

UIC-I-005

C-138

Date: 1997

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	4. Generator <i>Williamsfield Service</i>
2. Management Facility Destination <i>SUNCO DISPOSAL</i>	5. Originating Site <i>MILAGRO PLANT</i>
3. Address of Facility Operator <i>345 CR 3500, Aztec, SANJUAN Co.</i>	6. Transporter <i>SUNCO TRUCKING</i>
7. Location of Material (Street Address or ULSTR) <i>MILAGRO PLANT</i>	8. State <i>NM</i>
9. Circle One: <input checked="" type="radio"/> 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 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:

*Amine Rinse 3% amine and 97% deionized water
from Amine Treatment Plant*

*Chromium present is trivalent
from stainless steel piping.*

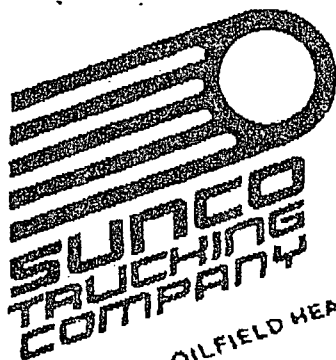
Estimated Volume 40,000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: *Michael Talovich* TITLE: *Disposal MGR* DATE: *2-11-97*
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: *MICHAEL TALOVICH* TELEPHONE NO. *505-334-6186*

(This space for State Use)

APPROVED BY: *Ken G. Kent* TITLE: *Geologist* DATE: *2/13/97*

APPROVED BY: *Ernie Busch* TITLE: *Geologist* DATE: *2/13/97*



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-12 T-29 R-11 1/4 1/4 County San Juan State NM
Physical Address if appropriate: 192 County Rd 4900 Bloomfield, NM 87413

Source and description of waste:

Amine Rinse 3% amine and 97% deionized water used to rinse process vessels and piping involved in amine treatment train.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Leigh E. Gooding representative
for Williams Field Services Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached: Analysis

Check the appropriate line(s):

- ☒ MSDS Information sheet
☐ RCRA TCLP Analysis
☒ RCRA Metals Analysis
☒ Corrosivity, Ignitability, Reactivity
☒ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 12/96

Signature Leigh E. Gooding
Printed Name Leigh E. Gooding
Title Senior Environmental Specialist
Date 2/10/97

nter Mountain Laboratories, Inc.

Client: Williams Field Service
 Project: Milagro Plant
 Sample ID: Train 2 Rinse
 Laboratory ID: 0397W00093
 Sample Matrix: Water
 Condition: Cool/Intact

2606 W. Main Street
 Farmington, New Mexico 87401

Date Reported: 01/28/97
 Date Sampled: 01/21/97
 Time Sampled: 1:15 PM
 Date Received: 01/21/97

Parameter	Result	Units
Lab pH (Corrosivity).....	10.6	S.U.
Flash Point (Ignitability).....	>140	°F
Reactivity.....		
Total Cyanide.....	0.02	mg/L
Sulfide.....	275	mg/L
Trace Metals (Total)		
Arsenic.....	0.010	mg/L
Barium.....	0.04	mg/L
Cadmium.....	0.001	mg/L
Chromium.....	14.6	mg/L
Lead.....	0.016	mg/L
Mercury.....	<0.001	mg/L
Selenium.....	<0.005	mg/L
Silver.....	<0.01	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 "Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by WSTReviewed by AB

P.O. Box 58900 Salt Lake City, Utah 84158-0900

January 29, 1997

Mr. Patricio Sanchez
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

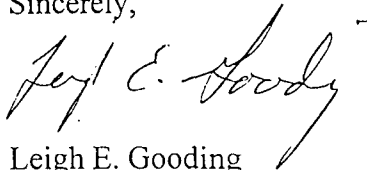
RE: Milagro Plant Wastewater GW-60 (Train 2 Rinse)

Dear Mr. Sanchez:

Enclosed, please find the analytical results of wastewater generated at Williams Field Services Company's Milagro Plant located in Bloomfield, New Mexico. The process generating the waste is the rinse out of process vessels and piping with a 3% amine and 97% deionized water solution. The MSDS for the amine is also enclosed for your review.

WFS requests approval to dispose of approximately 40,000 gallons of this non-hazardous, E&P exempt waste stream at Sunco's disposal well. If you have any questions or require additional information, please do not hesitate to contact me at (801) 584-6543.

Sincerely,



Leigh E. Gooding

enclosure

cc: Hal Stone, Sunco
Denny Foust. NMOCD

Mike T.

Client: Williams Field Service
Project: Milagro Plant
Sample ID: Train 2 Rinse
Laboratory ID: 0397W00093
Sample Matrix: Water
Condition: Cool/Intact

2508 W. Main Street
Farmington, New Mexico 87401

Date Reported: 01/28/97
Date Sampled: 01/21/97
Time Sampled: 1:15 PM
Date Received: 01/21/97

Parameter	Analytical Result	Units	Units
-----------	-------------------	-------	-------

Lab pH (Corrosivity)	10.8	S.U.
Flash Point (Ignitability)	>140	°F
Reactivity		
Total Cyanide	0.02	mg/L
Sulfide	275	mg/L

Trace Metals (Total)

Arsenic	0.010	mg/L
Barium	0.04	mg/L
Cadmium	0.001	mg/L
Chromium	14.6	mg/L
Lead	0.016	mg/L
Mercury	<0.001	mg/L
Selenium	<0.005	mg/L
Silver	<0.01	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992

Comments:

Reported by WST

Reviewed by JB



M. I. Agro

La Maguina
El Cedro

Dow U.S.A.

Material Safety Data Sheet

The Dow Chemical Company
Midland, Michigan 48674
Emergency 517 • 636-4400

Product Code: 13693

Page: 1

Product Name: GAS/SPEC (R) CS-PLUS SOLVENT

Effective Date: 01/21/92 Date Printed: 10/06/92

MSDS:003430

1. INGREDIENTS: (% w/w, unless otherwise noted)

Methyldiethanolamine	CAS# 000105-59-9	69-70%
Proprietary Amine Derivative		30%
Water	CAS# 007732-18-5	Max. 1%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: 240-280F, 152-162C
VAP. PRESS: 0.5 mmHg @ 20C
VAP. DENSITY: 3.5
SOL. IN WATER: Complete
SP. GRAVITY: 1.05-1.07 @ (25/25C)
FREEZING POINT: -20C
APPEARANCE: Pale straw liquid
ODOR: Amine odor

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 160F, 71C
METHOD USED: PMCC

FLAMMABLE LIMITS

LFL: Not established
UFL: Not established

EXTINGUISHING MEDIA: Water fog, alcohol resistant foam, CO2, dry chemical, and water spray.

(Continued on page 2)

(R) Indicates a Trademark of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 13693

Page: 2

Product Name: GAS/SPEC (R) CS-PLUS SOLVENT

Effective Date: 01/21/92 Date Printed: 10/06/92

MSDS:003430

3. FIRE AND EXPLOSION HAZARD DATA: (CONTINUED)

FIRE AND EXPLOSION HAZARDS: No special hazards.

FIRE-FIGHTING EQUIPMENT: Wear positive pressure, self-contained breathing apparatus.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Stable, avoid heat, sparks, and open flames.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Acids, strong oxidizers, halogenated hydrocarbons.

HAZARDOUS DECOMPOSITION PRODUCTS: Possible nitrogen oxides, carbon dioxide, carbon monoxide.

HAZARDOUS POLYMERIZATION: Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ENVIRONMENTAL DATA: (optional)

ACTION TO TAKE FOR SPILLS: Wash with small amounts of water. Dike to avoid contamination of sewer with large amounts, soak up with absorbent material, scoop into drums.

DISPOSAL METHOD: Dispose by incineration in accordance with all local, state, and federal requirements.

(Continued on page 3)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 13693

Page: 3

Product Name: GAS/SPEC (R) CS-PLUS SOLVENT

Effective Date: 01/21/92 Date Printed: 10/06/92

MSDS:003430

6. HEALTH HAZARD DATA:

EYE: Due to the pH of the material, it is assumed that exposure may cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness.

SKIN CONTACT: Short single exposure may cause severe skin burns.
DOT classification: corrosive.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The dermal LD50 has not been determined.

INGESTION: Single dose oral toxicity is low. The oral LD50 for rats is >1000 mg/kg. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of larger amounts may cause injury. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of mouth and throat. Observations in animals include liver and kidney effects.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract.

SYSTEMIC AND OTHER EFFECTS: One component did not cause birth defects in laboratory animals.

7. FIRST AID:

EYES: Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists.

(Continued on page 4)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 13693

Page: 4

Product Name: GAS/SPEC (R) CS-PLUS SOLVENT

Effective Date: 01/21/92 Date Printed: 10/06/92

MSDS:003430

7. FIRST AID: (CONTINUED)

Wash clothing before reuse. Destroy contaminated shoes.

INGESTION: Do not induce vomiting. Give large amounts of water or milk if available and transport to medical facility.

INHALATION: Remove to fresh air if effects occur. Consult physician.

NOTE TO PHYSICIAN: May cause tissue destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE (S): None established.

VENTILATION: Good general ventilation should be sufficient for most conditions.

RESPIRATORY PROTECTION: If respiratory irritation is experienced, use an approved air-purifying respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Wear a face-shield which allows use of chemical goggles, or wear a full-face respirator, to protect face and eyes when there is any likelihood of splashes. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

(Continued on page 5)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 13693

Page: 5

Product Name: GAS/SPEC (R) CS-PLUS SOLVENT

Effective Date: 01/21/92 Date Printed: 10/06/92

MSDS:003430

8. HANDLING PRECAUTIONS: (CONTINUED)

EYE PROTECTION: Use chemical goggles. Wear a face-shield which allows use of chemical goggles, or wear a full-face respirator, to protect face and eyes when there is any likelihood of splashes. Eye wash fountain should be located in immediate work area.

9. ADDITIONAL INFORMATION:

MSDS STATUS: Revised regsheet (WHMIS) information.

For information regarding state/provincial and federal regulations see
(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 13693

Page: R-1

Product Name: GAS/SPEC (R) CS-PLUS SOLVENT

Effective Date: 01/21/92 Date Printed: 10/06/92

MSDS:003430

REGULATORY INFORMATION: (Not meant to be all-inclusive--selected regulations represented.)

NOTICE: The information herein is presented in good faith and believed to be accurate as the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

U.S. REGULATIONS

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard

CANADIAN REGULATIONS

The Workplace Hazardous Materials Information System (W.H.M.I.S.) Classification for this product is:

B3
E

A claim for exemption from ingredient disclosure has been approved under the Hazardous Materials Information Review Act (Canada). The Hazardous

(Continued on page R-2)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 13693

Page: R-2

Product Name: GAS/SPEC (R) CS-PLUS SOLVENT

Effective Date: 01/21/92 Date Printed: 10/06/92

MSDS:003430

REGULATORY INFORMATION (CONTINUED)

Materials Information Review Act registry number and the date assigned to this claim are:

REGULATION CLAIM NUMBER: 1068

REGULATION CLAIM DATE: 01/12/89

The Transportation of Dangerous Goods Act (T.D.G.A.) classification for this product is:

Corrosive Liquid, N.O.S. (Alkanolamine), Class 8/UN1760/II

(R) Indicates a Trademark of The Dow Chemical Company
The Information Herein is Given in Good Faith, But No Warranty, Express Or Implied, is Made. Consult The Dow Chemical Company For Further Information.

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A. Chemical EMERGENCY PHONE CHEMTREC 800-424-9300

Product Code: 13693

Name: GAS/SPEC (R) CS-PLUS SOLVENT

DOT BULK HAZ CLASS: CORROSIVE MATERIAL, NA1719

Effective date: 09/15/92 Date Printed: 10/09/92

ERTED # 000011

COMPOSITION AND PRODUCT CHARACTERISTICS

COMPOSITION:

PHYSICAL STATE AND APPEARANCE: Liquid

SOLUBILITY IN WATER: Mixes

FLASH PT: >160 F (PMCC)

LOWER FLAM LIMIT: Not established.

UPPER FLAM LIMIT: Not established.

AUTO-IGNITION TEMPERATURE: Not determined

BOILING PT: 240 F to 280 F

FREEZING PT: -30 C

SPECIFIC GRAVITY: 1.05-1.07 G (25/25)

WEIGHT/GAL @ 77 DEG F: 8.7

VAPOR DENSITY (AIR = 1): 3.5

VAPOR PRESSURE @ 20 DEG F: Not determined

VAPOR PRESSURE @ 100 DEG F: Not determined.

COEFF OF THERMAL EXPANSION: Not determined.

LOADING TEMPERATURE: Ambient

MAXIMUM PRODUCT TEMPERATURE: 200 F

MAXIMUM STEAM PRESSURE: 25 psig

(R) Indicates a Trademark of The Dow Chemical Company

Dow Chemical U.S.A. Chemical EMERGENCY PHONE CHEMTREC 800-424-9300

Product Code: 13693

Name: GAS/SPEC (R) CS-PLUS SOLVENT

DOT BULK HAZ CLASS: CORROSIVE MATERIAL , NA1719

Effective date: 09/15/92 Date Printed: 10/09/92

ERTED # 000011

TRANSPORTATION EQUIPMENT DATA

TANK TRUCK: *MC 303, 304, 306, 307, 311, 312. Stainless steel, carbon steel. *Special requirements in CFR 49, 173249 (a) (6)

(NOTE: DOT 400 series may be substituted for previous MC 300 series equipment.)

