%)	101 %					11/14/06 21:11	WS46 1311/8081	6112650

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 Factor Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Client: **lina Bu, LTD (3130)**  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: **Jeff Engels**

Work Order: **NPK1622**  
Project Name: **lina Bu, LTD**  
Project Number: **0611010**  
Received: **11/10/06 07:50**

## SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
<b>TCLP Chlorinated Herbicides by EPA Method 8151</b>							
SW846 1311/8151A	6112666	NPK1622-01	5.00	5.00	11/14/06 10:35	SHU	EPA 8151A
<b>TCLP Extraction by EPA 1311</b>							
SW846 1311	6112393	NPK1622-01	100.00	2000.00	11/11/06 12:48	JSS	EPA 1311
SW846 1311	6112393	NPK1622-01	100.00	2000.00	11/11/06 12:48	JSS	EPA 1311
SW846 1311	6112393	NPK1622-01	100.00	2000.00	11/11/06 12:48	JSS	EPA 1311
<b>TCLP Metals by 6000/7000 Series Methods</b>							
SW846 1311/6010B	6112564	NPK1622-01	5.00	50.00	11/13/06 11:30	LTB	EPA 3015
SW846 1311/6010B	6112564	NPK1622-01	5.00	50.00	11/13/06 11:30	LTB	EPA 3015
SW846 1311/6010B	6112564	NPK1622-01	5.00	50.00	11/13/06 11:30	LTB	EPA 3015
SW846 1311/6010B	6112564	NPK1622-01	5.00	50.00	11/13/06 11:30	LTB	EPA 3015
SW846 1311/6010B	6112564	NPK1622-01	5.00	50.00	11/13/06 11:30	LTB	EPA 3015
SW846 1311/6010B	6112564	NPK1622-01	5.00	50.00	11/13/06 11:30	LTB	EPA 3015
SW846 1311/6010B	6112564	NPK1622-01	5.00	50.00	11/13/06 11:30	LTB	EPA 3015
SW846 1311/6010B	6112393	NPK1622-01	100.00	2000.00	11/11/06 15:15	JSS	EPA 1311
SW846 1311/7470A	6112494	NPK1622-01	3.00	30.00	11/13/06 07:58	JMR	EPA 7470
<b>TCLP Pesticides by EPA Method 1311/8081A</b>							
SW846 1311/8081A	6112650	NPK1622-01	100.00	10.00	11/14/06 10:40	KLG	EPA 3510C Leachate
<b>TCLP Semivolatile Organic Compounds by EPA Method 1311/8270C</b>							
SW846 1311/8270C	6112655	NPK1622-01	500.00	1.00	11/14/06 11:30	KLG	EPA 3510C Leachate
SW846 1311/8270C	6112393	NPK1622-01	100.00	2000.00	11/11/06 12:48	JSS	EPA 1311

Client: Tina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Tina Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## PROJECT QUALITY CONTROL DATA

### Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
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#### TCLP Metals by 6000/7000 Series Methods

##### 6112494-BLK1

Mercury	<0.00500		mg/L	6112494	6112494-BLK1	11/14/06 11:11
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##### 6112564-BLK1

Antimony	0.0340		mg/L	6112564	6112564-BLK1	11/13/06 13:49
Barium	<0.00100		mg/L	6112564	6112564-BLK1	11/13/06 13:49
Cadmium	<0.000400		mg/L	6112564	6112564-BLK1	11/13/06 13:49
Chromium	<0.00130		mg/L	6112564	6112564-BLK1	11/13/06 13:49
Lead	<0.00220		mg/L	6112564	6112564-BLK1	11/13/06 13:49
Selenium	0.0231		mg/L	6112564	6112564-BLK1	11/13/06 13:49
Silver	<0.00190		mg/L	6112564	6112564-BLK1	11/13/06 13:49

#### TCLP Chlorinated Herbicides by EPA Method 8151

##### 6112666-BLK1

2,4-D	<0.0220		mg/L	6112666	6112666-BLK1	11/15/06 17:56
2,4,5-TP (Silvex)	<0.00400		mg/L	6112666	6112666-BLK1	11/15/06 17:56
Surrogate: Dichloroacetic Acid	93%			6112666	6112666-BLK1	11/15/06 17:56

#### TCLP Volatile Organic Compounds by EPA Method 1311/8260B

##### 6112757-BLK1

Benzene	<0.00310		mg/L	6112757	6112757-BLK1	11/15/06 22:07
2-Butanone	<0.00310		mg/L	6112757	6112757-BLK1	11/15/06 22:07
Carbon Tetrachloride	<0.00220		mg/L	6112757	6112757-BLK1	11/15/06 22:07
Chlorobenzene	<0.00340		mg/L	6112757	6112757-BLK1	11/15/06 22:07
Chloroform	<0.00510		mg/L	6112757	6112757-BLK1	11/15/06 22:07
1,2-Dichloroethane	<0.00170		mg/L	6112757	6112757-BLK1	11/15/06 22:07
1,1-Dichloroethene	<0.00270		mg/L	6112757	6112757-BLK1	11/15/06 22:07
Tetrachloroethene	<0.00320		mg/L	6112757	6112757-BLK1	11/15/06 22:07
Trichloroethene	<0.00250		mg/L	6112757	6112757-BLK1	11/15/06 22:07
Vinyl chloride	<0.00260		mg/L	6112757	6112757-BLK1	11/15/06 22:07
Surrogate: 1,2-Dichloroethane-d4	96%			6112757	6112757-BLK1	11/15/06 22:07
Surrogate: Dichromofluoromethane	94%			6112757	6112757-BLK1	11/15/06 22:07
Surrogate: Toluene-d8	94%			6112757	6112757-BLK1	11/15/06 22:07
Surrogate: 4-Bromofluorobenzene	96%			6112757	6112757-BLK1	11/15/06 22:07

#### TCLP Semivolatile Organic Compounds by EPA Method 1311/8270C

##### 6112655-BLK1

Cresol(s)	<0.0188		mg/L	6112655	6112655-BLK1	11/16/06 14:43
1,4-Dichlorobenzene	<0.0112		mg/L	6112655	6112655-BLK1	11/16/06 14:43
2,4-Dinitrotoluene	<0.0104		mg/L	6112655	6112655-BLK1	11/16/06 14:43
Hexachlorobenzene	<0.00860		mg/L	6112655	6112655-BLK1	11/16/06 14:43
Hexachlorobutadiene	<0.0104		mg/L	6112655	6112655-BLK1	11/16/06 14:43
Hexachlorocyclopentadiene	<0.0116		mg/L	6112655	6112655-BLK1	11/16/06 14:43

Client: Tina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Tina Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

PROJECT QUALITY CONTROL DATA  
Blank - Cont.

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
<b>TCLP Semivolatile Organic Compounds by EPA Method 1311/8270C</b>						
<b>6112655-BLK1</b>						
Nitrobenzene	<0.00900		mg/L	6112655	6112655-BLK1	11/16/06 14:43
Benzo(a)anthracene	<0.00900		mg/L	6112655	6112655-BLK1	11/16/06 14:43
Pyridine	<0.0102		mg/L	6112655	6112655-BLK1	11/16/06 14:43
2,4,6-Trichlorophenol	<0.00840		mg/L	6112655	6112655-BLK1	11/16/06 14:43
2,4,5-Trichlorophenol	<0.00840		mg/L	6112655	6112655-BLK1	11/16/06 14:43
2-Methylphenol	<0.00560		mg/L	6112655	6112655-BLK1	11/16/06 14:43
3,4-Methylphenol	<0.00620		mg/L	6112655	6112655-BLK1	11/16/06 14:43
Surrogate: Terphenyl-d14	78%			6112655	6112655-BLK1	11/16/06 14:43
Surrogate: 2,4,6-Trichlorophenol	70%			6112655	6112655-BLK1	11/16/06 14:43
Surrogate: Phenol-d5	39%			6112655	6112655-BLK1	11/16/06 14:43
Surrogate: 2-Fluorobiphenyl	74%			6112655	6112655-BLK1	11/16/06 14:43
Surrogate: 2-Fluorophenol	50%			6112655	6112655-BLK1	11/16/06 14:43
Surrogate: Nitrobenzene-d5	72%			6112655	6112655-BLK1	11/16/06 14:43
<b>TCLP Pesticides by EPA Method 1311/8081A</b>						
<b>6112650-BLK1</b>						
gamma-BHC (Lindane)	<0.000300		mg/L	6112650	6112650-BLK1	11/14/06 19:41
Chlordane	<0.000700		mg/L	6112650	6112650-BLK1	11/14/06 19:41
Endrin	<0.000400		mg/L	6112650	6112650-BLK1	11/14/06 19:41
Heptachlor	<0.000300		mg/L	6112650	6112650-BLK1	11/14/06 19:41
Heptachlor epoxide	<0.000300		mg/L	6112650	6112650-BLK1	11/14/06 19:41
Methoxychlor	<0.000300		mg/L	6112650	6112650-BLK1	11/14/06 19:41
Toxaphene	<0.0170		mg/L	6112650	6112650-BLK1	11/14/06 19:41
Surrogate: Tetrachloro-m-xylene	106%			6112650	6112650-BLK1	11/14/06 19:41
Surrogate: Decachlorobiphenyl	113%			6112650	6112650-BLK1	11/14/06 19:41

Client: Lisa Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Lisa Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## PROJECT QUALITY CONTROL DATA LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
<b>TCLP Metals by 6000/7000 Series Methods</b>								
<b>6112494-BS1</b>								
Mercury	0.0200	0.0202		mg/L	101%	78 - 124	6112494	11/14/06 11:20
<b>6112564-BS1</b>								
Antimony	10.0	9.87		mg/L	99%	80 - 120	6112564	11/13/06 13:58
Barium	100	102		mg/L	102%	80 - 120	6112564	11/13/06 13:58
Cadmium	10.0	9.85		mg/L	98%	80 - 120	6112564	11/13/06 13:58
Chromium	50.0	48.0		mg/L	96%	80 - 120	6112564	11/13/06 13:58
Lead	50.0	48.6		mg/L	97%	80 - 120	6112564	11/13/06 13:58
Selenium	10.0	9.82		mg/L	98%	80 - 120	6112564	11/13/06 13:58
Silver	10.0	9.42		mg/L	94%	80 - 120	6112564	11/13/06 13:58
<b>TCLP Chlorinated Herbicides by EPA Method 8151</b>								
<b>6112666-BS1</b>								
2,4-D	1.00	0.666		mg/L	67%	39 - 140	6112666	11/15/06 18:07
2,4,5-TP (Silvex)	1.00	0.652		mg/L	65%	32 - 125	6112666	11/15/06 18:07
Surrogate: Dichloroacetic Acid	1.00	0.394			39%	60 - 150	6112666	11/15/06 18:07
<b>TCLP Volatile Organic Compounds by EPA Method 1311/8260B</b>								
<b>6112757-BS1</b>								
Benzene	50.0	47.1		ug/L	94%	80 - 129	6112757	11/15/06 20:49
2-Butanone	250	240		ug/L	96%	72 - 132	6112757	11/15/06 20:49
Carbon Tetrachloride	50.0	50.0		ug/L	101%	66 - 147	6112757	11/15/06 20:49
Chlorobenzene	50.0	48.2		ug/L	96%	83 - 119	6112757	11/15/06 20:49
Chloroform	50.0	48.3		ug/L	97%	77 - 128	6112757	11/15/06 20:49
1,2-Dichloroethane	50.0	47.7		ug/L	95%	78 - 126	6112757	11/15/06 20:49
1,1-Dichloroethane	50.0	46.8		ug/L	94%	77 - 134	6112757	11/15/06 20:49
Tetrachloroethane	50.0	50.2		ug/L	100%	81 - 124	6112757	11/15/06 20:49
Trichloroethene	50.0	48.0		ug/L	96%	77 - 134	6112757	11/15/06 20:49
Vinyl chloride	50.0	50.3		ug/L	101%	55 - 150	6112757	11/15/06 20:49
Surrogate: 1,2-Dichloroethane-d4	50.0	49.3			99%	62 - 142	6112757	11/15/06 20:49
Surrogate: Dibromofluoromethane	50.0	47.7			95%	78 - 123	6112757	11/15/06 20:49
Surrogate: Toluene-d8	50.0	48.0			96%	79 - 120	6112757	11/15/06 20:49
Surrogate: 4-Bromofluorobenzene	50.0	49.1			98%	75 - 133	6112757	11/15/06 20:49
<b>TCLP Semivolatile Organic Compounds by EPA Method 1311/8270C</b>								
<b>6112655-BS1</b>								
Cresol(s)	0.400	0.276		mg/L	69%	44 - 116	6112655	11/16/06 15:11
1,4-Dichlorobenzene	0.200	0.143		mg/L	72%	28 - 95	6112655	11/16/06 15:11
2,4-Dinitrotoluene	0.200	0.163		mg/L	82%	59 - 123	6112655	11/16/06 15:11
Hexachlorobenzene	0.200	0.174		mg/L	87%	52 - 125	6112655	11/16/06 15:11
Hexachlorobutadiene	0.200	0.158		mg/L	79%	24 - 102	6112655	11/16/06 15:11
Hexachlorocyclopentadiene	0.200	0.168		mg/L	84%	28 - 92	6112655	11/16/06 15:11

Client Tina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn Jeff Engels

Work Order: NPK1622  
Project Name: Tina Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## PROJECT QUALITY CONTROL DATA LCS - Cont.

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
<b>TCCLP Semivolatile Organic Compounds by EPA Method 1311/8270C</b>								
<b>6112655-BS1</b>								
Nitrobenzene	0.200	0.141		mg/L	70%	45 - 111	6112655	11/16/06 15:11
Pentachlorophenol	0.200	0.169		mg/L	84%	48 - 139	6112655	11/16/06 15:11
Pyridine	0.200	0.0605		mg/L	30%	12 - 82	6112655	11/16/06 15:11
2,4,6-Trichlorophenol	0.200	0.152		mg/L	76%	53 - 116	6112655	11/16/06 15:11
2,4,5-Trichlorophenol	0.200	0.165		mg/L	82%	55 - 120	6112655	11/16/06 15:11
2-Methylphenol	0.200	0.135		mg/L	68%	15 - 90	6112655	11/16/06 15:11
3/4-Methylphenol	0.200	0.140		mg/L	70%	4 - 99	6112655	11/16/06 15:11
Surrogate: Terphenyl-d14	0.100	0.0759			76%	29 - 149	6112655	11/16/06 15:11
Surrogate: 2,4,6-Tribromophenol	0.100	0.0796			80%	40 - 161	6112655	11/16/06 15:11
Surrogate: Phenol-d5	0.100	0.0418			42%	11 - 76	6112655	11/16/06 15:11
Surrogate: 2-Fluorobiphenyl	0.100	0.0760			76%	30 - 120	6112655	11/16/06 15:11
Surrogate: 2-Fluorophenol	0.100	0.0517			52%	20 - 86	6112655	11/16/06 15:11
Surrogate: Nitrobenzene-d5	0.100	0.0689			69%	24 - 125	6112655	11/16/06 15:11
<b>TCCLP Pesticides by EPA Method 1311/8081A</b>								
<b>6112650-BS1</b>								
gamma-BHC (Lindane)	0.0100	0.00812		mg/L	81%	48 - 142	6112650	11/14/06 19:56
Endrin	0.0100	0.00841		mg/L	84%	43 - 165	6112650	11/14/06 19:56
Heptachlor	0.0100	0.00844		mg/L	84%	30 - 134	6112650	11/14/06 19:56
Heptachlor epoxide	0.0100	0.00853		mg/L	85%	47 - 140	6112650	11/14/06 19:56
Methoxychlor	0.0100	0.00677		mg/L	68%	40 - 145	6112650	11/14/06 19:56
Surrogate: Tetracloro-meta-xylene	0.00250	0.00251			100%	46 - 127	6112650	11/14/06 19:56
Surrogate: Decachlorobiphenyl	0.00250	0.00259			104%	25 - 144	6112650	11/14/06 19:56
<b>6112650-BS2</b>								
Chlordane	0.0500	0.0640		mg/L	128%	70 - 184	6112650	11/14/06 20:11
Toxaphene	0.100	0.0919		mg/L	92%	85 - 172	6112650	11/14/06 20:11
Surrogate: Tetracloro-meta-xylene	0.00250	0.00281			112%	46 - 127	6112650	11/14/06 20:11
Surrogate: Decachlorobiphenyl	0.00250	0.00284			114%	25 - 144	6112650	11/14/06 20:11

Client: lina Bu, LTD (3130)  
612 E. Murray Drive  
Farmingington, NM 87401  
Ann: Jeff Engels

Work Order: NPK1622  
Project Name: lina Bu, LTD  
Project Number: 0611010  
Received: 11/10/06 07:30