TANK CAR: DOT 103W, 111A60W1, 111A100W1, 111A100W6. Carbon steel, stainless steel.

IMO CONTAINER:

INSULATION: Required

STEAM COILS: Required - tank car.

Required in cold weather - tank truck.

PUMP TYPE: Stainless steel, carbon steel. Centrifugal or positive displacement.

HOSE TYPE: Seamless stainless steel, Teflon, cross linked P/E, Neoprene.

GASKETS: Teflon, asbestos.

SPECIAL REQUIREMENTS: Prevent contact with brass, bronze & copper alloys.

PRECAUTIONS: Avoid contact with eyes, skin & clothing.
Avoid breathing vapors.

DRIVER PROTECTIVE EQUIPMENT: Use protective equipment - minimum of chemical workers goggles, hard hat, rubber gloves & boots.
Have respirator ready.

UNLOADING INSTRUCTIONS: Pump or N2 pressure. (Pressure not approved for MC 303 & 306 tanks.)

The Information Herein Is Given In Good Faith, but no Warranty Express or Implied, is Made. Consult The Dow Chemical Company For Further Information

Box 1190
Bbs, NM 88241-1980
District II - (505) 748-1283
1 S. First
esia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
c, NM 87410
District IV - (505) 827-7131

Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form 1-138
Originated 8/5/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Burlington Resources</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>VAL VERDE PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Building 101A, CR 4437A Bloomfield, NM</u>	
5. 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.	

RECEIVED

JUL 7 1997

BRIEF DESCRIPTION OF MATERIAL:

GAS PLANT WASH WATER

Environmental Bureau
Oil Conservation Division

RECEIVED
JUL 10 1997

OIL CON. DIV.
DIST. 3

RECEIVED
JUN 26 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 6000 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MBR DATE: 6-26-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-329-6186

(This space for State Use)

APPROVED BY: Larry J. Font TITLE: Geologist DATE: 7/3/97

APPROVED BY: Matthew J. Kelly TITLE: Environmental Geologist DATE: 7/8/97

Printed in Aztec 7/14/97 MBR

Box 1
NM 86241-1980
NM - (505) 748-1283
First
NM 88210
NM - (505) 334-6178
Rio Brazos Road
NM 87410
NM - (505) 827-7131

Energy and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated 8/87

Submit Origin
Plus 1 Co
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Burlington Resources</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>VAL VERDE PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Bldg 101A, CR 4437A Bloomfield, NM</u>	

9. Circle One:

- A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.
- ☒ B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

RECEIVED

JUL 7 1997

BRIEF DESCRIPTION OF MATERIAL:

GAS PLANT WASH WATER

Environmental Bureau
Oil Conservation Division

RECEIVED
JUL - 9 1997

OIL CON. DIV.
DIST. 3

RECEIVED
JUN 26 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 6000 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MBR DATE: 6-26-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Darryl D. Fent TITLE: Geologist DATE: 7/3/97

APPROVED BY: Matthew J. Kelly TITLE: Environmental Geologist DATE: 7/8/97

Office I - (505) 393-6161
D. Box 1980
bbs, NM 88241-1980
Office II - (505) 748-1283
1 S. First
esla, NM 88210
Office III - (505) 334-6178
Rio Brazos Road
ec, NM 87410
Office IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Burlington Resources</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>VAL VERDE PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Building 101A, CR 4437A Bloomfield, NM</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

GAS PLANT WASH WATER

RECEIVED
JUN 26 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 600 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MBR DATE: 6-26-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-324-6186

(This space for State Use)

APPROVED BY: Denny G. Fent TITLE: Geologist DATE: 7/3/97

APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I Craig A. Bock representative
for Burlington Resources

do hereby certify that according to the Resource Conservation and Recovery Act that the waste described below is

 Exempt

 X

Non-Exempt and that it has been

identified as non-hazardous by characteristic analysis or by product identification as required.

Originating Site: Sec. 14 Twn. 29N Rng. 11W 1/4 1/4
County San Juan State New Mexico

Physical Address (If Appropriate): Building 101A, CR 4937A
Bloomfield, NM 87413

Source and Description of Waste: Spent wash water from cleaning plate and
frame exchangers and amine reboilers at the Val Verde Plant.

Check the appropriate line(s):

 MSDS Information Sheet
 X RCRA TCLP Analysis
 X RCRA Metals Analysis
 X Corrosivity, Ignitability, Reactivity
 Exempt

I further certify that there has been no change in the waste stream at the facility generating the waste

since 3/5/97

Signature: 

Printed Name: Craig A. Bock

Title: Environmental Representative

Date: 6/25/97

Destination: Sunco Disposal Well, 345 CR 3500, Aztec, NM, San Juan County

Exempt Waste Manifest
Burlington Resources Oil & Gas
P.O. Box 4289, Farmington, NM 87499

Environmental
and Safety Dept.

1. **Waste Location:** Lease / Well No. / Facility Val Verde Plant

2. **Volume:** _____ Cubic Yards 600 Barrels _____ Gallons

3. **Description of Waste:** Spent wash water

4. **Method of Waste Generation:** Washing and cleaning plate and frame exchangers and amine reboilers at Val Verde Plant

5. **Disposal Facility:** Sunco Disposal Well

6. **Disposal Cost:** _____

7. **Certification:** I do hereby certify that according to the Resource Conservation and Recovery Act (40 CFR 261) that the above described waste is .

Exempt ☒ Non-Exempt / Non-Hazardous ☐ Hazardous

Approval for Disposal

Cj. A. Borch

Date 6/25/97

BR Representative **Transportation Company:** _____

Date(s) Transported: _____

BR Representative on Site: _____

Signature

Date: _____

Disposal Facility

Date (s) Received: _____

Notice: Complete and
return to Burlington

Environmental and
Safety Dept.

Total Volume Received: _____

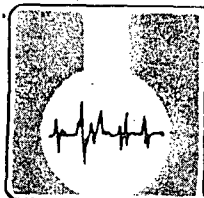
Waste Location:

(Cell/Grid No.)

Injection well

Received By: _____

Signature



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

Report Generated:
March 12, 1997 14:42

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

SENT CONTRACT ENVIRONMENTAL SERV WORKORDER # : 9703041
TO: PO BOX 3376 WORK ID : MOI-VAL VERDE
FARMINGTON, NM 87499 CLIENT CODE : CONT01
DATE RECEIVED : 03/06/97

ATTN: SHAWN ADAMS

Page: 1

Lab ID: 9703041-01A
Sample ID: VALV-100

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
FLASH POINT/SW846 1010						
Flash Point	>60	Deg Centigrade	20	1.0	03/10/97	WFLASH204
REACTIVITY/SW846 7-3						
Sulfide	NON-REACT	mg/Kg of Waste	500	1.0	03/11/97	W97114
Cyanide	NON-REACT	mg/Kg of Waste	250	1.0	03/11/97	W97114

Lab ID: 9703041-01B
Sample ID: VALV-101

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
CORROS(NACE)/SW846 1110						
Corrosivity (NACE)	ND	mm/yr	6.0	1.0	03/07/97	WNACE035

Lab ID: 9703041-01C
Sample ID: VALV-102/103

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP SV/METHOD 1311/8270B						
1,4-Dichlorobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
2-Methylphenol / O-Cresol	ND	mg/L	0.0010	290	03/08/97	TSVOA186
3/4-Methylphenol / M/P-Cresol	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Hexachloroethane	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Nitrobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Hexachlorobutadiene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
2,4,6-Trichlorophenol	ND	mg/L	0.010	290	03/08/97	TSVOA186
2,4,5-Trichlorophenol	ND	mg/L	0.010	290	03/08/97	TSVOA186
2,4-Dinitrotoluene	ND	mg/L	0.010	290	03/08/97	TSVOA186
Hexachlorobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Pentachlorophenol	ND	mg/L	0.020	290	03/08/97	TSVOA186
Pyridine	ND	mg/L	0.010	290	03/08/97	TSVOA186
TCLP SVOA XT/1311/3520	03/07/97	N/A				



Lab ID: 9703041-01D
Sample ID: VALV-104

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
pH/EPA 150.1 pH	8.7	pH Units	0.10	1.0	03/07/97	WPH479

Lab ID: 9703041-01E
Sample ID: VALV-105

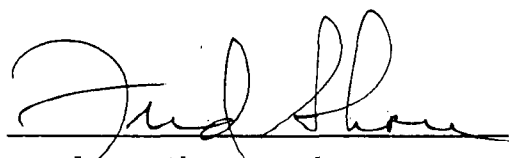
Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
% SOLIDS(TCLP XT)EPA 160.3	1.00	% (Percent)				
TCLP (ICP) DIG/1311/3005	03/09/97	N/A				
TCLP EXTRACTION/TCLP 1311	03/06/97	N/A				
TCLP METALS/1311/SW8466010						
Arsenic, As	ND	mg/L	0.40	1.0	03/10/97	M97180,97178
Barium, Ba	ND	mg/L	0.50	1.0	03/10/97	M97180,97178
Cadmium, Cd	ND	mg/L	0.0050	1.0	03/10/97	M97180,97178
Chromium, Cr	ND	mg/L	0.020	1.0	03/10/97	M97180,97178
Lead, Pb	ND	mg/L	0.050	1.0	03/10/97	M97180,97178
Mercury, Hg	ND	mg/L	0.0020	1.0	03/11/97	M97180,97178
Selenium, Se	ND	mg/L	0.050	1.0	03/10/97	M97180,97178
Silver, Ag	ND	mg/L	0.040	1.0	03/10/97	M97180,97178
TCLP(CVAA)Hg XT/SW846 7471	03/10/97	N/A				

Lab ID: 9703041-01F
Sample ID: VALV-106/107 A/B

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP ZHE / TCLP 1311	03/06/97	N/A				
ZHE/VOA/METHOD 1311/8240B						
Vinyl Chloride	ND	mg/L	0.0050	5.0	03/07/97	TVOA278
1,1-Dichloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Chloroform	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
1,2-Dichloroethane	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
2-Butanone (MEK)	ND	mg/L	0.0050	5.0	03/07/97	TVOA278
Carbon Tetrachloride	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Trichloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Benzene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Tetrachloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Chlorobenzene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278



Fred L. Shore, Ph.D.
VP of Laboratory Operations

WORKORDER COMMENTS

DATE : 03/12/97
WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

ND = Analyte "not detected" in analysis at the sample specific detection limit.

D_F = Sample "dilution factor"

NT = Analyte "not tested" per client request.

B = Analyte was also detected in laboratory method QC blank.

E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

*** Analytical results reported pertain only to the samples provided ***
*** for analysis and may not represent actual field conditions. ***

*** This report is not to be reproduced except in full, without the ***
*** written approval of Assaigai Analytical Inc. ***

REPORT COMMENTS

**SAMPLE RECEIPT CHECKLIST
AND
NONCONFORMANCE REPORT**

WO#: 97-03-041
DATE RCVD: 3-6-97
RCVD BY: GM
NONCONFORM.?: (Y) or N

COOLER CONDITION:

- A. Was the cooler intact?
- B. Freight bill received?
- D. Cooler labelled properly?
- C. Cooler Temperature (acceptable range 1 - 8 °C)

*SENT via
mail
4/5/97*

YES	NO	N/A
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
11.2 °C		

SAMPLE CONTAINERS

- A. Are all sample containers intact?
- B. Are custody seals in place?
- C. Are VOA samples without air bubbles or less than "pea size"?
- D. Are all sample labels complete and correct?
- E. Are volumes marked on bottles?
- F. Is there sufficient volume request analyses?

YES	NO	N/A
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		

SAMPLE/CHAIN-OF-CUSTODY INFORMATION

- A. Do the number of sample containers match the Chain-of-Custody (COC)?
- B. Does all information on sample labels match the information on the COC?
- C. Are contact names, phone and fax numbers clearly indicated on the COC?
- D. Is the COC signed by all parties?
- E. Field copy given to client?

YES	NO	N/A
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>		

NON-CONFOMRANCE SPECIFICS

Cooler temp slightly high.

If any non-conformances were identified:

Who was client contact?

Talked to client - proceed w/ analysis

Non-conformance resolution:

Sean Adams

AAL Employee:

[Signature]

Date: 3/6/97

Program Management/QC Signature

[Signature]

Date: 3/7/97

Temperature Terms:

TERM DEFINITION

- "Cold-A" Client brought samples in their own cooler on ice.
- "Cold-B" Samples brought in after hours. No temp taken, however, samples were on ice and immediately put into walk-in refrigerator.
- "On ice" Cooler was emptied before a temp could be taken, however, samples were on ice.



Chain of Custody Record

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 770-1116

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Lab Job no.: 3041 Date 3/5/97

Page 1 of 1

Client CONTRACT ENVIRONMENTAL SERVICES, INC.