## PROJECT QUALITY CONTROL DATA

### LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Unit	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>TCLP Metals by 6000/7000 Series Methods</b>												
<b>6112494-BSD1</b>												
Mercury		0.0200		mg/L	0.0200	100%	78 - 124	1	22	6112494		11/14/06 11:23
<b>6112564-BSD1</b>												
Arsenic	10.4			mg/L	10.0	104%	80 - 120	5	20	6112564		11/13/06 14:02
Barium	105			mg/L	100	105%	80 - 120	3	20	6112564		11/13/06 14:02
Cadmium	10.4			mg/L	10.0	104%	80 - 120	5	20	6112564		11/13/06 14:02
Chromium	50.5			mg/L	50.0	101%	80 - 120	5	20	6112564		11/13/06 14:02
Cu	51.0			mg/L	50.0	102%	80 - 120	5	20	6112564		11/13/06 14:02
Selenium	10.3			mg/L	10.0	103%	80 - 120	5	20	6112564		11/13/06 14:02
Silver	9.85			mg/L	10.0	98%	80 - 120	4	20	6112564		11/13/06 14:02

## TCLP Semivolatile Organic Compounds by EPA Method 1311/8270C

<b>6112655-BSD1</b>												
Crowol(s)	0.262			mg/L	0.400	66%	44 - 116	5	50	6112655		11/16/06 15:38
1,4-Dichlorobenzene	0.0697	R		mg/L	0.200	35%	28 - 95	69	15	6112655		11/16/06 15:38
2,4-Dinitrotoluene	0.154			mg/L	0.200	77%	59 - 125	8	22	6112655		11/16/06 15:38
Hexachlorobenzene	0.162			mg/L	0.200	81%	52 - 125	7	19	6112655		11/16/06 15:38
Hexachlorobutadiene	0.0954	R		mg/L	0.200	48%	24 - 102	49	29	6112655		11/16/06 15:38
Hexachlorocyclopentadiene	0.0710	R		mg/L	0.200	36%	28 - 92	81	37	6112655		11/16/06 15:38
Nitrobenzene	0.132			mg/L	0.200	66%	45 - 111	7	23	6112655		11/16/06 15:38
Pentachlorophenol	0.158			mg/L	0.200	79%	48 - 139	7	50	6112655		11/16/06 15:38
Pyridine	0.0950			mg/L	0.200	48%	12 - 82	44	50	6112655		11/16/06 15:38
2,4,6-Trichlorophenol	0.148			mg/L	0.200	74%	53 - 116	3	50	6112655		11/16/06 15:38
2,4,5-Trichlorophenol	0.155			mg/L	0.200	78%	55 - 120	6	50	6112655		11/16/06 15:38
2-Methylphenol	0.130			mg/L	0.200	65%	15 - 90	4	52	6112655		11/16/06 15:38
3/4-Methylphenol	0.132			mg/L	0.200	66%	4 - 99	6	54	6112655		11/16/06 15:38
Surrogate: Terphenyl-d14	0.0720			mg/L	0.100	72%	29 - 149			6112655		11/16/06 15:38
Surrogate: 2,4,6-Tribromophenol	0.0734			mg/L	0.100	73%	40 - 161			6112655		11/16/06 15:38
Surrogate: Phenol-d5	0.0364			mg/L	0.100	36%	11 - 76			6112655		11/16/06 15:38
Surrogate: 2-Fluorobiphenyl	0.0725			mg/L	0.100	72%	30 - 120			6112655		11/16/06 15:38
Surrogate: 2-Fluorophenol	0.0489			mg/L	0.100	49%	20 - 86			6112655		11/16/06 15:38
Surrogate: Nitrobenzene-d5	0.0656			mg/L	0.100	66%	24 - 125			6112655		11/16/06 15:38

Client: Ima Ba, LTD (3130)  
613 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Ima Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## PROJECT QUALITY CONTROL DATA

Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
<b>TCLP Metals by 6000/7000 Series Methods</b>										
<b>6112494-MS1</b>										
Mercury	ND	0.0206		mg/L	0.0200	103%	63 - 138	6112494	NPK1319-01	11/14/06 11:27
<b>6112564-MS1</b>										
Arsenic	5.88	16.4		mg/L	10.0	105%	75 - 125	6112564	NPK1319-01	11/13/06 14:11
Barium	0.164	106		mg/L	100	106%	75 - 125	6112564	NPK1319-01	11/13/06 14:11
Cadmium	0.00600	10.1		ug/L	10.0	101%	75 - 125	6112564	NPK1319-01	11/13/06 14:11
Chromium	0.0380	49.0		mg/L	50.0	98%	75 - 125	6112564	NPK1319-01	11/13/06 14:11
Lead	0.00700	50.1		mg/L	50.0	100%	75 - 125	6112564	NPK1319-01	11/13/06 14:11
Selenium	0.0181	10.4		mg/L	10.0	104%	75 - 125	6112564	NPK1319-01	11/13/06 14:11
Silver	0.0340	9.82		mg/L	10.0	98%	75 - 125	6112564	NPK1319-01	11/13/06 14:11
<b>TCLP Chlorinated Herbicides by EPA Method 8151</b>										
<b>6112666-MS1</b>										
2,4-D	ND	0.654		mg/L	1.00	65%	33 - 142	6112666	NPK1299-01	11/15/06 18:18
2,4,5-TP (Silvex)	ND	0.547		mg/L	1.00	55%	32 - 125	6112666	NPK1299-01	11/15/06 18:18
Surrogate: Dichloroacetic Acid		0.876		mg/L	1.00	88%	60 - 150	6112666	NPK1299-01	11/15/06 18:18
<b>TCLP Volatile Organic Compounds by EPA Method 1311/8260B</b>										
<b>6112757-MS1</b>										
Benzene	ND	0.423		mg/L	0.500	85%	58 - 160	6112757	NPK1535-01	11/16/06 04:24
2-Butanone	ND	2.01		mg/L	2.50	80%	58 - 139	6112757	NPK1535-01	11/16/06 04:24
Carbon Tetrachloride	ND	0.416		mg/L	0.500	83%	49 - 182	6112757	NPK1535-01	11/16/06 04:24
Chlorobenzene	ND	0.417		mg/L	0.500	83%	70 - 142	6112757	NPK1535-01	11/16/06 04:24
Chloroform	ND	0.446		mg/L	0.500	89%	52 - 158	6112757	NPK1535-01	11/16/06 04:24
1,2-Dichloroethane	ND	0.424		mg/L	0.500	85%	52 - 153	6112757	NPK1535-01	11/16/06 04:24
1,1-Dichloroethene	ND	0.391		mg/L	0.500	78%	59 - 169	6112757	NPK1535-01	11/16/06 04:24
Tetrachloroethene	ND	0.386		mg/L	0.500	77%	61 - 156	6112757	NPK1535-01	11/16/06 04:24
Trichloroethene	ND	0.393		mg/L	0.500	79%	58 - 165	6112757	NPK1535-01	11/16/06 04:24
Vinyl chloride	ND	0.407		mg/L	0.500	81%	38 - 183	6112757	NPK1535-01	11/16/06 04:24
Surrogate: 1,3-Dichloroethene- <i>old</i>		46.2		ug/L	50.0	92%	62 - 142	6112757	NPK1535-01	11/16/06 04:24
Surrogate: Dichlorofluoromethane		46.1		ug/L	50.0	92%	78 - 123	6112757	NPK1535-01	11/16/06 04:24
Surrogate: Toluene- <i>old</i>		48.4		ug/L	50.0	97%	79 - 120	6112757	NPK1535-01	11/16/06 04:24
Surrogate: 4-Bromofluorobenzene		47.1		ug/L	50.0	94%	75 - 133	6112757	NPK1535-01	11/16/06 04:24
<b>TCLP Pesticides by EPA Method 1311/8081A</b>										
<b>6112650-MS1</b>										
gamma-BHC (Lindane)	ND	0.00823		ug/L	0.0100	82%	37 - 149	6112650	NPK1534-01	11/14/06 20:26
Endrin	ND	0.00863		ug/L	0.0100	86%	32 - 169	6112650	NPK1534-01	11/14/06 20:26
Heptachlor	ND	0.00853		ug/L	0.0100	85%	28 - 138	6112650	NPK1534-01	11/14/06 20:26



# TestAmerica

ANALYTICAL TESTING CORPORATION

2050 Foster Creighton Road Nashville, TN 37204 • 800-765-0980 • Fax 615-728-3401

Client: Lina Bu, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Lina Bu, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## PROJECT QUALITY CONTROL DATA Matrix Spike - Cont.