Project Manager / Contact SHAWN ADAMS

Address PO Box 3376

Telephone No. (505) 325-1198

City / State / Zip FARMINGTON NM 87499

Fax No. SAME (CALL)

Project Name / Number MOI - VAL VENDE

Samplers: (Signature) Shawn Adams

Contract / Purchase Order / Quote CONTRACT ENV

AAL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		Analysis Required										Remarks
						Temp.	Chemical	No. of Containers	FLASH	REACT	NACE	ICCP	ICCP SWGA	PH	ICCP - MT	ICCP - VOA		
1A	VALV-100	3/5/97	12:00	LIQ	8 oz glass		no	1	X									Composite Tank Sample
1B	VALV-101	"	"	"	2 1/2 x 7" Plastic		no	1		+								"
1C	VALV-102	"	"	"	4 x 6" Amber		no	1			X							"
1D	VALV-103	"	"	"	4 x 6" Amber		no	1				X						"
1E	VALV-104	"	"	"	2 x 5 1/4" Plastic		no	1					X					"
1F	VALV-105	"	"	"	3 3/4 x 6" Plastic		no	1						X				"
1G	VALV-106 A/B	"	"	"	VOA'S		no	2							X			"
1H	VALV-107 A/B	"	"	"	VOA'S		no	2							X			"

Inquired by: Shawn Adams
Signature: Shawn Adams
Printed: SHAWN ADAMS
Company: CONTRACT ENV. SVCS.
Reason: Analyses

Date: 3/5/97
Time: 2:00

Received by:
Signature: _____
Printed: _____
Company: Fed-Ex
Reason: _____

Relinquished by:
Signature: _____
Printed: _____
Company: Fed-Ex
Reason: _____

Date: 3/4/97
Time: 945

Received by: Shawn Adams
Signature: Shawn Adams
Printed: SHAWN ADAMS
Company: _____
Reason: _____

Method of Shipment: Truck 112

Shipment No. _____

Special Instructions: _____

Comments:

"RUSH" 5-DAY
Request DUE BY 3/13/97
Blend
Shake and analyse liquid phase only
not solid phase too!

COURIER

After analysis, samples are to be:

- ☐ Disposed of (additional fee)
- ☒ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

Contract Environmental Services, Inc.
Post Office Box 3376
Farmington, New Mexico 87499
Phone (505) 325-1198

March 4, 1997

Burlington Resources
Mr. Craig Bock
3535 E. 30th Street
Farmington, New Mexico 87401

RE: Written Procedure For Sampling Steel Tank, Spent Scale Cleaning Solution, Val Verde Plant,
Bloomfield, New Mexico

Dear Mr. Bock,

Contract Environmental Services, Inc. (CES) is pleased to present this sampling procedure for the above described site to Burlington Resources (BR). Sampling will be broken down into two (2) parts. Part one (1) will be sampling the liquid and part two (2) will be sampling the bottom sludge (if any).

Part 1 - Top to bottom liquid samples will be obtained using a 3/4" PVC sample tube. The PVC will be lowered into the fluid until the bottom is encountered. A rubber stopper will be inserted into the exposed end just above the liquid level. The PVC sampler will be extracted and the contents placed in a stainless steel canister for mixing. A total of three (3) liquid samples will be taken for compositing.

Part 2 - The bottom sludge (if any) will be sampled using a PVC sample tube with an eight (8) ounce glass sample jar secured with zip ties at one end. If sludge is encountered, a sample will be gathered from the center and each side. The three (3) sludge samples will be added to the same stainless steel canister to be composited with the liquid previously obtained.

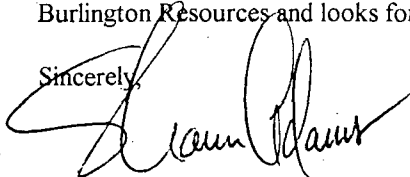
The liquid and solids will be thoroughly mixed and samples for laboratory analysis will be gathered from the stainless steel container.

Samples will be adequately preserved as directed by the lab and carefully packaged for shipping to Assaigai Laboratory of Albuquerque for analyses. Chain-of-custody records will accompany the sample from the time they are gathered until the analyses are completed at the laboratory. The lab has been informed of our request for "Rush" analyses and have scheduled the work prior to receiving the samples. They have committed to a five (5) working day turn-around-time. Assaigai will receive the samples on Thursday morning by 10:00 am to begin the analyses. We should expect results on or before Thursday, March 13th, 1997.

All sampling equipment will be wiped down on site and either decontaminated or properly disposed of.

Contract Environmental Services, Inc. appreciates this opportunity to submit this sampling procedure to Burlington Resources and looks forward to serving your firm on this and other projects in the near future.

Sincerely,



Shawn A. Adams
Contract Environmental Services, Inc.

CONTRACT ENVIRONMENTAL SERVICES, INC.

SHAWN ADAMS
Owner



Post Office Box 3376
Farmington, New Mexico 87499
Mobile 860-3107 E-Mail 102565.1606@compuserve.com (505) 325-1198

I. (505) 393-6161
1980
NM 68241-1980
dist II - (505) 748-1283
S. First
Sta. NM 88210
dist III - (505) 334-6178
Rio Brazos Road
c. NM 87410
dist IV - (505) 827-7131

New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated BSM

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>CONOCO Plant</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>CONOCO Plant</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3550 #345, Aztec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULST) <u>Bloomfield, NM</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.	

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

WASH WATER FROM AMINE SYSTEM

RECEIVED
JUN 19 1997

RECEIVED

JUN 19 1997

Environmental Bureau
Oil Conservation Division

RECEIVED
JUN 12 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MBL DATE: 6-12-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael Talovich TELEPHONE NO. 505-3346186

(This space for State Use)

APPROVED BY: Dennis E. Hunt TITLE: Geologist DATE: 6/16/97
APPROVED BY: Monty J. Thibault TITLE: Environmental Geologist DATE: 6/19/97

Office I - (505) 393-6161
D. Box 1980
Bbs, NM 88241-1980
Office II - (505) 748-1283
S. First
csia, NM 88210
Office III - (505) 334-6178
Rio Brazos Road
c, NM 87410
Office IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>CONOCO Plant</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>CONOCO Plant</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3550 #345, Aztec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Bloomfield, NM</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASH water from Amine System

RECEIVED
JUN 12 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MBL DATE: 6-12-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Michael Talovich TELEPHONE NO. 505-3346186

(This space for State Use)

APPROVED BY: Denny G. Fout TITLE: Geologist DATE: 6/16/97

APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I Louis E Ferraci representative

for Conoco Inc.

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S- 14 T- 29 R- 11 W 1/4 1/4 County San Juan State NM

Physical Address if appropriate: #61 CR 4900 Bloomfield N.M. 87413

Source and description of waste: Wash water from Amine system.

Check the appropriate line(s):

- MSDS Information sheet
X RCRA TCLP Analysis
RCRA Metals Analysis
Corrosivity, Ignitability, Reactivity
Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since June 96

Signature Louis E Ferraci

Printed Name Louis E. Ferraci

Title Maint. Foreman

Date 6-12-97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

**Certificate of
Analysis**

Quanterra Incorporated
5307 Industrial Oaks Boulevard, Suite 160
Austin, Texas 78735

512 892-6684 Direct
512 892-6652 Fax



ANALYTICAL REPORT

San Juan Gas Plant

Lot#: I6G120107

Chris Hansen Room #HU 3006

Conoco Inc.

QUANTERRA INCORPORATED

A handwritten signature in black ink, appearing to read "Chris J. Schepcoff", written over the printed name and title.

Chris J. Schepcoff
Project Manager

July 24, 1996

EXECUTIVE SUMMARY - Detection Highlights

I6G120107

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>
SAN JUAN AMINE WASHER WATER 07/08/96 00:00				
Chromium	2.2	0.10	mg/L	SW846 6010A
Flashpoint	>150	>150	deg F	SW846 1010
pH (liquid)	4.1	0.10	No Units	MCAWW 150.1
Total Solids (Residue)	75000	10	mg/L	MCAWW 160.3

ANALYTICAL METHODS SUMMARY

I6G120107

<u>PARAMETER</u>	<u>METHOD</u>
pH (Electrometric)	MCAWW 150.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010A
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470
Pensky-Martens Method for Determining Ignitability	SW846 1010
Reactive Cyanide	SW846 7.3.3
Reactive Sulfide	SW846 7.3.4
Total Residue (TS)	MCAWW 160.3
Volatile Organics by GC/MS	SW846 8240A

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

I6G120107

ANALYTICAL

<u>METHOD</u>	<u>ANALYST</u>	<u>ID #</u>
MCAWW 150.1	Jay Harris	060505
MCAWW 160.3	Jay Harris	060505
SW846 1010	Jay Harris	060505
SW846 6010A	Scott Butler	010399
SW846 7.3.3	Jay Harris	060505
SW846 7.3.4	Jay Harris	060505
SW846 7470	Todd Marion	026009
SW846 8240A	Sam Bivone	011612

References:

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

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

QC DATA ASSOCIATION SUMMARY

Sample Preparation and Analysis Control Numbers

<u>Lot#-Sample#</u>	<u>Matrix</u>	<u>Method</u>	<u>Pgm Code</u>	<u>Leach Batch#</u>	<u>QC Batch Number</u>	<u>MS Run Number</u>
I6G110105-001	WATER	MCAWW 245.1	03		6197166	6197035
	WATER	SW846 1010	01		6200111	6200005
	WATER	MCAWW 150.1	01		6197132	6197016
	WATER	MCAWW 160.3	01		6198195	6198056
	WATER	SW846 6010A	01		6197182	6197048
	WATER	SW846 7470	01		6197166	6197035
	WATER	SW846 8240A	01		6200138	6205027
	WATER	SW846 7.3.3	01		6198108	6198002
	WATER	SW846 7.3.4	01		6198110	6198004
I6G120161-003	WATER	MCAWW 200.7	01		6197182	6197048
	WATER	MCAWW 239.2	01		6197182	6197048
	WATER	SW846 6010A	01		6197182	6197048
I6G160116-001	WATER	SW846 8240B	01		6200138	6205027

SAMPLE SUMMARY

The analytical results of the samples listed below are presented on the following pages.

<u>WO #</u>	<u>LOT-SAMPLE #</u>	<u>SAMPLE IDENTIFICATION</u>	<u>DATE/TIME SAMPLED</u>
C4R4P	I6G120107-001	SAN JUAN AMINE WASHER WATER	07/08/95 00:00

This report must not be reproduced except in full, without the written approval of the laboratory.

CONOCO INC.

Client Sample ID: SAN JUAN AMINE WASHER WATER

GC/MS Volatiles

Lot-Sample #: I6G120107 - 001 Work Order #: C4R4P107 Matrix.....: WATER
 Date Sampled.: 07/08/96 00:00 Date Received: 07/10/96 09:18
 Prep Date.....: 07/17/96 Analysis Date: 07/22/96
 Prep Batch #: 6200138 MS Run #.....: 6205027
 Dilution Fact: 1
 Percent Moist:

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Benzene	ND	0.050	mg/L		SW846 8240A
Carbon tetrachloride	ND	0.050	mg/L		SW846 8240A
Chlorobenzene	ND	0.050	mg/L		SW846 8240A
Chloroform	ND	0.050	mg/L		SW846 8240A
1,2-Dichloroethane	ND	0.050	mg/L		SW846 8240A
1,1-Dichloroethylene	ND	0.050	mg/L		SW846 8240A
Methyl ethyl ketone	ND	0.20	mg/L		SW846 8240A
Tetrachloroethylene	ND	0.050	mg/L		SW846 8240A
Trichloroethylene	ND	0.050	mg/L		SW846 8240A
Vinyl chloride	ND	0.10	mg/L		SW846 8240A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
4-Bromofluorobenzene	97	(86 - 115)
1,2-Dichloroethane-d4	100	(76 - 114)
Toluene-d8	97	(88 - 110)

NOTE(S):

ND Parameter was not detected at or above the stated reporting limit.

CONOCO INC.

Client Sample ID: SAN JUAN AMINE WASHER WATER

General Chemistry

Lot-Sample #: I6G120107 - 001

Work Order #: C4R4P

Matrix.....: WATER

Date Sampled.: 07/08/96 00:00

Date Received: 07/10/96 09:18

Percent Moist:

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Flashpoint	>150	>150	deg F	SW846 1010	07/17/96	6200111
		DIL Factor....: 1				
		MS Run #.....: 6200005				
pH (liquid)	4.1	0.10	No Units	MCAWW 150.1	07/12/96	6197132
		DIL Factor....: 1				
		MS Run #.....: 6197016				
Total Solids (Residue)	75000	10	mg/L	MCAWW 160.3	07/15/96	6198195
		DIL Factor....: 1				
		MS Run #.....: 6198056				
Reactive Cyanide	ND	200	mg/L	SW846 7.3.3	07/16/96	6198108
		DIL Factor....: 1				
		MS Run #.....: 6198002				
Reactive Sulfide	ND	200	mg/L	SW846 7.3.4	07/16/96	6198110
		DIL Factor....: 1				
		MS Run #.....: 6198004				

NOTE(S) :

RL Reporting Limit

ND Parameter was not detected at or above the stated reporting limit.

CONOCO INC.



Client Sample ID: SAN JUAN AMINE WASHER WATER

TOTAL Metals

Lot-Sample #: I6G120107 - 001

Work Order #: C4R4P

Matrix.....: WATER

Date Sampled.: 07/08/96 00:00

Date Received: 07/10/96 09:18

Percent Moist:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Mercury	ND	0.00020	mg/L	SW846 7470	07/15/96	6197166
		Dilution Fact: 1				
		MS Run #: 6197035				
Barium	ND	2.0	mg/L	SW846 6010A	07/15-07/19/96	6197182
		Dilution Fact: 10				
		MS Run #: 6197048				
Cadmium	ND	0.050	mg/L	SW846 6010A	07/15-07/19/96	6197182
		Dilution Fact: 10				
		MS Run #: 6197048				
Chromium	2.2	0.10	mg/L	SW846 6010A	07/15-07/19/96	6197182
		Dilution Fact: 10				
		MS Run #: 6197048				
Silver	ND	0.10	mg/L	SW846 6010A	07/15-07/19/96	6197182
		Dilution Fact: 10				
		MS Run #: 6197048				
Arsenic	ND	3.0	mg/L	SW846 6010A	07/15-07/19/96	6197182
		Dilution Fact: 10				
		MS Run #: 6197048				
Lead	ND	1.0	mg/L	SW846 6010A	07/15-07/19/96	6197182
		Dilution Fact: 10				
		MS Run #: 6197048				
Selenium	ND	2.5	mg/L	SW846 6010A	07/15-07/19/96	6197182
		Dilution Fact: 10				
		MS Run #: 6197048				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

ND Parameter was not detected at or above the stated reporting limit.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #: I6G120107
Percent Moist: 100

MS Sample: I6G110105-001

Matrix: WATER

<u>PARAMETER</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>BATCH #</u>
Mercury	115	(75-125)			MCAWW 245.1	07/15/96	6197166
	106	(75-125)	7.5	(0-20)	MCAWW 245.1	07/15/96	6197166
		Dilution Factor: 1					
		MS Run #:	6197035				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #: I6G120107
Percent Moist: 100

MS Sample: I6G120161-003

Matrix: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-- ANALYSIS DATE	BATCH #
Copper	84	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	99	(80-120)	4.3	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Cadmium	91	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	93	(80-120)	1.9	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Lead	115	(80-120)			MCAWW 239.2	07/15-07/16/96	6197182
	120	(80-120)	3.5	(0-20)	MCAWW 239.2	07/15-07/16/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Nickel	100	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	88	(80-120)	11	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Silver	88	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	90	(80-120)	2.8	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Zinc	95	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	97	(80-120)	1.9	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Chromium	92	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	93	(80-120)	1.2	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Arsenic	93	(80-120)			SW846 6010A	07/15-07/19/96	6197182
	95	(80-120)	2.1	(0-20)	SW846 6010A	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						
Selenium	90	(80-120)			SW846 6010A	07/15-07/19/96	6197182
	93	(80-120)	2.4	(0-20)	SW846 6010A	07/15-07/19/96	6197182
	Dilution Factor: 1						
	MS Run #: 6197048						

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #: I6G120107

MS Sample: I6G120161-003

Matrix: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>BATCH #</u>
Barium	87	(80-120)			SW846 6010A	07/15-07/19/96	6197182
	89	(80-120)	2.0	(0-20)	SW846 6010A	07/15-07/19/96	6197182
		Dilution Factor: 1					
		MS Run #:	6197048				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #: I6G120107 Work Order #: C4T6K112-MS Matrix: WATER
 MS Lot #: I6G160116-001 C4T6K113-MSD
 Date Sampled: 07/08/96 11:00 Date Received: 07/09/96 08:54
 Prep Date: 07/17/96 Analysis Date: 07/22/96
 Prep Batch #: 6200138 MS Run #: 6205027
 Dilution Factor: 1 Percent Moist: 100

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Vinyl chloride	76	(1.0-251)			SW846 8240B
	76	(1.0-251)	0.11	(0-30)	SW846 8240B
1,1-Dichloroethylene	107	(59-155)			SW846 8240B
	106	(59-155)	1.8	(0-30)	SW846 8240B
Chloroform	102	(51-136)			SW846 8240B
	104	(51-136)	1.6	(0-30)	SW846 8240B
1,2-Dichloroethane	111	(49-155)			SW846 8240B
	110	(49-155)	0.90	(0-30)	SW846 8240B
Methyl ethyl ketone	134	(25-250)			SW846 8240B
	140	(25-250)	4.2	(0-30)	SW846 8240B
Carbon tetrachloride	104	(71-240)			SW846 8240B
	108	(71-240)	4.2	(0-30)	SW846 8240B
Trichloroethylene	105	(71-157)			SW846 8240B
	108	(71-157)	2.7	(0-30)	SW846 8240B
Benzene	107	(37-151)			SW846 8240B
	110	(37-151)	3.0	(0-30)	SW846 8240B
Tetrachloroethylene	105	(46-157)			SW846 8240B
	108	(46-157)	3.0	(0-30)	SW846 8240B
Chlorobenzene	110	(37-160)			SW846 8240B
	112	(37-160)	2.0	(0-30)	SW846 8240B
1,4-Dichlorobenzene	108	(75-137)			SW846 8240B
	109	(75-137)	0.49	(0-30)	SW846 8240B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	100	(86-115)
	99	(86-115)
1,2-Dichloroethane-d4	99	(76-114)
	95	(76-114)
Toluene-d8	98	(88-110)
	98	(88-110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #: I6G120107

Matrix: WATER

Percent Moist: 100

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>BATCH #</u>
Reactive Cyanide					C4R4P10J-MS/C4R4P10K-MSD	MS Lot/Sample #: I6G120107-001	
	2.5	(1.0-64)			SW846 7.3.3	07/16/96	6198108
	0.58 N	(1.0-64)	105	(0-213)	SW846 7.3.3	07/16/96	6198108
		Dilution Factor: 1					
		MS Run #:		6198002			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Metals

Client Lot #: I6G120107

Matrix: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>BATCH #</u>
Cadmium	103	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	104	(80-120)	1.5	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
		Dilution Factor: 1					
Lead	108	(82-127)			MCAWW 239.2	07/15-07/16/96	6197182
	106	(82-127)	1.7	(0-19)	MCAWW 239.2	07/15-07/16/96	6197182
		Dilution Factor: 1					
Silver	101	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	101	(80-120)	0.03	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
		Dilution Factor: 1					
Chromium	101	(80-120)			MCAWW 200.7	07/15-07/19/96	6197182
	103	(80-120)	1.3	(0-20)	MCAWW 200.7	07/15-07/19/96	6197182
		Dilution Factor: 1					
Barium	99	(80-120)			SW846 6010A	07/15-07/19/96	6197182
	100	(80-120)	1.4	(0-20)	SW846 6010A	07/15-07/19/96	6197182
		Dilution Factor: 1					
Arsenic	103	(80-120)			SW846 6010A	07/15-07/19/96	6197182
	105	(80-120)	1.2	(0-20)	SW846 6010A	07/15-07/19/96	6197182
		Dilution Factor: 1					
Selenium	104	(80-120)			SW846 6010A	07/15-07/19/96	6197182
	105	(80-120)	0.92	(0-20)	SW846 6010A	07/15-07/19/96	6197182
		Dilution Factor: 1					
Mercury	87	(81-120)			MCAWW 245.1	07/15/96	6197166
	87	(81-120)	0.04	(0-21)	MCAWW 245.1	07/15/96	6197166
		Dilution Factor: 1					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #: I6G120107

Matrix: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>BATCH #</u>
pH (liquid)					C4RTH101-MS/C4RTH102-MSD		
	98	(90-110)			MCAWW 150.1	07/12/96	6197132
	98	(90-110)	0.56	(0-20)	MCAWW 150.1	07/12/96	6197132
		Dilution Factor: 1					
Total Solids (Residue)					C4TA6102-MS/C4TA6103-MSD		
	101	(87-113)			MCAWW 160.3	07/15/96	6198195
	102	(87-113)	1.4	(0-20)	MCAWW 160.3	07/15/96	6198195
		Dilution Factor: 1					
Reactive Cyanide					C4T39102-MS/C4T39103-MSD		
	8.4	(1.0-64)			SW846 7.3.3	07/16/96	6198108
	4.5	(1.0-64)	60	(0-213)	SW846 7.3.3	07/16/96	6198108
		Dilution Factor: 1					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

CONOCO INC.



Sample Duplicate Evaluation Report

General Chemistry

Lot-Sample #.: I6G120107 - 001 Work Order #.: C4R4P-SMP
C4R4P-DUP

Matrix.....: WATER

Date Sampled.: 07/08/96

Date Received: 07/10/96

Percent Moist:

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Sulfide								
ND	ND		mg/L	0	(0-20)	SW846 7.3.4	07/16/96	6198110
						Dilution Fact: 1		
						MS Run #.....: 6198004		
Flashpoint								
>150	>150		deg F	0.0	(0-20)	SW846 1010	07/17/96	6200111
						Dilution Fact: 1		
						MS Run #.....: 6200005		
pH (liquid)								
4.1	4.1		No Units	0.73	(0-20)	MCAWW 150.1	07/12/96	6197132
						Dilution Fact: 1		
						MS Run #.....: 6197016		
Total Solids (Residue)								
75000	75000		mg/L	0.40	(0-0.0)	MCAWW 160.3	07/15/96	6198195
						Dilution Fact: 1		
						MS Run #.....: 6198056		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

Metals

Client Lot #: I6G120107

Matrix: WATER

Work Order #: C4T12

Prep Date: 07/15/96

Prep Batch #: 6197166

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	ANALYSIS DATE	DIL FACT
Mercury	ND	0.00020	mg/L	SW846 7470	07/15/96	1

Work Order #: C4T1J

Prep Date: 07/15/96

Prep Batch #: 6197182

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	ANALYSIS DATE	DIL FACT
Arsenic	ND	0.30	mg/L	SW846 6010A	07/19/96	1
Barium	ND	0.20	mg/L	SW846 6010A	07/19/96	1
Cadmium	ND	0.0050	mg/L	SW846 6010A	07/19/96	1
Chromium	ND	0.010	mg/L	SW846 6010A	07/19/96	1
Lead	ND	0.10	mg/L	SW846 6010A	07/19/96	1
Selenium	ND	0.25	mg/L	SW846 6010A	07/19/96	1
Silver	ND	0.010	mg/L	SW846 6010A	07/19/96	1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

ND Parameter was not detected at or above the stated reporting limit.

METHOD BLANK REPORT

General Chemistry

Client Lot #: I6G120107

Matrix: WATER

Work Order #: C4T39 Prep Date: 07/16/96 Prep Batch #: 6198108
Analysis Date: 07/16/96
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Reactive Cyanide	ND	200	mg/L	SW846 7.3.3

Work Order #: C4T3E Prep Date: 07/16/96 Prep Batch #: 6198110
Analysis Date: 07/16/96
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Reactive Sulfide	ND	200	mg/L	SW846 7.3.4

Work Order #: C4TA6 Prep Date: 07/15/96 Prep Batch #: 6198195
Analysis Date: 07/15/96
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Total Solids (Residue)	ND	10	mg/L	MCAWW 160.3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.
ND Parameter was not detected at or above the stated reporting limit.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #: I6G120107 Work Order #: C4V4H101 Matrix: WATER
Prep Date: 07/17/96 Analysis Date: 07/22/96
Dilution Factor: 1 Prep Batch #: 6200138

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Benzene	ND	0.050	mg/L	SW846 8240A
Carbon tetrachloride	ND	0.050	mg/L	SW846 8240A
Chlorobenzene	ND	0.050	mg/L	SW846 8240A
Chloroform	ND	0.050	mg/L	SW846 8240A
1,2-Dichloroethane	ND	0.050	mg/L	SW846 8240A
1,1-Dichloroethylene	ND	0.050	mg/L	SW846 8240A
Methyl ethyl ketone	ND	0.20	mg/L	SW846 8240A
Tetrachloroethylene	ND	0.050	mg/L	SW846 8240A
Trichloroethylene	ND	0.050	mg/L	SW846 8240A
Vinyl chloride	ND	0.10	mg/L	SW846 8240A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
4-Bromofluorobenzene	97	(86-115)
1,2-Dichloroethane-d4	95	(76-114)
Toluene-d8	97	(88-110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
ND Parameter was not detected at or above the stated reporting limit.

Chain of Custody Record

166120107



Environmental Services

QUA-4149

Client CONOCO, INC.			Project Manager CHRIS HANSEN			Date 7/5/96		Chain Of Custody Number 14226	
Address 600 NORTH DAIRY ASHFORD			Telephone Number (Area Code)/Fax Number 713-293-1124 FAX 713-293-1214			Lab Number C6-06-040		Page _____ of _____	
City HOUSTON	State TX	Zip Code 77252	Site Contact DAVID BOTTOMS			Analysis M E T A L S R C I P V T C L P V - W A T E R			
Project Name AMINE WASHER WATER			Carrier/Waybill Number FRD X						

Contract/Purchase Order/Quote No.

QUOTE #

PACK IN WET ICE/SHIP TO: QUANTERRA AUSTIN

Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers		Preservative	Condition on Receipt	S	V	R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
---------------------------------	------	------	-------------	--------------	------------	--	--------------	----------------------	---	---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Special Instructions METALS= 8 RCRA METALS. WATER=1 SOLID/DRY WT

Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown				Sample Disposal <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Turn Around Time Required <input type="checkbox"/> Normal <input type="checkbox"/> Rush		QC Level <input type="checkbox"/> I. <input type="checkbox"/> II. <input type="checkbox"/> III.		Project Specific (Specify)			
1. Relinquished By Kevin Reese		Date 7-8-96		Time 12:45 PM		1. Received By Karl	
2. Relinquished By		Date		Time		2. Received By	
3. Relinquished By		Date		Time		3. Received By	
Comments							

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy



Conoco Inc.
San Juan Gas Plant
P.O. Box 217
Bloomfield, NM 87413
(505) 632-4900

The amine still wash water has been tested here at the San Juan Gas Plant
and has a neutral Ph.