Analyte	Orig. Val.	MS Val	Q	Unit	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
<b>TCLP Pesticides by EPA Method 1311/8081A</b>										
<b>6112650-MS1</b>										
Heptachlor epoxide	ND	0.00849		mg/L	0.0100	85%	43 - 140	6112650	NPK1534-01	11/14/06 20:26
Metoxychlor	ND	0.00759		mg/L	0.0100	76%	20 - 151	6112650	NPK1534-01	11/14/06 20:26
Surrigate: Trisachloro-meta-xylene		0.00247		mg/L	0.00250	99%	46 - 127	6112650	NPK1534-01	11/14/06 20:26
Surrigate: Decachlorobiphenyl		0.00274		mg/L	0.00250	110%	25 - 144	6112650	NPK1534-01	11/14/06 20:26

Client: Tina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Tina Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## PROJECT QUALITY CONTROL DATA

### Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>TCLP Metals by 6000/7000 Series Methods</b>												
<b>6112494-MSD1</b>												
Mercury	ND	0.0200		mg/L	0.0200	100%	63 - 138	3	22	6112494	NPK1319-01	11/14/06 11:29
<b>6112564-MSD1</b>												
Arsenic	5.88	16.0		mg/L	10.0	101%	75 - 125	2	20	6112564	NPK1319-01	11/13/06 14:16
Barium	0.169	103		mg/L	100	103%	75 - 125	3	30	6112564	NPK1319-01	11/13/06 14:16
Cadmium	0.00600	9.97		mg/L	10.0	100%	75 - 125	1	20	6112564	NPK1319-01	11/13/06 14:16
Chromium	0.0380	48.1		mg/L	80.0	96%	75 - 125	2	20	6112564	NPK1319-01	11/13/06 14:16
Cuad	0.00700	49.2		mg/L	50.0	98%	75 - 125	2	20	6112564	NPK1319-01	11/13/06 14:16
Selenium	0.0161	10.2		mg/L	10.0	102%	75 - 125	2	20	6112564	NPK1319-01	11/13/06 14:16
Silver	0.0340	9.55		mg/L	10.0	95%	75 - 125	3	20	6112564	NPK1319-01	11/13/06 14:16
<b>TCLP Chlorinated Herbicides by EPA Method 8151</b>												
<b>6112666-MSD1</b>												
2,4-D	ND	0.672		mg/L	1.00	67%	33 - 142	3	48	6112666	NPK1299-01	11/15/06 18:30
2,4,5-TP (Silvex)	ND	0.538		mg/L	1.00	54%	32 - 125	2	39	6112666	NPK1299-01	11/15/06 18:30
Surrogate: Dichloroacetic Acid		0.740		mg/L	1.00	74%	60 - 150			6112666	NPK1299-01	11/15/06 18:30
<b>TCLP Volatile Organic Compounds by EPA Method 1311/8260B</b>												
<b>6112757-MSD1</b>												
Benzene	ND	0.478		mg/L	0.500	96%	58 - 160	12	33	6112757	NPK1535-01	11/16/06 04:49
2-Butanone	ND	2.23		mg/L	2.50	90%	58 - 139	11	24	6112757	NPK1535-01	11/16/06 04:49
Carbon Tetrachloride	ND	0.541		mg/L	0.500	108%	49 - 182	26	44	6112757	NPK1535-01	11/16/06 04:49
Chlorobenzene	ND	0.490		mg/L	0.500	98%	70 - 142	16	36	6112757	NPK1535-01	11/16/06 04:49
Chloroform	ND	0.487		mg/L	0.500	97%	52 - 158	9	29	6112757	NPK1535-01	11/16/06 04:49
1,2-Dichloroethane	ND	0.468		mg/L	0.500	94%	52 - 153	10	28	6112757	NPK1535-01	11/16/06 04:49
1,1-Dichloroethane	ND	0.467		mg/L	0.500	93%	59 - 169	18	38	6112757	NPK1535-01	11/16/06 04:49
Tetrachloroethene	ND	0.500		mg/L	0.500	100%	61 - 156	26	43	6112757	NPK1535-01	11/16/06 04:49
Trichloroethene	ND	0.485		mg/L	0.500	97%	58 - 165	21	39	6112757	NPK1535-01	11/16/06 04:49
Vinyl chloride	ND	0.467		mg/L	0.500	93%	38 - 183	14	34	6112757	NPK1535-01	11/16/06 04:49
Surrogate: 1,2-Dichloroethane-d4		48.7		ug/L	50.0	97%	62 - 142			6112757	NPK1535-01	11/16/06 04:49
Surrogate: Dibromofluoromethane		47.5		ug/L	50.0	95%	78 - 123			6112757	NPK1535-01	11/16/06 04:49
Surrogate: Toluene-d8		47.7		ug/L	50.0	95%	79 - 120			6112757	NPK1535-01	11/16/06 04:49
Surrogate: 4-Bromofluorobenzene		48.8		ug/L	50.0	98%	75 - 133			6112757	NPK1535-01	11/16/06 04:49
<b>TCLP Pesticides by EPA Method 1311/8081A</b>												
<b>6112650-MSD1</b>												
gamma-BHC (Lindane)	ND	0.00808		mg/L	0.0100	81%	37 - 149	2	33	6112650	NPK1534-01	11/14/06 20:41
Endrin	ND	0.00846		mg/L	0.0100	85%	32 - 169	2	29	6112650	NPK1534-01	11/14/06 20:41
Heptachlor	ND	0.00826		mg/L	0.0100	83%	28 - 138	3	38	6112650	NPK1534-01	11/14/06 20:41
Heptachlor epoxide	ND	0.00829		mg/L	0.0100	83%	43 - 140	2	23	6112650	NPK1534-01	11/14/06 20:41
Methoxychlor	ND	0.00719		mg/L	0.0100	72%	26 - 151	5	27	6112650	NPK1534-01	11/14/06 20:41

# TestAmerica

ANALYTICAL TESTING CORPORATION

2860 Foster Creighton Road Nashville, TN 37204 • 800-765-0080 • Fax 615-726-3404

Client: Jina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Jina Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## PROJECT QUALITY CONTROL DATA

### Matrix Spike Dup - Cont.

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD Limit	Batch	Sample Duplicated	Analyzed Date/Time
<b>TCLP Pesticides by EPA Method 1311/8081A</b>											
<b>6112650-MSD1</b>											
<i>Surrogate: Tetrachloro-m-xylene</i>		0.00262		mg/L	0.00230	105%	46 - 137		6112650	NPK1534-01	11/14/06 20:41
<i>Surrogate: Decachlorobiphenyl</i>		0.00278		mg/L	0.00250	111%	25 - 144		6112650	NPK1534-01	11/14/06 20:41

Client: Iina Ba. LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn: Jeff Engels

Work Order: NPK1622  
Project Name: Iina Ba. LTD  
Project Number: 0611010  
Received: 11/10/06 07:50

## TCLP REGULATORY LIMITS

Analyte	Regulatory Limit
1,1-Dichloroethene	0.7
1,2-Dichloroethane	0.5
1,4-Dichlorobenzene	7.5
2,4,5-TP (Silvex)	1
2,4,5-Trichlorophenol	2
2,4,6-Trichlorophenol	400
2,4-D	10
2,4-Dinitrotoluene	0.13
2-Butanone	200
Arsenic	5
Barium	100
Benzene	0.5
Cadmium	1
Carbon Tetrachloride	0.5
Chlordane	0.03
Chlorobenzene	100
Chloroform	6
Chromium	5
Cresol(s)	200
Endrin	0.02
gamma-BHC (Lindane)	0.4
Heptachlor	0.008
Heptachlor epoxide	0.008
Hexachlorobenzene	0.13
Hexachlorobutadiene	0.5
Hexachloroethane	3
Lead	5
Mercury	0.2
Methoxychlor	10
Nitrobenzene	2
Pentachlorophenol	100
Pyridine	5
Selenium	1
Silver	5
Tetrachloroethene	0.7
Toxaphene	0.5
Trichloroethene	0.5
Vinyl chloride	0.2

# TestAmerica

ANALYTICAL TESTING CORPORATION

2060 Foster Creighton Road Nashville, TN 37204 • 800-755-0980 • Fax 615-726-3404

Client Tina Ba, LTD (3130)  
612 E. Murray Drive  
Farmington, NM 87401  
Attn Jeff Engels

Work Order: NPK1622  
Project Name: Tina Ba, LTD  
Project Number: 0611010  
Received: 11/10/06 07:30

## DATA QUALIFIERS AND DEFINITIONS

R The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.  
Z5 Due to sample matrix effects, the surrogate recovery was outside acceptance limits. Secondary surrogate recovery was within the acceptance limits.

## METHOD MODIFICATION NOTES



**Nashville Division**  
**COOLER RECEIPT FORM**

BC#



NPK1622

Cooler Received/Opened On: 11/10/06@7:50

1. Indicate the Airbill Tracking Number (last 4 digits for FedEx only) and Name of Courier below: 2740

Fed-Ex

Temperature of representative sample or temperature blank when opened: 5.2 Degrees Celsius  
(indicate IR Gun ID#)

92171982

3. Were custody seals on outside of cooler? YES...NO...NA

a. If yes, how many and where: 1 Front

4. Were the seals intact, signed, and dated correctly? YES...NO...NA

5. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-5 (initial) [Signature]

6. Were custody seals on containers: YES NO and intact YES NO NA

were these signed, and dated correctly? YES...NO...NA

7. What kind of packing material used? Bubblewrap Peanuts Vermiculite Foam Insert

Plastic bag Paper Other \_\_\_\_\_ None

8. Cooling process: Ice Ice-pack Ice (direct contact) Dry Ice Other None

9. Did all containers arrive in good condition (unbroken)? YES...NO...NA

10. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

11. Did all container labels and tags agree with custody papers? YES...NO...NA

12. a. Were VOA vials received? YES...NO...NA

b. Was there any observable head space present in any VOA vial? YES...NO...NA

I certify that I unloaded the cooler and answered questions 6-12 (initial) [Signature]

13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...NA

If preservation in-house was needed, record standard ID of preservative used here \_\_\_\_\_

14. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (initial) [Signature]

15. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

16. Did you sign the custody papers in the appropriate place? YES...NO...NA

17. Were correct containers used for the analysis requested? YES...NO...NA

18. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 15-18 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

19. Were there Non-Conformance issues at log in YES NO Was a PIPE generated YES NO H

iiiná bá

612 E. Murray Drive  
Farmington, NM 87401  
(505) 327-1072

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

**Subcontractor:**

Test America, Inc.  
2960 Foster Creighton Drive  
Nashville, TN 372040566

TEL: (800) 765-0980  
FAX: (615) 726-3404

**NPK1622**

11/20/06 23:59

Acct #: 3130SP

09-Nov-06

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests						
				SW1311	SW1311/6010B	SW1311/8081A	SW1311/8150	SW1311/8260B	SW1311/8270C	SW7470
0611010-001A	# A Multiple Pha	11/8/2006 9:10:00 AM	1LAMGU	1	1	1	1	1	1	1

*NPK 1622*

Comments: Please analyze one (1) sample for TCLP metals (6010B/7470), Pesticides/Herbicides, Volatiles, and Semi-volatiles. Thank you.

	Date/Time		Date/Time
Relinquished by: <i>Valeria C...</i>	11/9/06 16:10	Received by: <i>[Signature]</i>	11/10/06 7:50 5.2°C
Relinquished by: _____	_____	Received by: _____	_____





District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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: Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No: <input type="checkbox"/>	4. Generator: Red Willow Production Company 5. Originating Site: McElvain Compressor 6. Transporter: 8. State: NM
2. Management Facility Destination: JFJ Landfarm L.L.C.	
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.o Box 2043 Farmington, NM 87499	
7. Location of Material (Street Address or ULSTR) S-25, T-33N, R-08W	
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: Mixture of sand/gravl/engine oil (15W40) from clean-up around engine and location. MSDS, RCRA8, TCLP, Chain of Custody forms attached

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

SIGNATURE [Signature] TITLE: Operations Manager DATE: 12/15/06  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: JOEL OWENS TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: joel.owens@industrialecosystems.com

(This space for State Use)

APPROVED BY: BD TITLE: \_\_\_\_\_ DATE: 12-26-06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

DUPLICATE

12/17/2006 22:08 5056321876

INDUSTRIALECOSYSTEMC

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# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

RECD DEC 23 2006  
OIL CONS. DIV.  
DIST. 10

BILL RICHARDSON

Governor

Joanna Prukop  
Cabinet Secretary

Wayne Price

Director

Oil Conservation Division

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Red Willow Production Company 14933 Hwy 172 Ignacio, Colorado 81137	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name):  <i>McElvain Compressor</i>  Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR):  UL- <u>S-25 T-33N R-08W</u> or attach list Street Address: _____
4. Source and Description of Waste  Mixture of Sand/Gravel/Engine oil (15W40) from clean up around engine and location.	

I, Jonathan Sorrel representative for: Red Willow Production 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) TCLP☒ RCRA 8 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):

Phone Contact: 970-563-5193

Title: EHS Manager / EHS TECHNICIAN

P.O# / Pay Key No: \_\_\_\_\_

Date: 18-Dec-06

MSDS Code: 776084  
Status: Final

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Date of Issue: 06-May-2004



## MATERIAL SAFETY DATA SHEET

### Conoco HD Fleet Supreme Engine Oil

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Conoco HD Fleet Supreme Engine Oil  
Product Code: 46261  
Intended Use: Heavy Duty Diesel Engine Oil  
Synonyms: Conoco MSDS #MOTC0090  
Conoco HD Fleet Supreme Engine Oil (AP Region)  
Conoco HD Fleet Supreme Engine Oil 10W-30  
Conoco HD Fleet Supreme Engine Oil 15W-40  
Conoco HD Fleet Supreme Engine Oil 20W-50  
Chemical Family: Not Given

Responsible Party: Conoco Lubricants  
A Division of ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas  
77079-1175

Customer Service: 800-255-9558  
Technical Information: 800-255-9558

The intended use of this product is indicated above. If any additional use is known, please contact us at the Technical Information number listed.

#### EMERGENCY OVERVIEW

##### 24 Hour Emergency Telephone Numbers:

Spill, Leak, Fire or Accident Call CHEMTREC:  
North America: (800) 424-9300  
Others: (703) 527-3887 (collect)

California Poison Control System: (800) 356-3219

Health Hazards/Precautionary Measures: Causes eye and skin irritation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Physical Hazards/Precautionary Measures: Keep away from all sources of ignition.

Appearance: Light brown  
Physical Form: Liquid  
Odor: Light petroleum

#### NFPA 704 Hazard Class:

Health: 1 (Slight)  
Flammability: 1 (Slight)  
Instability: 0 (Least)

#### HMIS Hazard Class:

Health: 1 (Slight)  
Flammability: 1 (Slight)  
Physical Hazards: 0 (Least)

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### HAZARDOUS COMPONENTS

Component / CAS No:	Percent (%)	ACGIH:	OSHA:	NIOSH:	Other:
Zinc Compound PROPRIETARY	1 - 2	NE	NE	NE	

### NON-HAZARDOUS COMPONENTS

Component / CAS No:	Percent (%)	ACGIH:	OSHA:	NIOSH:	Other:
Lubricant Base Oil (Petroleum) VARIOUS	70 - 80	5mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> STEL	5 mg/m <sup>3</sup> TWA	2500 mg/m <sup>3</sup> IDLH	as Oil Mist, if Generated  5 mg/m <sup>3</sup> NOHSC TWA
Additives PROPRIETARY	20 - 30	NE	NE	NE	

All components are listed on the TSCA inventory.

The base oil for this product can be a mixture of any of the following highly refined petroleum streams: CAS 64741-88-4; CAS 64741-89-5; CAS 64741-98-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-62-7; CAS 64742-63-8; CAS 64742-65-0; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.

NE=Not Established

## 3. HAZARDS IDENTIFICATION

### Potential Health Effects:

**Eye:** Eye irritant. Contact may cause stinging, watering, redness, and swelling.

**Skin:** Skin irritant. Contact may cause redness, itching, burning, and skin damage. No harmful effects from skin absorption are expected.

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** No harmful effects expected from ingestion.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea, and, diarrhea.

**Cancer:** Inadequate evidence available to evaluate the cancer hazard of this material. See Section 11 for carcinogenicity information of individual components, if any.

**Target Organs:** No data available for this material.

**Developmental:** No data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders.

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#### 4. FIRST AID MEASURES

**Eye:** Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek medical attention. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

**Skin:** Wipe material from skin, remove contaminated shoes and clothing and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops, seek medical attention.

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

**Notes to Physician:** High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. Often these injuries require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury.

Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

#### 5. FIRE-FIGHTING MEASURES

##### Flammable Properties:

Flash Point:	380°F / 193°C
Test Method:	PM
OSHA Flammability Class:	Not applicable
LEL%:	No data
UEL%:	No data
Autoignition Temperature:	No data

**Unusual Fire & Explosion Hazards:** This material may burn, but will not ignite readily. If water is applied to heated material, it can cause violent foaming and boilover. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

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## 6. ACCIDENTAL RELEASE MEASURES

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. Notify appropriate federal, state, and local agencies.

## 7. HANDLING AND STORAGE

**Handling:** Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.148. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Storage temperatures above 113°F may lead to thermal decomposition, resulting in the generation of hydrogen sulfide and other sulfur containing gases. Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Use and store this material in cool, dry, well-ventilated areas. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required.

**Personal Protective Equipment (PPE):**

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**Respiratory:** Inhalation is not an expected route of exposure. However, a NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

<b>Appearance:</b>	Light brown
<b>Physical Form:</b>	Liquid
<b>Odor:</b>	Light petroleum
<b>Odor Threshold:</b>	No data
<b>pH:</b>	Not applicable
<b>Vapor Pressure (mm Hg):</b>	<1
<b>Vapor Density (air=1):</b>	>1
<b>Boiling Point:</b>	No data
<b>Melting/Freezing Point:</b>	No data
<b>Solubility In Water:</b>	No data
<b>Partition Coefficient (n-octanol/water):</b>	No data
<b>Specific Gravity:</b>	0.88
<b>Bulk Density:</b>	7.33
<b>Bulk Density Units</b>	lbs/gal
<b>Viscosity cSt @ 100°C:</b>	15.1
<b>Viscosity cSt @ 40°C:</b>	115
<b>Evaporation Rate (nBuAc=1):</b>	<1
<b>Flash Point:</b>	380°F / 193°C
<b>Test Method:</b>	PM
<b>Flammable/Explosive Limits:</b>	No data
<b>Decomposition Temperature:</b>	No data

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## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Conditions to avoid:** Can become unstable at elevated temperatures and pressures.

**Materials to Avoid (Incompatible Materials):** Avoid contact with acids and strong oxidizing agents.

**Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen, sulfur, phosphorus, and zinc oxides. Hydrogen sulfide and alkyl mercaptans may also be released. Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 113°F.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Lubricant Base Oil (Petroleum) - VARIOUS

**Carcinogenicity:** The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, hydrotreating, and dewaxing to remove aromatics and improve performance characteristics. None of the oils used are listed as a carcinogen by NTP, IARC, or OSHA.

#### Acute Data:

### Lubricant Base Oil (Petroleum) - VARIOUS

Dermal LD50 = >2 g/kg

LC50 = No information available

Oral LD50 = >5 g/kg

### Additives - PROPRIETARY

Dermal LD50 = No information available

LC50 = No information available

Oral LD50 = No information available

### Zinc Compound - PROPRIETARY

Dermal LD50 = No information available

LC50 = No information available

Oral LD50 = No information available

## 12. ECOLOGICAL INFORMATION

Not evaluated at this time.



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### 13. DISPOSAL CONSIDERATIONS

This material under most intended uses would become used oil due to contamination by physical or chemical impurities. RECYCLE ALL USED OIL. While being recycled, used oil is regulated by 40 CFR 279. Use resulting in chemical or physical change or contamination may also subject it to regulation as hazardous waste. Under federal regulations, used oil is a solid waste managed under 40 CFR 279. However, in California, used oil is managed as hazardous waste until tested to show it is not hazardous. Consult state and local regulations regarding the proper handling of used oil. In the case of used oil, the intent to discard it may cause the used oil to be regulated as hazardous waste.

Contents should be completely used and containers emptied prior to discard. Rinseate may be considered a RCRA hazardous waste and must be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or a drum reconditioner. To assure proper disposal of small empty containers, consult with state and local regulations and disposal authorities.

### 14. TRANSPORTATION INFORMATION

DOT Shipping Description: Not classified as hazardous

Note: Material is unregulated unless in container of 3500 gallons or more, then provisions of 49 CFR Part 130 apply for land shipment.

IMDG Shipping Description: Not regulated

ICAO/IATA Shipping Description: Not regulated

### 15. REGULATORY INFORMATION

#### U.S. Regulations:

##### EPA SARA 311/312 (Title III Hazard Categories)

Acute Health:	Yes
Chronic Health:	No
Fire Hazard:	No
Pressure Hazard:	No
Reactive Hazard:	No

##### SARA - Section 313 and 49 CFR 372:

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:  
Zinc Compound 1-2%

##### EPA (CERCLA) Reportable Quantity:

--None Known--

##### CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPOs

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:  
-- None Known --

##### California Proposition 65:

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

-- None Known --

##### Carcinogen Identification:

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This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

**TSCA:**

All components are listed on the TSCA inventory.

**16. OTHER INFORMATION**

Issue/Revision Date: 06-May-2004  
Previous Issue Date: 5/13/2003  
Product Code: 46261  
Reason for revision: Formulation Change. SEE SECTION 2.  
Previous Product Code: 46261, 46260, 46272  
MSDS Code: 776084

**Disclaimer of Expressed and Implied Warranties:**

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

**Green Analytical Laboratories, Inc.**  
**75 Suttle Street**  
**Durango, CO 81303**

Red Willow Production  
PO Box 369  
Ignacio, CO 81137  
Attention: Andy Young

**PROJECT NAME:**

**PROJECT NUMBER:**

**SAMPLE I.D.:** McElvain Comp

**GAL I.D.:** 610-043-01

Date Received: 10/05/06

Date Reported: 11/20/06

QC Batches:

Sample Date: 10/05/06

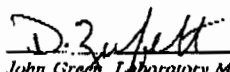
Sample Matrix: Soil

Units: mg/L

## TCLP Metals

### RESULTS

PARAMETER	METHOD	REPORT		DATE	
		LIMIT	RESULT	DILUTION	ANALYZED ANALYST
Arsenic	6010B	0.10	<0.10	1	
Barium	6010B	0.01	1.25	1	
Cadmium	6010B	0.01	0.01	1	
Chromium	6010B	0.01	<0.01	1	
Lead	6010B	0.05	<0.05	1	
Mercury	7470A	0.0002	<0.0002	1	
Selenium	6010B	0.20	<0.20	1	
Silver	6010B	0.01	<0.01	1	

*for:*   
John Green, Laboratory Manager

Nov. 20. 2006 11:18AM 970-247-4227

No. 7234 P. 4

Green Analytical Laboratories, Inc.  
75 Suttle Street  
Durango, CO 81303

Red Willow Production  
PO Box 369  
Ignacio, CO 81137  
Attention: Andy Young

GAL I.D.: 610-043-01

Date Received: 10/05/06

Date Reported: 11/20/06

QC Batches:

PROJECT NAME:PROJECT NUMBER:SAMPLE I.D.:

McElvain Comp

- Totals -

Sample Date: 10/05/06

Sample Matrix: Soil

Units: mg/kg

## RCRA Metals

RESULTS

PARAMETER	METHOD	REPORT		DATE	
		LIMIT	RESULT	DILUTION	ANALYZED ANALYST
Arsenic	6010B	10	<10	100	
Barium	6010B	1.0	146	100	
Cadmium	6010B	1.0	2.0	100	
Chromium	6010B	1.0	5.9	100	
Lead	6010B	50	6.6	100	
Mercury	7470A	0.10	0.19	500	
Selenium	6010B	20	<20	100	
Silver	6010B	1.0	<1.0	100	

For:   
John Green, Laboratory Manager

**Green Analytical Laboratories, Inc.****3050 METALS SRM**

LAB ID#	SRM Data			
610-043				
PARAMETER	SRM Result	True Value	SRM % Rec	Acceptance Range
Arsenic	5.10	5.00	102	90-110 %
Barium	2.45	2.50	98	90-110 %
Cadmium	2.48	2.50	99	90-110 %
Chromium	2.53	2.50	101	90-110 %
Lead	5.15	5.00	103	90-110 %
Mercury	0.0021	0.0020	105	90-110 %
Selenium	10.2	10.0	102	90-110 %
Silver	0.55	0.50	110	90-110 %

NA=Data not available

**Green Analytical Laboratories, Inc.****TCLP METALS SRM**

LAB ID#	SRM Data			
610-043				
PARAMETER	SRM Result	True Value	SRM % Rec	Acceptance Range
Arsenic	9.93	10.00	99.3	90-110 %
Barium	4.80	5.00	96	90-110 %
Cadmium	4.98	5.00	100	90-110 %
Chromium	2.51	2.50	100	90-110 %
Lead	10.0	10.0	100	90-110 %
Mercury	0.0019	0.0020	95	90-110 %
Selenium	9.94	10.00	99	90-110 %
Silver	0.24	0.25	96	90-110 %

NA=Data not available



## CHAIN OF CUSTODY RECORD

Page 1 of 1

Client: Red Willow Production Co.