Louis E. Ferrari 6-17-97
Louis E. Ferrari
Maintenance Foreman

Michael Freemyer
Freemyer Company

Office I - (505) 393-6161
Box 1980
Albuquerque, NM 88241-1980
Office II - (505) 748-1283
1 S. First
Albuquerque, NM 88210
Office III - (505) 334-6178
Rio Brazos Road
Albuquerque, NM 87410
Office IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95
Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/>	4. Generator <u>Williams Field</u>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>EL CEDRO PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC N.M.</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>EL CEDRO PLANT HWY 64</u>	
9. <u>Circle One:</u> (A) All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL: RAIN WATER, D IONIZED WATER, AND LESS
than 1 % Amine

6-18-97
VERBAL APPROVAL RECEIVED
FROM MR. D. FAUST

RECEIVED
JUN 19 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 1400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MGR DATE: 6-18-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: <u>Eugene Burch</u>	TITLE: <u>Geologist</u>	DATE: <u>6/19/97</u>
APPROVED BY: <u>SS. Z</u>	TITLE: <u>Dist. Inm.</u>	DATE: <u>6/19/97</u>

CERTIFICATE OF WASTE STATUS

I David E Thompson representative

for Williams Field Service
El Cedro Complex
P.O. Box 215
Bloomfield, N.M. 87413

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S- T- R- Williams Field Service State

Physical Address if appropriate: El Cedro Complex
Hwy 64 Mile Marker 100.5
Blanco, N.M. 87412

Source and description of waste: Gas Plant Sweetening Waste
Production impoundments (DI Water, Rain Water
Amine) Less Than 1% Amine C5+

Est Volume 1400 bbl

Check the appropriate line(s):

- ☒ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☒ Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since N/A

Signature David E Thompson
Printed Name David E Thompson
Title Lead Operator
Date 6-17-87

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N M

strict I - (505) 393-6161
D. Box 1980
bbs, NM 88246-1980
strict II - (505) 748-1283
1 S. First
esia, NM 88210
strict III - (505) 334-6178
7 Rio Brazos Road
ec, NM 87410
strict IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>CONOCO</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	5. Originating Site <u>CONOCO Plant</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	6. Transporter <u>SUNCO</u>
7. Location of Material (Street Address or ULSTR) <u>Bloomfield, NM</u>	8. State <u>NM</u>
9. Circle One: <input checked="" type="radio"/> 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 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:

Water with CLEANING AGENT
MSDS Attached

RECEIVED
JUN 12 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MGR DATE: 6-12-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Benny D. Feunt TITLE: Geologist DATE: 6/16/97
APPROVED BY: Ernie Busch TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I Louis E. Ferrari representative

for Coroco Inc.

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S- 14 T- 29 R- 11 W1/4 1/4 County San Juan State NM

Physical Address if appropriate: #61 CR 4900 Bloomfield NM 87413

Source and description of waste: water with cleaning agent from
plant inlet filter housings.

Check the appropriate line(s):

- ☒ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☒ Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since _____

Signature Louis E. Ferrari

Printed Name Louis E. Ferrari

Title Maint. Foreman

Date 6-12-97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

Before using product, read and follow directions and precautions on product label and bulletins.

TOXICITY	Oral (acute)	Slight toxicity due to high pH 1d(50) (rat): 6.5 g/kg		
	Dermal (acute)	Strong irritant, chemical burns possible		
	Eye	can cause burns	Inhalation (acute)	irritant
	Chronic, Subchronic, etc.			
no chronic effects				
HEALTH HAZARD INFORMATION	PERMISSIBLE EXPOSURE LIMIT (Specify if TLV/TWA or Ceiling (c))			Other:
	ACGIH 19		OSHA 19	
	IRRITATION	<input checked="" type="checkbox"/> Skin <input checked="" type="checkbox"/> Eye	<input type="checkbox"/> Severe <input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Mild (transient)
	CORROSIVITY	<input type="checkbox"/> Skin <input type="checkbox"/> Eye	<input type="checkbox"/> 4 hrs. (DOT) <input type="checkbox"/> May cause blindness	<input type="checkbox"/> 24 hrs. (CPSC)
	SENSITIZATION	<input checked="" type="checkbox"/> Skin <input type="checkbox"/> Respiratory <input type="checkbox"/> Allergen	INHALATION EFFECTS <input type="checkbox"/> Narcotic effect <input type="checkbox"/> Cyanosis <input type="checkbox"/> Asphyxiant	
	LUNG EFFECTS (Specify): may cause burns			
	OTHER (Specify): <input type="checkbox"/> Repeated contact - skin defatter <input type="checkbox"/> Other (Specify):			
	INGESTION <input type="checkbox"/> Induce vomiting <input checked="" type="checkbox"/> Do NOT induce vomiting <input type="checkbox"/> Give plenty of water <input checked="" type="checkbox"/> Get medical attention <input type="checkbox"/> Other (Specify): Give cold H2O or milk			
	DERMAL <input checked="" type="checkbox"/> Flush with soap and water <input type="checkbox"/> Get medical attention <input checked="" type="checkbox"/> Contaminated clothing - remove & launder <input type="checkbox"/> Contaminated shoes - destroy <input type="checkbox"/> Other (Specify):			
	EYE CONTACT <input checked="" type="checkbox"/> Flush with plenty of water for at least 15 minutes <input type="checkbox"/> Get medical attention <input type="checkbox"/> Other (Specify):			
SPECIAL PROTECTION INFORMATION	INHALATION <input checked="" type="checkbox"/> Remove to fresh air <input type="checkbox"/> If not breathing, give artificial respiration <input type="checkbox"/> Give oxygen <input checked="" type="checkbox"/> Get medical attention <input type="checkbox"/> Other (Specify):			
	VENTILATION REQUIREMENTS - Always maintain exposure below permissible exposure limits <input type="checkbox"/> Consult an industrial hygienist or environmental health specialist <input checked="" type="checkbox"/> Local exhaust <input type="checkbox"/> Use with adequate ventilation <input type="checkbox"/> Check for air contaminant and oxygen deficiency			
	EYE <input type="checkbox"/> Safety glasses <input checked="" type="checkbox"/> Face shield and goggles <input type="checkbox"/> Goggles			
	HAND (GLOVE TYPE) <input type="checkbox"/> Polyvinyl chloride <input type="checkbox"/> Neoprene <input type="checkbox"/> Butyl rubber <input type="checkbox"/> Natural rubber <input type="checkbox"/> Polyvinyl alcohol <input type="checkbox"/> Polyethylene <input checked="" type="checkbox"/> Other (Specify): Any Impervious material			
	RESPIRATOR TYPE - Use only NIOSH approved equipment <input type="checkbox"/> Self-contained <input type="checkbox"/> Supplied air <input type="checkbox"/> Can or cartridge gas or vapor <input checked="" type="checkbox"/> Filter - dust, fume, mist <input type="checkbox"/> Other (Specify):			
	OTHER PROTECTIVE EQUIPMENT <input type="checkbox"/> Rubber boots <input type="checkbox"/> Apron <input checked="" type="checkbox"/> Other (Specify): Impervious clothing			
	PRECAUTIONARY LABELING <input type="checkbox"/> Wash thoroughly after handling <input type="checkbox"/> Do not get in eyes, on skin or clothing <input type="checkbox"/> Do not breathe dust, vapor, mist, gas <input type="checkbox"/> Keep container closed <input type="checkbox"/> Keep away from heat, sparks, and open flames <input type="checkbox"/> Store in tightly closed containers <input type="checkbox"/> Do not store near combustibles <input type="checkbox"/> Keep from contact with clothing and other combustible materials <input type="checkbox"/> Empty container may contain hazardous residues <input type="checkbox"/> Use explosion proof equipment <input type="checkbox"/> Other (Specify):			
	Other handling and storage conditions Store in a cool dry place			

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS, AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE AND THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, WE MAKE NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIM ALL LIABILITY FOR RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

Office I - (505) 393-6161
 D. Box 1980
 Sps. NMs 86241-1980
 Office II - (505) 748-1283
 S. First
 Santa Fe, NM 87210
 Office III - (505) 334-6178
 7 Rio Brazos Road
 Santa Fe, NM 87410
 Office IV - (505) 827-7131

New Mexico
 Energy Minerals and Natural Resources Department
 Oil Conservation Division
 2040 South Pacheco Street
 Santa Fe, New Mexico 87505
 (505) 827-7131

P.2
 Form C-138
 Originated 8/6/95

Submit Original
 Plus 1 Copy
 to appropriate
 District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Halliburton</u>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>YARD</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZtec NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>4109 E MAIN</u>	
9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WG-19 Gel water mixed with Fresh water

RECEIVED RECEIVED
 JUN - 5 1997 JUN 11 1997

OIL CON. DIV. OIL CON. DIV.
 DIST. 3 DIST. 3

Estimated Volume 90 BELS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael T. Horvich TITLE: DISPOSAL MGR DATE: 6-5-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Michael T. Horvich TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Martynne J. Kelly TITLE: Environmental Geologist DATE: 6/6/97

APPROVED BY: Ernie Burch TITLE: Geologist DATE: 6/5/97

strict I - (505) 393-6161
D. Box 1980
bbs, NM 88241-1980
strict II - (505) 748-1283
S. First
csia, NM 88210
strict III - (505) 334-6178
Rio Brazos Road
NM 87410
strict IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	4. Generator <u>Halliburton</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	5. Originating Site <u>YARD</u>
3. Address of Facility Operator <u>CR 3500 #345, Aztec NM</u>	6. Transporter <u>SUNCO</u>
7. Location of Material (Street Address or ULSTR) <u>4109 E. MAIN</u>	8. State <u>NM</u>
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WG-19 GEL WATER MIXED WITH FRESH WATER

RECEIVED
JUN - 5 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 90 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael E. Talovich TITLE: DISPOSAL MGR DATE: 6-5-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: [Signature] TITLE: mi DATE: 6/5/97

CERTIFICATE OF WASTE STATUS

I Dale A. Kalcich representative

for Halliburton Energy Services

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

✓ Non-Exempt and that it has been identified as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S-____ T-____ R-____ 1/4____ 1/4____ County San Juan State NM

Physical Address if appropriate: 2615 San Juan Blvd

Source and description of waste: WG-19 Guar gel & water

I further certify that there has been NOTHING
ADDED to the waste other than the above
Dale A. Kalcich

Check the appropriate line(s):

- ☒ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☐ Exempt

I further certify that there has been no change in the waste stream at the facility generating the waste since N/A

Signature Dale A. Kalcich
Printed Name Dale A. Kalcich
Title Team Coordinator
Date 6-5-97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

HALLIBURTON ENERGY SERVICES - SH 3 PAPERS

FOR

MOVEMENT OF MATERIALS ACCORDING TO FEDERAL REGULATION
AS SPECIFIED IN CFR 49, SEC.177.817 AND 176.24

LOCATION: FARMINGTON NM

FOR EMERGENCY CONTACT:

TRUCK# OR TELR# :

NAME: TOM COLLINS

TELEPHONE: (505) 324-3500

DRIVER:

U.S. DOT HAZMAT REG. NO. - 051496 005 031E

*HM:*****

* * TOT GROSS LBS 5 NUM CONTAINERS: TYPE: 50 LB BAG

* *****

* * NOT RESTRICTED

* *

* *

* *

* *HALCO NAME & NO.: WG-19 GELLING AGENT - 50 LBS 516.00107

* * * GROSS LBS/PKG: _____ ERG =>

THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED,
DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR
TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF
TRANSPORTATION.

SIGNATURE _____

MATERIAL SAFETY DATA SHEET
HALLIBURTON ENERGY SERVICES
DUNCAN, OKLAHOMA 73536

DATE: 06-05-97
REVISED DATE 01-17-96

EMERGENCY TELEPHONE: 405/251-4689 OR 405/251-3569
AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: WG-19 GELLING AGENT - 50 LBS PART NUMBER: 516001070
PKG QTY: 50 LB BAG APPLICATION: GELLING AGENT
SERVICE USED: STIMULATION

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT+++++	PERCENT	TLV	PEL
GUAR GUM	> 60 %	10 MG/M3	15 MG/M3

***** SECTION III - PHYSICAL DATA *****

PROPERTY	MEASUREMENT
----------	-------------

APPEARANCE	OFF WHITE SOLID, POWDER
ODOR	BEAN-LIKE
SPECIFIC GRAVITY (H2O=1)	1.300
BULK DENSITY	35.00 LB/CU.FT.
PH	8.5 FOR 5% SOL
SOLUBILITY IN WATER AT	
20 DEG C. GMS/100ML H2O	FORMS GEL
BIODEGRADABILITY	READILY
PERCENT VOLATILES	N/A
EVAPORATION RATE(BUTYL ACETATE=1)	N/A
VAPOR DENSITY	N/A
VAPOR PRESSURE (MMHG)	N/A
BOILING POINT(760 MMHG)	N/A
POUR POINT	N/A
FREEZE POINT	N/A
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

NFPA(704) RATING:

HEALTH 1	FLAMMABILITY 1	REACTIVITY 0	SPECIAL NONE
FLASH POINT	N/A		
AUTOIGNITION TEMPERATURE	430 F /	221 C	
FLAMMABLE LIMITS (OZ. PER CU. FT.)	LOWER .80	UPPER	N/D

EXTINGUISHING MEDIA:

USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES:

AVOID CREATING DUST CLOUDS WITH EXTINGUISHERS.
FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING
APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE, CARBON
MONOXIDE AND NITROGEN OXIDES.
ORGANIC DUST IN THE PRESENCE OF A SOURCE OF IGNITION CARRIES A POTENTIAL
EXPLOSION HAZARD IF THE CONCENTRATION IN THE AIR IS TOO HIGH. GOOD

HOUSEKEEPING PROCEDURES ARE REQUIRED TO MINIMIZE THIS POTENTIAL HAZARD.