CONTACT Andy Yarns

**Address:**

Phone Number: 970-563-5192

FAX Number: 970-563-5161

**NOTES:**

- 1) Ensure proper container packaging.
- 2) Ship samples promptly following collection.
- 3) Designate Sample Reject Disposition.

PO#

Project Name: M<sup>c</sup>Ekin Compo

## Table 1: - Matrix Type

- 1 = Surface Water, 2 = Ground Water  
3 = Soil/Sediment, 4 = Rinsate, 5 = Oil  
6 = Waste, 7 = Other (Specify) \_\_\_\_\_

**Samplers Signature:**

FOR GAL USE ONLY

GAL JOB #

610-643

Lab Name: Green Analytical Laboratories, Inc. (970) 247-4220 FAX (970) 247-4227										Analyses Required									
Address: 75 Suttle Street, Durango, CO 81303																			
Sample ID	Collection		Miscellaneous			Preservative(s)				Comments									
	Date	Time	Collected by: (Init.)	Matrix Type From Table 1	No. of Containers	Sample Filtered? Y/N	Unpreserved (Ice Only)	HNO <sub>3</sub>	HCL		H <sub>2</sub> SO <sub>4</sub>	NAOH	Other (Specify)						
1. M <sup>c</sup> Elusio Comp	10/05/06	10:02 AM		3	1		X						X TCLP - Metals X RCRA - Metals						
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

Relinquished by: *AK Miller*  
 Relinquished by: \_\_\_\_\_

Date: *05-06-06*  
 Date: \_\_\_\_\_

Time: *3:15 PM*  
 Time: \_\_\_\_\_

Received by: *D. Miller*  
 Received by: \_\_\_\_\_

Date: *10-05-06*  
 Date: \_\_\_\_\_

Time: *1:15*  
 Time: \_\_\_\_\_

\* Sample Reject: ☐ Return ☐ Dispose ☐ Store (30 Days)

**Certificate From Out of State Agency Authorizing  
Removal of Non-exempt,  
Non-hazardous Oilfield Waste  
from Their Jurisdiction to New Mexico**

I have reviewed the enclosed information concerning the Non-Exempt, Non-hazardous oilfield waste material from McElvain Compressor and agree that by its description it is non-hazardous as defined by the resource Conservation & Recovery Act (RCRA) and my jurisdiction's rules, regulations or statutes.

- The Material is Non-Exempt oilfield waste.
- The Material is Non-hazardous according to total RCRA8 & TCLP Metals.

Therefore:

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

Name: [Signature]

Title: Superintendent

Date: 12/22/06

Agency Address & Phone:

BIA Southern Ute Agency  
Ignacio, Colorado



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
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"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No: <input type="checkbox"/> 12/15/06 - Charlie-District Supervisor, OCD		4. Generator: Burlington Resources
2. Management Facility Destination: JFJ Landfarm L.L.C.		5. Originating Site: Reid # 23
3. Address of Facility Operator: JFJ Landfarm C/o. Industrial Ecosystems Inc. P.O. Box 2043 Farmington, NM 87499		6. Transporter: Riley
7. Location of Material (Street Address or ULSTR) S-17, T-28N, R-09W		8. State: NM
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="checkbox"/> 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 generated from a diesel spill release from a completion rig air package vandalism incident. Raw diesel contaminated soil approx. 330 gallons diesel lost on location combined with soil impacted. -MSDS attached.

Known Volume 15 bbls (to be entered by the operator at the end of the haul)

SIGNATURE Joel Owens TITLE: Operations Manager DATE: 12/15/2006  
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Joel Owens TELEPHONE NO. (505) 632-1782

E-MAIL ADDRESS: jtowens@industrialecosystems.com

(This space for State Use)

APPROVED BY: BP TITLE: \_\_\_\_\_ DATE: 12-19-06  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

**COPY**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**Bill Richardson**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
**Oil Conservation Division**

## CERTIFICATE OF WASTE STATUS

1. Generator Name and Address Burlington Resources 3401 E 30 <sup>th</sup> . St. Farmington, New Mexico 87499	2. Destination Name: J.F.J. Landfarm C/O Industrial Ecosystems Inc. #81 CR 3150 Aztec, NM 87410 Phone # 505-632-1782 Fax No# 505-334-1003
3. Originating Site (name): Reid #23 API# 30045074370000 hBR	Location of the Waste (Street address &/or ULSTR): U- L S- 17 T- 28N R- 09W San Juan County, New Mexico
4. Source and Description of Waste Soil generated from a diesel spill release from a completion rig air package vandalism incident. Raw diesel contaminated soil approx. 300 gallons diesel lost on location combined with soil impacted. Transporter Riley Industrial.	
5. Attn: 267993	

I, Gregg Wurtz representative for :  
Print Name

Burlington Resources 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): Gregg Wurtz

Title: Env. Rep

Date: December 15, 2006

MSDS Code: 001847

Status: Final

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Date of Issue: 21-Feb-2006



## MATERIAL SAFETY DATA SHEET

### No. 2 Diesel Fuel

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** No. 2 Diesel Fuel  
**Synonyms:** CARB Diesel TF3; CARB Diesel; CARB Diesel 10%  
CARB Diesel Ultra Low Sulfur - Dyed and Undyed  
EPA Low Sulfur Diesel Fuel - Dyed and Undyed  
EPA Off Road High Sulfur Diesel - Dyed  
High Sulfur Diesel Fuel; Low Sulfur Diesel Fuel  
No. 2 Diesel Fuel Oil  
No. 2 High Sulfur Diesel - Dyed  
No. 2 Low Sulfur Diesel - Dyed; No. 2 Low Sulfur Diesel - Undyed  
No. 2 Low Sulfur Distillate  
No. 2 Ultra Low Sulfur Diesel - Dyed; No. 2 Ultra Low Sulfur Diesel - Undyed  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel; No. 2 Distillate  
Super Diesel Fuel; Super Diesel Fuel II-LS  
Virgin Diesel Fuel

**Intended Use:** Fuel  
**Chemical Family:** Petroleum Hydrocarbon

**Responsible Party:** ConocoPhillips  
600 N. Dairy Ashford  
Houston, Texas 77079-1175  
800-762-0942  
MSDS@conocophillips.com

**MSDS Information:**

**Customer Service:** 800-527-5476  
**Technical Information:** 800-527-5476

#### Emergency Overview

**24 Hour Emergency Telephone Numbers:**  
Spill, Leak, Fire or Accident Call CHEMTREC:  
North America: (800) 424-9300  
Others: (703) 527-3887 (collect)

California Poison Control System: (800) 356-3219

**Health Hazards/Precautionary Measures:** Causes skin irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use with ventilation adequate to keep exposure below recommended limits, if any. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

**Physical Hazards/Precautionary Measures:** Flammable liquid and vapor. Keep away from heat, sparks, flames, static electricity or other sources of ignition.

**Appearance:** Straw colored to dyed red  
**Physical Form:** Liquid  
**Odor:** Diesel fuel

**NFPA 704 Hazard Class:**  
**Health:** 1 (Slight)  
**Flammability:** 2 (Moderate)  
**Instability:** 0 (Least)

**MSDS Code:** 001847  
**Status:** Final

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

<b>HAZARDOUS COMPONENTS</b>					
<b>Component / CAS No:</b>	<b>Concentration (wt %)</b>	<b>ACGIH:</b>	<b>OSHA:</b>	<b>NIOSH:</b>	<b>Other:</b>
Diesel Fuel No. 2 68476-34-6	100	100 mg/m <sup>3</sup> TWA- SKIN	NE	NE	—
Naphthalene 91-20-3	<1	10 ppm TWA 52 mg/m <sup>3</sup> TWA 15 ppm STEL 79 mg/m <sup>3</sup> STEL	10 ppm TWA 50 mg/m <sup>3</sup> TWA	250 ppm IDLH	—

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

1%=10,000 PPM.  
 NE=Not Established

## 3. HAZARDS IDENTIFICATION

### Potential Health Effects

**Eye:** Contact may cause mild eye irritation including stinging, watering, and redness.

**Skin:** Mild to moderate skin irritant. Contact may cause redness, itching, burning, and skin damage. Prolonged or repeated contact may cause drying and cracking of the skin, dermatitis (inflammation), burns, and severe skin damage. No harmful effects from skin absorption have been reported.

**Inhalation (Breathing):** No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

**Ingestion (Swallowing):** Low degree of toxicity by ingestion. **ASPIRATION HAZARD** - This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

**Signs and Symptoms:** Effects of overexposure may include irritation of the respiratory tract, irritation of the digestive tract, nausea, diarrhea, transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

**Cancer:** There is inadequate information to evaluate the cancer hazard of this material. See Section 11 for information on the individual components, if any.

**Target Organs:** Inadequate evidence available for this material. See Section 11 for target-organ toxicity information of individual components, if any.

**Developmental:** Inadequate data available for this material.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include skin disorders.

## 4. FIRST AID MEASURES

**Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin:** Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention.

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**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

## 5. FIRE-FIGHTING MEASURES

### Flammable Properties:

<b>Flash Point:</b>	125-180°F / 52-82°C
<b>Test Method:</b>	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
<b>OSHA Flammability Class:</b>	Combustible liquid
<b>LEL%:</b>	0.3
<b>UEL%:</b>	10.0
<b>Autoignition Temperature:</b>	500°F / 260°C

**Unusual Fire & Explosion Hazards:** This material is flammable and can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

**Extinguishing Media:** Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

## 6. ACCIDENTAL RELEASE MEASURES

**Flammable.** Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

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## 7. HANDLING AND STORAGE

**Handling:** Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

**Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineering controls may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

### **Personal Protective Equipment (PPE):**

**Respiratory:** A NIOSH certified air purifying respirator with an organic vapor cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, and skin damage. Examples of approved materials are nitrile or Viton® (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

Suggestions for the use of specific protective materials are based on readily available published data. Users should check with specific manufacturers to confirm the performance of their products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Straw colored to dyed red
Physical Form:	Liquid
Odor:	Diesel fuel
Odor Threshold:	No data
pH:	Not applicable
Vapor Pressure (mm Hg):	0.40
Vapor Density (air=1):	> 3
Boiling Point:	300-690°F / 149-366°C
Solubility in Water:	Negligible
Partition Coefficient (n-octanol/water) (Kow):	No data
Specific Gravity:	0.81-0.88@ 60°F (15.6°C)
Bulk Density:	7.08 lbs/gal
Viscosity cSt @ 40°C:	1.7-4.1
Percent Volatile:	Negligible@ ambient conditions
Evaporation Rate (nBuAc=1):	<1
Flash Point:	125-180°F / 52-82°C
Test Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
LEL%:	0.3
UEL%:	10.0
Autoignition Temperature:	500°F / 260°C

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Flammable liquid and vapor. Vapor can cause flash fire.

**Conditions to Avoid:** Avoid all possible sources of ignition (see Sections 5 and 7).

**Materials to Avoid (Incompatible Materials):** Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc.

**Hazardous Decomposition Products:** Combustion can yield carbon, nitrogen and sulfur oxides. The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. See Section 11 for additional information on hazards of engine exhaust. IARC has classified Diesel exhaust as probably carcinogenic in humans.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Chronic Data:

#### **Diesel Fuel No. 2 (68476-34-6)**

**Carcinogenicity:** Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation. Animal studies have also shown that washing the skin with soap and water can reduce the tumor response. Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as a carcinogen by NTP, IARC or OSHA.

**Target Organs:** Limited evidence of renal impairment has been noted from a few older case reports involving excessive exposure to diesel fuel No. 2. However, renal toxicity has not been demonstrated to be a consistent finding of diesel fuel exposure.

#### **Naphthalene (91-20-3)**

**Carcinogenicity:** Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

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**Acute Data:****Diesel Fuel No. 2 (68476-34-6)**

Dermal LD50= &gt;5ml/kg (Rabbit)

LC50= No data available

Oral LD50= 9 ml/kg (Rat)

**Naphthalene (91-20-3)**

Dermal LD50= &gt;2.5 g/kg (rat)

LC50= >340 mg/m<sup>3</sup>/1H (rat)

Oral LD50= 490 mg/kg; 2.6 g/kg (rat)

## 12. ECOLOGICAL INFORMATION

When middle distillate hydrocarbons escape into the environment due to leaks or spills, most of their constituent hydrocarbons will evaporate and be photodegraded by reaction with hydroxyl radicals in the atmosphere. The half-lives in air for many of the individual hydrocarbons is less than one day. Less volatile hydrocarbons can persist in the aqueous environment for longer periods. They remain floating on the surface of the water; those that reach soil or sediment biodegrade relatively slowly. Soil contaminated with middle distillates can develop adapted microbial species able to use the fuel as a carbon source; soil aeration and nutrient supplementation can enhance this biodegradation.

Reported LC50/EC50 values for water-soluble fractions of middle distillates are usually in the range of 10 to 100 mg/liter. Adverse effects on the gills, pseudobranch, kidney and nasal mucosa have been reported in fish involved in spills of middle distillates. Juvenile clams may be particularly sensitive to marine sediments contaminated as a result of spilled material. Direct toxicity and fouling of sea birds can occur if birds dive through floating layers of spilled material.

Phytotoxic effects of middle distillate hydrocarbons have been reported following exposure of plants to sprays or vapors. Lack of seed germination and inhibition of seedling growth may also occur. There is evidence for moderate bioaccumulation of the water-soluble hydrocarbons present in middle distillates.

## 13. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for ignitability (D001) and benzene (D018) prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

## 14. TRANSPORT INFORMATION

**DOT****Shipping Description:** Diesel Fuel, Combustible liquid, NA1993, III**Non-Bulk Package Marking:** Not regulated in non-bulk quantities**Non-Bulk Package Labeling:** Not regulated in non-bulk quantities**Bulk Package/Placard Marking:** Combustible/1993**Packaging - References (Exceptions, Non-Bulk, Bulk):** 49 CFR 173.150(f), 173.203, 173.241**Hazardous Substance:** None**Emergency Response Guide:** 128**Note:** This product has been reclassified as a Combustible Liquid for domestic land transportation using 49 CFR 173.150(f).**IMDG****Shipping Description:** UN1202, Diesel fuel, 3, III (52°C)**Non-Bulk Package Marking:** Diesel fuel, UN1202



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**14. TRANSPORT INFORMATION**

Labels: Flammable

Placards/Marking (Bulk): Flammable/1202

Packaging - Non-Bulk: P001, LP01

EMS: F-E, S-E

**ICAO/IATA**

UN/ID #: UN1202

Proper Shipping Name: Diesel fuel

Hazard Class/Division: 3

Packing Group: III

Subsidiary risk: None

Non-Bulk Package Marking: Diesel fuel, UN1202

Labels: Flammable

	LTD. QTY.	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	Y309	309	310
Max. Net Qty. Per Package:	10 L	60 L	220 L

**15. REGULATORY INFORMATION****U.S. Regulations:****EPA SARA 311/312 (Title III Hazard Categories)**

Acute Health: Yes

Chronic Health: No

Fire Hazard: Yes

Pressure Hazard: No

Reactive Hazard: No

**SARA - Section 313 and 40 CFR 372:**

This material contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

Naphthalene.....91-20-3.....&lt;1%

**EPA (CERCLA) Reportable Quantity (in pounds):**

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

**CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):**

This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372:

-- None Known --

**California Proposition 65:**

Warning: This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of California Proposition 65 (CA Health &amp; Safety Code Section 25249.5):

Benzene -- Cancer, Developmental and Reproductive Toxicant

Naphthalene -- Cancer

Toluene -- Developmental Toxicant

Diesel engine exhaust, while not a component of this material, is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

**Carcinogen Identification:**

This material has not been identified as a carcinogen by NTP, IARC, or OSHA. See Section 11 for carcinogenicity information of individual components, if any.

Diesel exhaust is a probable cancer hazard based on tests in laboratory animals. It has been identified as a carcinogen by IARC.

**TSCA:**

All components are listed on the TSCA inventory.

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**International Regulations:**

**Canadian Regulations:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**Domestic Substances List:** Listed

**WHMIS Hazard Class:**

B2 - Flammable Liquids

D2B - Materials Causing Other Toxic Effects - Toxic Material

**16. OTHER INFORMATION**

**Issue Date:**

21-Feb-2006

**Previous Issue Date:**

13-Feb-2003

**Product Code:**

Multiple

**Previous Product Code:**

Multiple

**Revised Sections or Basis for Revision:**

Product Name / Synonyms (Section 1)

**MSDS Code:**

001847

**Disclaimer of Expressed and Implied Warranties:**

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.