***** SECTION V - HEALTH HAZARD DATA *****

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN

ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: TOX ORL-RAT LD50:7060 MG/KG
TOX ORL-MUS LD50:8100 MG/KG
TOX ORL-RBT LD50:7000 MG/KG
TOX EOD5=268,300 PPM
TOX COD=1,500,000 PPM

PRODUCT TLV: 10 MG/M3 (N)

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY CAUSE EYE IRRITATION.

SKIN:

CONTACT MAY CAUSE SKIN IRRITATION.

INHALATION:

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

MAY BE IRRITATING.

INGESTION:

NO DATA AVAILABLE

CHRONIC EFFECTS:

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

OTHER SYMPTOMS AFFECTED:

A REVIEW OF AVAILABLE DATA DOES NOT IDENTIFY ANY CONDITIONS WORSENERD BY
EXPOSURE TO THIS PRODUCT.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF
IRRITATION PERSISTS, SEEK PROMPT MEDICAL ATTENTION.

SKIN:

PROMPTLY WASH SKIN WITH SOAP AND WATER.

INHALATION:

REMOVE TO FRESH AIR. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

INGESTION:

DO NOT INDUCE VOMITING! IN GENERAL, NO TREATMENT IS NECESSARY UNLESS LARGE
QUANTITIES ARE INGESTED. HOWEVER, MEDICAL ADVICE SHOULD BE OBTAINED.

***** SECTION VI - REACTIVITY DATA *****

STABILITY: STABLE

CONDITIONS TO AVOID:

NOT APPLICABLE.

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

NITROGEN OXIDES, CARBON DIOXIDE AND/OR CARBON MONOXIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

***** SECTION VII - SPILL OR LEAK PROCEDURES *****

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

USE PROTECTIVE EQUIPMENT. SWEEP UP AND REMOVE. AVOID CREATING OR INHALING DUST.

WASTE DISPOSAL METHOD:

IF NOT CONTAMINATED, REUSE PRODUCT.

GET APPROVAL FROM LANDFILL OPERATOR AND TRANSPORT TO SANITARY LANDFILL.

***** SECTION VIII - SPECIAL PROTECTION INFORMATION *****

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

NOT NORMALLY NECESSARY.

TOXIC DUST/MIST RESPIRATOR.

SULFUR DIOXIDE RESPIRATOR.

PROTECTIVE GLOVES:

NORMAL WORK GLOVES.

EYE PROTECTION:

GOGGLES AND/OR FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT:

NORMAL WORK COVERALLS.

***** SECTION IX - SPECIAL PRECAUTIONS *****

PRECAUTIONARY LABELING WG-19 GELLING AGENT - 50 LBS

516,001070

WARNING!

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

IRRITATING TO THE EYES, SKIN AND RESPIRATORY SYSTEM.

AIRBORNE DUST MAY BE EXPLOSIVE!

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM OXIDIZERS.

STORE IN DRY LOCATION TO PROTECT PRODUCT QUALITY. REQUIRES COVERED STORAGE.

AVOID CREATING OR INHALING DUST.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

CONTAINER DISPOSITION:

EMPTY CONTAINER COMPLETELY. TRANSPORT CONTAINER WITH ALL CLOSURES IN PLACE.

RETURN FOR REUSE OR DISPOSE IN A SANITARY LANDFILL BY FIRST OBTAINING

LANDFILL OPERATOR'S AUTHORIZATION.

***** SECTION X - TRANSPORTATION INFORMATION *****

DOT SHIPPING DESCRIPTION:

NOT RESTRICTED

***** SECTION XI - ENVIRONMENTAL EVALUATION *****

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: N PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y

CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX

B. EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)

N/A

C. EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)

PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

D. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)

CHEMICAL CONTAINS NO TOXIC INGREDIENTS

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES CEPA NE EEC N/D ACOIN N/D NPR NE DRSH NE

H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA OF A
HAZARDOUS WASTE

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE
DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM
VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS
GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN
BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE
DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO
SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY
SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR
CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS
SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY
OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE
REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR
DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND
SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY
PROHIBITED. HEALTH, SAFETY AND ENVIRONMENT DEPARTMENT, HALLIBURTON ENERGY
SERVICES.

District I - (505) 393-6161
P.O. Box 1980
Socorro, NM 88241-1980
District II - (505) 748-1283
P.O. Box 1980
Socorro, NM 88241-1980
District III - (505) 334-6178
P.O. Box 1980
Socorro, NM 88241-1980
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger Anderson
Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>BIGAWELL SERVICE</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>WASH SUMP</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#34.5 CR 3500, AZtec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
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. <u>B.</u> 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:

EQUIPMENT WASH DOWN WATER

Faxes
attached
to paperwork

RECEIVED
MAY 14 1997

OIL CON. DIV.
DIST. 3

RECEIVED
MAY - 1 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 500 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 5-1-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Kent TITLE: Geologist DATE: 5/2/97

APPROVED BY: Martyn G. Kelly TITLE: Environmental Geologist DATE: 5/6/97

Box 1980
NM 88241-1980
(505) 748-1283
First
NM 88210
(505) 334-6178
Rio Brazos Road
NM 87410
(505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated 8/87

Submit Origin
Plus 1 Co
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>BIGAWELL SERVICE</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>WASH SUMP</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#345 CR 3500, AZtec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
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:

EQUIPMENT WASH DOWN WATER

RECEIVED
MAY 12 1997

OIL CON. DIV.
DIST. 3

RECEIVED
MAY - 1 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 500 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: Disposal Mgr DATE: 5-1-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Feunt TITLE: Geologist DATE: 5/2/97
APPROVED BY: Mortym J. Kelly TITLE: Environmental Geologist DATE: 5/6/97

District I - (505) 393-6161
P.O. Box 1980
Albuquerque, NM 88241-1980
District II - (505) 748-1283
S. First
Albuquerque, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Albuquerque, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>BIG A WELL SERVICE</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>WASH SUMP</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#345 CR 3500, AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
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:

EQUIPMENT WASH DOWN WATER

RECEIVED
MAY - 1 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 500 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 5-1-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fent TITLE: Geologist DATE: 5/2/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I Ron Fellabauer representative

for BIG A WELL SERVICE

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

~~X~~ Non-Exempt and that it has been identified as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S-____ T-____ R-____ 1/4 ____ 1/4 ____ County ____ State ____

Physical Address if appropriate: 708 S. Teller Ave, Farmington NM

Source and description of waste: STEAM CLEANING WATER SUMP

City water, MIXED with soap

Check the appropriate line(s):

MSDS Information sheet

X RCRA TCLP Analysis

~~A~~ X RCRA Metals Analysis

Corrosivity, Ignitability, Reactivity

Exempt

I further certify that there has been no change in the waste stream at the facility generating the waste since _____.

Signature

Printed Name ~~Mr~~ Ron Fellabaum

Title President - CEO

Date 5-1-97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

Project Information		Sample Receipt		Sampled By:		Relinquished By:		Relinquished By:	
Proj. #:	No. Containers: 5	Signature: Michael Johnson	Date: 12-31-96	Signature:	Date:	Signature: Y. d. C.	Date: 12/31/96	Signature:	Date:
Proj. Name:	Custody Seals: Y / N (NA)	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:
P. O. No:	Received Intact: Y	SUNCO DISPOSAL 3:00 PM				Anantex 3:30 PM			
Shipped Via:	Received Cold: Y								
Required Turnaround Time (Prior Authorization Required for Rush)		Received By:		Received By:		Received By: Relinquished By:			
		Signature:	Date:	Signature:	Date:	Signature:	Date:		
		Company:	Time:	Company:	Time:	Company:	Time:		

Please Fill Out Thoroughly.

Shaded areas for lab use only.

White/Yellow: Analytica
Pink: Client




General Water Quality Sunco Disposal

Project ID:	Big A Well Service	Date Reported:	12/13/96
Sample ID:	Big A Well Service	Date Sampled:	12/31/96
Laboratory ID:	6077	Time Sampled:	15:00
Sample Matrix:	Water	Date Received:	12/31/96

Parameter	Analytical Result	Units
General		
Lab pH.....	6.8	s.u.
Lab Conductivity @ 25° C.....	1,080	µmhos/cm
Total Dissolved Solids @ 180°C.....	625	mg/L
Total Dissolved Solids (Calc).....	616	mg/L
Anions		
Total Alkalinity as CaCO ₃	129	mg/L
Bicarbonate Alkalinity as CaCO ₃	129	mg/L
Carbonate Alkalinity as CaCO ₃	NA	mg/L
Hydroxide Alkalinity as CaCO ₃	NA	mg/L
Chloride.....	112	mg/L
Sulfate.....	202	mg/L
Nitrate + Nitrite - N.....	NA	mg/L
Nitrate - N.....	NA	mg/L
Nitrite - N.....	NA	mg/L
Cations		
Total Hardness as CaCO ₃	179	mg/L
Calcium.....	55.8	mg/L
Magnesium.....	9.67	mg/L
Potassium.....	19	mg/L
Sodium.....	140	mg/L
Data Validation		<u>Acceptance Level</u>
Cation/Anion Difference.....	0.96	+/- 2 %
TDS (180):TDS (calculated).....	1.0	1.0 - 1.2

Reference U.S.E.P.A. 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1983.
Standard Methods For The Examination Of Water And Wastewater, 18th ed., 1992.


Review



TCLP Metals Analysis

Sunco Disposal

Project ID:	Big A Well Service	Date Reported:	03/04/97
Sample ID:	Big A Well Service	Date Sampled:	12/31/96
Laboratory ID:	6077	Date Received:	12/31/96
Sample Matrix:	Water	Date TCLP:	01/03/97


Parameter	Analytical Result (mg/L)	Regulatory Limit (mg/L)
-----------	-----------------------------	----------------------------

Trace Metals

Arsenic.....	0.006	5.0
Barium.....	0.36	100
Cadmium.....	0.019	1.0
Chromium.....	0.08	5.0
Lead.....	0.42	5.0
Mercury.....	< 0.001	0.2
Selenium.....	< 0.05	1.0
Silver.....	< 0.05	5.0

General	Percent Solids.....	0	%
---------	---------------------	---	---

Reference: Method 1311: Toxicity Characteristic Leaching Procedure; Method 7000: Methods for Determination of Metals; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.


Review



PURGEABLE AROMATICS

Sunco Disposal

Project ID: Big A Well Service
Sample ID: Big A Well Service
Lab ID: 6077
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Report Date: 01/08/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/07/97

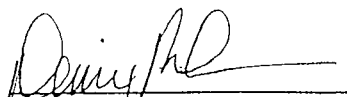
Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	5.00
Toluene	14.4	5.00
Ethylbenzene	26.9	5.00
m,p-Xylenes	86.9	10.0
o-Xylene	33.8	5.00
Total BTEX		164

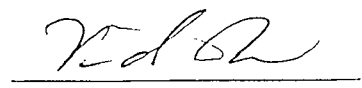
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	94	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:


Analyst


Review



Chlorinated Volatile Organic Compounds

EPA Method 8010

Sunco Disposal

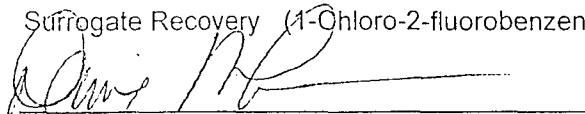
Project ID: Big A Well Service
Sample ID: Big A Well Service
Lab ID: 6077
Sample Matrix: Water
Preservative: Cool, HCl

Report Date: 03/04/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/10/97

Analyte	Concentration (µg/L)	Detection Limit (µg/L)
Bromodichloromethane	0.44	0.40
Bromoform	ND	0.40
Bromomethane	ND	0.40
Carbon Tetrachloride	ND	0.40
Chlorobenzene	ND	0.40
Chloroethane	0.87	0.40
2-Chloroethyl vinyl ether	ND	0.40
Chloroform	ND	0.40
Chloromethane	ND	0.40
Dibromochloromethane	ND	0.40
1,2-Dichlorobenzene	ND	0.40
1,3-Dichlorobenzene	ND	0.40
1,4-Dichlorobenzene	ND	0.40
Dichlorodifluoromethane	ND	0.40
1,1-Dichloroethane	ND	0.40
1,2-Dichloroethane	ND	0.20
1,1-Dichloroethene	ND	0.40
trans-1,2-Dichloroethene	ND	0.40
Dichloromethane	ND	0.40
1,2-Dichloropropane	ND	0.40
cis-1,3-Dichloropropene	ND	0.20
trans-1,3-Dichloropropene	ND	0.20
Tetrachloroethene	0.44	0.20
1,1,2,2-Tetrachloroethane	ND	0.50
1,1,1-Trichloroethane	ND	0.20
1,1,2-Trichloroethane	ND	0.20
Trichloroethene	ND	0.20
Trichlorofluoromethane	ND	0.40
Vinyl Chloride	ND	0.40

Surrogate Recovery (1-Chloro-2-fluorobenzene): 89%

70% - 130% (QC Limits)


Review

Purgeable Aromatics

Matrix Spike Analysis

Lab ID: 6077Spk
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Report Date: 01/08/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/07/97

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	100	ND	96.8	94%	39 - 150
Toluene	100	14.4	109	94%	46 - 148
Ethylbenzene	100	26.9	131	104%	32 - 160
m,p-Xylenes	200	86.9	288	101%	NE
o-Xylene	100	33.8	132	98%	NE

ND - Analyte not detected at the stated detection limit.


NA - Not applicable or not calculated.

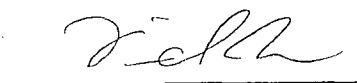
NE - Spike acceptance range not established by the EPA.

Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Trifluorotoluene	105	88 - 110%
	Bromofluorobenzene	102	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:


Analyst


Review

Purgeable Aromatics

Duplicate Analysis

Lab ID: 6077Dup
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Report Date: 01/08/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/07/97

Target Analyte	Original Conc. (ug/L)	Duplicate Conc. (ug/L)	Acceptance Range (ug/L)
Benzene	ND	ND	NA
Toluene	14.4	14.5	10.9 - 18.1
Ethylbenzene	26.9	30.9	18.2 - 39.7
m,p-Xylenes	86.9	96.9	NE
o-Xylene	33.8	36.9	NE

ND - Analyte not detected at the stated detection limit.


NA - Not applicable or not calculated.


NE - Duplicate acceptance range not established by the EPA.

	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
Quality Control:	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	95	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:


Analyst


Review

PURGEABLE AROMATICS

Quality Control Report

Method Blank Analysis

Sample hydrocarbon: Water
Lab ID: MB35710

Report Date: 01/08/97
Date Analyzed: 10/07/97

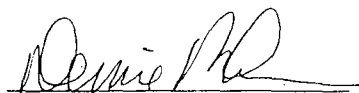
Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	1.00
o-Xylene	ND	0.50

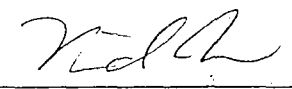
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	90	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,
Oct. 1984.

Comments:


Analyst


Review

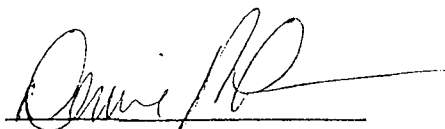
Quality Control Report

Sunco Disposal

Date Reported: 12/09/96

Target Analyte	QC Sample ID	Concentration ($\mu\text{g/L}$)	Certified Concentration ($\mu\text{g/L}$)	Acceptance Limits
Arsenic	ERA 9969	87.3	82.4	61.8 - 97.2
Barium	ERA 9969	481	471	386 - 556
Cadmium	ERA 9969	63.9	64.7	53.1 - 76.3
Chromium	ERA 9969	168	147	121 - 173
Lead	ERA 9969	448	476	390 - 562
Mercury	WP34C2	1.92	1.76	1.26 - 2.30
Selenium	ERA 9969	100	106	79.5 - 125
Silver	ERA 9969	125	132	108 - 156

Reference: Method 1311: Toxicity Characteristic Leaching Procedure; Method 7000: Methods for Determination of Metals; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.


Review

General Water Quality

Quality Control Report

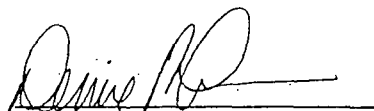
Sunco Disposal

Report Date: 12/13/96

Parameter	Analytical Result	Certified Value	Acceptance Range	Units
Laboratory pH	9.17	9.13	8.93 - 9.33	s.u.
Conductivity	746	740	629 - 851	µmhos/cm
Total Dissolved Solids	650	642	559 - 725	mg/L
Total Alkalinity	158	159	142 - 176	mg/L
Chloride	65.0	66.3	61.7 - 70.7	mg/L
Sulfate	74.1	77.5	66.7 - 88.4	mg/L
Total Hardness	209	209	179 - 237	mg/L
Calcium	59.8	60.3	51.9 - 68.7	mg/L
Magnesium	NA	NA	NA	mg/L
Potassium	72	73	62.3 - 84.3	mg/L
Sodium	110	116	98.6 - 133	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes",
1983. Standard Methods For The Examination Of Water And Wastewater, 18th ed.,
1992.

Comments:


Review

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>UNOCAL</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>• Lateral Comp. Stations #1 - #2 - #4</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>#345 CR. 3500, AZTEC, N.M.</u>	8. State <u>New Mexico</u>
7. Location of Material (Street Address or ULSTR) <u>① N.E. 1/4 N.E. 1/4 Sec-27 T-27N R-6W - R.A. County</u> <u>② S.E. 1/4 N.W. 1/4 Sec-26 T-26N R-7W - R.A. County</u> <u>④ S.W. 1/4 S.W. 1/4 Sec-30 T-27N R-6W - R.A. County</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. <u>B.</u> 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:

EFFULENT LIQUIDS - WASH DOWN WATER - USED COMPRESSOR OIL - USED ENGINE OIL &
ANTI - FREEZE

RECEIVED
APR 29 1997

OIL CON. DIV.
DIST. 3

RECEIVED
APR 21 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 3400 Gals cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Hal Stone TITLE: MANAGER DATE: 4-18-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: HAL STONE TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fount TITLE: Geologist DATE: 4/21/97
APPROVED BY: Martina J. Kuby TITLE: Environmental Geologist DATE: 4/28/97

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Roswell, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>UNOCAL</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>① Lateral Comp. Stations #1 - #2 - #4</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>#345 CR. 3500, AZTEC, N.M.</u>	8. State <u>NEW MEXICO</u>
7. Location of Material (Street Address or ULSTR) <u>① N.E. 1/4 N.E. 1/4 Sec-27 T-27N R-6W - R.A. County</u> <u>② S.E. 1/4 N.W. 1/4 Sec-26 T-26N R-7W - R.A. County</u> <u>④ S.W. 1/4 S.W. 1/4 Sec-30 T-27N R-6W - R.A. County</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.	
All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

EFFULENT LIQUIDS - WASH DOWN WATER - USED COMPRESSOR OIL - USED ENGINE OIL &
ANTI - FREEZE

RECEIVED
APR 21 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 3400 Gals cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Hal Stone TITLE: MANAGER DATE: 4-18-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: HAL STONE TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Jent TITLE: Geologist DATE: 4/21/97

APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I LES GIMBEL representative

for UNOCAL

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S- 30 T- 27N R- 6W 1/4SW 1/4SW County RIO ARriba State NM.

Physical Address if appropriate: LATERAL #4 COMPRESSOR STATION

Source and description of waste: EFFLUENT LIQUIDS - WASHDOWN WATER, USED

COMPRESSOR OIL, USED ENGINE OIL, ANTI-FREEZE

METAL ANALYSIS REPRESENTATIVE FOR LATERAL #1, #2, #4

Check the appropriate line(s):

X MSDS Information sheet

X RCRA TCLP Analysis

RCRA Metals Analysis

Corrosivity, Ignitability, Reactivity

Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since 7-24-96

Signature Les Gimbel

Printed Name LES GIMBEL

Title Field OPERATOR #1

Date 4-15-97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

CERTIFICATE OF WASTE STATUS

I LES GIMBEL representative

for UNOCAL

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S-26 T-26-N R-7-W 1/4 SE 1/4 NW County RIO ARriba State N.M.

Physical Address if appropriate: LATERAL #2 Compressor STATION

Source and description of waste: EFFLUENT LIQUIDS - WASHDOWN WATER,

USED COMPRESSOR OIL, USED ENGINE OIL, ANTI-FREEZE

METAL ANALYSIS REPRESENTATIVE FOR LATERAL #1, #2, #4

Check the appropriate line(s):

X MSDS Information sheet

X RCRA TCLP Analysis

RCRA Metals Analysis

Corrosivity, Ignitability, Reactivity

Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since 7-24-96

Signature Les Gimbel

Printed Name LES GIMBEL

Title FIELD OPERATOR #1

Date 4-15-97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N M

CERTIFICATE OF WASTE STATUS

I LES GIMBEL representative

for UNOCAL

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt
X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S- 27 T- 27N R- 6-W 1/4 NE 1/4 NE County RIO ARriba State NM

Physical Address if appropriate: LATERAL #1 COMPRESSOR STATION

Source and description of waste: EFFULENT LIQUIDS - WASH DOWN WATER,

USED COMPRESSOR OIL, USED ENGINE OIL, ANTI-FREEZE

METAL ANALYSIS REPRESENTATIVE FOR LATERAL #1, #2, #4

Check the appropriate line(s):

X MSDS Information sheet

X RCRA TCLP Analysis

RCRA Metals Analysis

Corrosivity, Ignitability, Reactivity

Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since 7-24-96

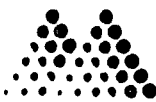
Signature Les Gimbel

Printed Name LES Gimbel

Title Field Operator #1

Date 4-15-97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM



Mountain States Analytical

The Quality Solution

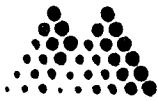
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: TCLP Metal Analysis

Sample ID: Lateral #1 Effluent Liq.
Matrix: Liquid Waste

MSAI Sample: 51209
MSAI Group: 13023
Date Reported: 08/14/96
Discard Date: 09/13/96
Date Submitted: 08/07/96
Date Sampled: 07/24/96
Collected by: DC
Purchase Order: 4277
Project No.: 2-1000

Test Analysis	Results as Received	Units	Limit of Quantitation
0246G Barium by ICP, TCLP Method: SW-846 6010A	ND	mg/l	1.0
0249G Cadmium by ICP, TCLP Method: SW-846 6010A	ND	mg/l	0.02
0251G Chromium by ICP, TCLP Method: SW-846 6010A	ND	mg/l	0.02
0255G Lead by ICP, TCLP Method: SW-846 6010A	ND	mg/l	0.2
0259T Mercury by CVAA, TCLP Method: SW-846 7470	ND	mg/l	0.0005
0266G Silver by ICP, TCLP Method: SW-846 6010A	ND	mg/l	0.02
0392N Mercury Prep CVAA, TCLP Method: SW-846 7470	Complete		
0392T Flame/ICP Prep For Metals, TCLP Method: SW-846 3010A	Complete		
1045G Arsenic by ICP, TCLP Method: SW-846 6010A	ND	mg/l	0.10
1064G Selenium by ICP, TCLP Method: SW-846 6010A	ND	mg/l	0.30
0947M TCLP Extraction, Metals Method: SW-846 1311	100	% Solids	0.001



Mountain States Analytical

On Site Technologies, Ltd.

The Quality Solution

Sample ID: Lateral #1 Effluent Liq.

Page 2

MSAI Sample: 51209

MSAI Group: 13023

ND - Not detected at the limit of quantitation

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

MATERIAL SAFETY DATA SHEET

This MSDS Complies with 29 CFR 1910.1200 (The Hazard Communication Standard)

Upon receiving this Material Safety Data Sheet you are urged to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information on this sheet, (2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

REVISION DATE 08/15/88

PAGE 1 OF 3

SECTION I					
MANUFACTURER'S NAME CREST OIL AND CHEMICAL, INC.				EMERGENCY TELEPHONE NO. (405) 232-7738	
ADDRESS 322 W. Fonshill, P.O. BOX 36396, OKLAHOMA CITY, OK 73136-0396					
PRODUCT NAME CREST FLEETGUARD ANTIFREEZE/COOLANT				PRODUCT CODE NO. 211 - 8510000	
CHEMICAL NAME AND SYNONYMS ANTIFREEZE SOLVENT, ENGINE COOLANT, EG					
CHEMICAL FAMILY NA		FORMULA NA		MOLECULAR WEIGHT NA	
DEPARTMENT OF TRANSPORTATION	HAZARD CLASSIFICATION NA		SHIPPING NAME ANTIFREEZE (ETHYLENE GLYCOL BASE)		
CHEMICAL ABSTRACT REGISTRY NAME ND					
CHEMICAL ABSTRACT REGISTRY NUMBER 107-21-1					
SECTION II - HAZARDOUS INGREDIENTS					
	%	TLV (Units)		%	TLV (Units)
ETHYLENE GLYCOL	> 9	50ppm			
SECTION III - PHYSICAL DATA					
BOILING POINT (°F.)	383° F.	FREEZING POINT	0° F.	STATE	SOLID
VAPOR PRESSURE (mm Hg.)	.1	SPECIFIC GRAVITY (H ₂ O = 1)	1.12		LIQUID
VAPOR DENSITY (AIR = 1)	2.1	PERCENT. VOLATILE BY VOLUME (%)	95.0		XX
SOLUBILITY IN WATER	COMPLETE	EVAPORATION RATE (= 1)	LONG		GAS
APPEARANCE AND ODOR DYED GREEN - SLIGHT ODOR					
SECTION IV - FIRE AND EXPLOSION HAZARD DATA					
FLASH POINT (Method used)		245° F. (TCC)	FLAMMABLE LIMITS IN AIR, % BY VOLUME	LOWER	1.0
				UPPER	ND
EXTINGUISHING MEDIA NEPA CLASS B EXTINGUISHERS (CO₂ OR FOAM) FOR CLASS III B FIRES.					
SPECIAL FIRE FIGHTING PROCEDURES WATER SPRAY MAY BE INEFFECTIVE ON FIRE BUT CAN PROTECT FIGHTERS, COOL CLOSED CONTAINERS AND DISPERSE VAPORS. USE FOG NOZZLES IF WATER IS USED. USE AIR-SUPPLIED BREATHING MASKS.					
UNUSUAL FIRE AND EXPLOSION HAZARDS SLIGHTLY COMBUSTIBLE. KEEP CONTAINER TIGHTLY CLOSED. ISOLATE FROM OXIDIZERS, HEAT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE IF EXPOSED TO EXTREME HEAT. APPLYING TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS.					
NFPA CODES: HEALTH 3 FLAMMABILITY 1 REACTIVITY 0 SPECIFIC ND					

MOBIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

***** I. PRODUCT IDENTIFICATION ***** **MOBIL PEGASUS SPECIAL**

SUPPLIER: MOBIL OIL CORP. HEALTH EMERGENCY TELEPHONE: (212) 883-4411
 CHEMICAL NAMES AND SYNONYMS: PET. HYDROCARBONS AND ADDITIVES TRANSPORT EMERGENCY TELEPHONE: (800) 424-9300 (CHEMTREC)
 USE OR DESCRIPTION: GAS ENGINE OIL

***** II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

APPEARANCE: ASTM 5 LIQUID COOR: MILD PH: NA
 VISCOSITY AT 100 F, SUS: 450.0 AT 40 C, CS: 38.0
 VISCOSITY AT 210 F, SUS: 73.0 AT 100 C, CS: 13.3
 FLASH POINT F(C): 410(210) (ASTM D-92)
 MELTING POINT F(C): NA POUR POINT F(C): -30(-34)
 BOILING POINT F(C): > 600(316)
 RELATIVE DENSITY, 15/4 C: 0.89 SOLUBILITY IN WATER: NEGLIGIBLE
 VAPOR PRESSURE-MM HG 20C: < .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES
 FOR FURTHER INFORMATION, CONTACT YOUR LOCAL MARKETING OFFICE.

***** III. INGREDIENTS *****

WT PCT	EXPOSURE LIMITS	SOURCES
(APPROX)	MG/M3	PPM (AND NOTES)

HAZARDOUS INGREDIENTS:
 NONE

OTHER INGREDIENTS:
 REFINED MINERAL OILS >85
 ADDITIVES AND/OR OTHER INGREDIENTS <15

KEY TO SOURCES: A=ACGIH-TLV, A*=SUGGESTED-TLV, M=MOBIL, O=OSHA
 NOTE: LIMITS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

***** IV. HEALTH HAZARD DATA *****

EFFECTS OF OVEREXPOSURE: SLIGHT EYE IRRITATION. SLIGHT SKIN IRRITATION.

***** V. EMERGENCY AND FIRST AID PROCEDURES *****

EYE CONTACT: FLUSH WITH WATER.
 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, IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN, HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

***** VI. FIRE AND EXPLOSION HAZARD DATA *****

FLASH POINT F(C): 410(210) (ASTM D-92)

FLAMMABLE LIMITS. LEL: .6 UEL: 7.0

EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES: FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

NFPA HAZARD ID: HEALTH: 0, FLAMMABILITY: 1, REACTIVITY: 0

***** VII. REACTIVITY DATA *****

STABILITY (THERMAL, LIGHT, ETC.): STABLE

CONDITIONS TO AVOID: EXTREME HEAT

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS: METAL OXIDES. CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

***** VIII. SPILL OR LEAK PROCEDURE *****

ENVIRONMENTAL IMPACT: 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 800-424-9802.

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.

WASTE MANAGEMENT: PRODUCT IS SUITABLE FOR BURNING IN AN ENCLOSED, CONTROLLED BURNER FOR FUEL VALUE OR DISPOSAL BY SUPERVISED INCINERATION. IN ADDITION, THE PRODUCT IS SUITABLE FOR PROCESSING BY AN APPROVED RECYCLING FACILITY OR CAN BE DISPOSED OF AT ANY GOVERNMENT APPROVED 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.

***** IX. SPECIAL PROTECTION INFORMATION *****

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.

RESPIRATORY PROTECTION: NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION: NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

***** X. SPECIAL PRECAUTIONS *****

NO SPECIAL PRECAUTIONS REQUIRED.

***** XI. TOXICOLOGICAL DATA *****

---ACUTE---

ORAL TOXICITY (RATS): SLIGHTLY TOXIC (ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY (RABBITS): SLIGHTLY TOXIC (ESTIMATED) ---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): MAY CAUSE SLIGHT IRRITATION. ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION (RABBITS): MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT. ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

***** XII. REGULATORY INFORMATION *****

TSCA INVENTORY STATUS: ALL COMPONENTS REGISTERED.

C.O.T. SHIPPING NAME: NOT APPLICABLE

C.O.T. HAZARD CLASS: NOT APPLICABLE

US OSHA HAZARD COMMUNICATION STANDARD: PRODUCT ASSESSED IN ACCORDANCE WITH OSHA CFR 1910.1200 AND DETERMINED NOT TO BE HAZARDOUS.

RCRA INFORMATION: THE UNUSED PRODUCT, IN OUR OPINION, IS NOT SPECIFICALLY LISTED BY THE EPA AS A HAZARDOUS WASTE (40 CFR, PART 261); DOES NOT EXHIBIT THE HAZARDOUS CHARACTERISTICS OF IGNITABILITY, CORROSIVITY, OR REACTIVITY, AND IS NOT FORMULATED WITH THE METALS CITED IN THE EP TOXICITY TEST. HOWEVER, USED PRODUCT MAY BE REGULATED.

THE FOLLOWING PRODUCT INGREDIENTS ARE CITED ON THE LISTS BELOW:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
ZINC (ELEMENTAL ANALYSIS) (0.023 PCT)	7440-66-6	15

--- KEY TO LIST CITATIONS ---

1 = OSHA Z, 2 = ACGIH, 3 = IARC, 4 = NTP, 5 = NCI,
6 = EPA CARC, 7 = NFPA 49, 8 = NFPA 325M, 9 = DOT HMT, 10 = CA RTK,
11 = IL RTK, 12 = MA RTK, 13 = MN RTK, 14 = NJ RTK, 15 = MI 293,
16 = FL RTK, 17 = PA RTK.

***** 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. *****

Mobil

MOBIL PECO US SPECIAL

005940

PAGE 4 OF 4

PREPARED BY: MOBIL OIL CORPORATION
ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPARTMENT, PRINCETON, NJ
FOR FURTHER INFORMATION, CONTACT:
MOBIL OIL CORPORATION, PRODUCT FORMULATION AND QUALITY CONTROL
3225 GALLOWES ROAD, FAIRFAX, VA 22037 (703) 849-3265

***** APPENDIX *****

FOR MOBIL USE ONLY: (FILL NO: MTN3918802*2) MHC: 1* 1* NA 1* 1* PPEC:
1085-030 APPROVE REVISED: 05/09/85

- | | |
|---|--|
| 1. Non-Exempt: x | 5. Originating site: Val Verde Plant |
| 2. Management Facility Destination: Sunco Disposal | 6. Transporter: Sunco |
| 3. Address of Facility Operator: #345 CR 3500, Aztec NM | 7. Location of Materials: Bloomfield, NM |
| 4. Generator: Burlington Res. | 8. State: NM |

Brief Description of Material: Wash water from cleaning plant equipment.

Estimated Volume: 1400 Gals

SIGNATURE: Michael Talovich

TITLE: Disposal Mgr.

DATE: 3/26/97

RECEIVED STAMP DIST. 3: 3/26/97

RECEIVED STAMP SANTA FE: 3/27/97

Additional Signature Space:

APPROVED BY: Marlene Kiching TITLE: Environmental Custodian DATE: 4/10/97

Printed in Font 4/10/97

RECEIVED
APR 15 1997

OIL CON. DIV.
DIST. 3

4-10-97

Denny,
Here is a copy for your files
Including the additional
Info sent to US By
Shawn Adams.
I called him on 4-10-97
To tell him that we approved
The C-138 And that From now on
we will be requesting the original
Chain of Custody. Marlene Kiching

U. Box 19.0
Jobbs, NM 88241-1980
strict II - (505) 748-1283
1 S. First
tesia, NM 88210
strict III - (505) 334-6178
Rio Brazos Road
cc, NM 87410
strict IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

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 checked="" type="checkbox"/>	4. Generator <u>Burlington Res.</u> 5. Originating Site <u>VAL VERDE PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#345 CR 3500, AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Bloomfield, NM</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASH WATER FROM CLEANING PLANT EQUIPMENT

RECEIVED

MAR 27 1997

Environmental Bureau
Oil Conservation Division

RECEIVED
MAR 26 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 1400 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 3-26-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-1618

(This space for State Use)		
APPROVED BY: <u>Denny Z. Farn</u>	TITLE: <u>Geologist</u>	DATE: <u>3/26/97</u>
DENIED	Petroleum	3/27/97
APPROVED BY: <u>[Signature]</u>	TITLE: <u>ENGINEER</u>	DATE: <u>3/27/97</u>

Printed in Aztec 3/28/97

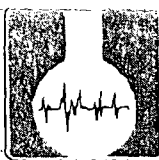
DL CONSERVATION DIVISION
RECEIVED

ROGON 97 APR 7 AM 8 52

These are the papers sent to
me by Assaigai Lab. Concerning
the C138 form for Burlington
Resources

Thanks

Shawn Adams



ASSAIGAI
ANALYTICAL
LABORATORIES

SERVICES, INC.

Chain of Custody Record

Lab job no.: 3041 Date 3/5/97

Page 1 of 1

ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 570-1116

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Client CONTRACT ENVIRONMENTAL
Address PO Box 3376
City / State / Zip FARMINGTON NM 87499
Project Name / Number MOI - VAL VERDE
Contract / Purchase Order / Quote CONTRACT ENV

Project Manager / Contact SHAWN ADAMS
Telephone No. (505) 325-1198
Fax No. SAME (CALL)
Samplers: (Signature) Shawn Adams

No. of Containers	Analysis Required								Remarks
	FLASH-REACT	NACE	TCLP	TCLP SVOA	PH	TCLP - MT	TCLP - VOA		
1	X								Composite Tank Sample
1		X							"
1			X						"
1				X					"
1						X			"
2							X		"
2							X		"

AAL ACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation	
						Temp.	Chemical
1A	VALV-100	3/5/97	12:00	Liq	8 oz glass	no	
1B	VALV-101	"	"	"	2 1/2 x 7" Plastic	no	
1C	VALV-102	"	"	"	4 x 6" Amber	no	
	VALV-103	"	"	"	4 x 6" Amber	no	
1D	VALV-104	"	"	"	2 x 5 1/4" Plastic	no	
1E	VALV-105	"	"	"	3 3/4 x 6" Plastic	no	
1F	VALV-106 A/B	"	"	"	VOA ^S	no	
	VALV-107 A/B	"	"	"	VOA ^S	no	

Relinquished by: Shawn Adams
Signature Shawn Adams
Printed SHAWN ADAMS
Company CONTRACT ENV. SCS.
Reason Analyses

Date 3/5/97
Time 2:00

Received by: Fed-Ex
Signature _____
Printed _____
Company Fed-Ex
Reason _____

Relinquished by: Fed-Ex
Signature _____
Printed _____
Company Fed-Ex
Reason _____

Date 3/6/97
Time 9:45

Received by: Shawn Adams
Signature Shawn Adams
Printed SHAWN ADAMS
Company _____
Reason _____

Method of Shipment: Temp 11.2
Shipment No. _____
Special Instructions: _____

Comments: "RUSH" 5-DAY
Results Due By 3/13/97
Blend /
Shake and analyse Liquid phase only
not Solid Phase too!
LABORATORY

After analysis, samples are to be:

- ☐ Disposed of (additional fee)
- ☒ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

**SAMPLE RECEIPT CHECKLIST
AND
NONCONFORMANCE REPORT**

WO#: 97-03-041
DATE RCVD: 3.6.97
RCVD BY: GM
NONCONFORM.?: Y or N

COOLER CONDITION:

- A. Was the cooler intact?
- B. Freight bill received?
- D. Cooler labelled properly?
- C. Cooler Temperature (acceptable range 1 - 8 °C)

YES	NO	N/A
✓		
✓		
✓		
11.2	C	

SAMPLE CONTAINERS

- A. Are all sample containers intact?
- B. Are custody seals in place?
- C. Are VOA samples without air bubbles or less than "pea size"?
- D. Are all sample labels complete and correct?
- E. Are volumes marked on bottles?
- F. Is there sufficient volume request analyses?

YES	NO	N/A
✓		
✓		
✓		
✓		
	✓	
✓		

SAMPLE/CHAIN-OF-CUSTODY INFORMATION

- A. Do the number of sample containers match the Chain-of-Custody (COC)?
- B. Does all information on sample labels match the information on the COC?
- C. Are contact names, phone and fax numbers clearly indicated on the COC?
- D. Is the COC signed by all parties?
- E. Field copy given to client?

YES	NO	N/A
✓		
✓		
✓		
✓		
✓		

NON-CONFORMANCE SPECIFICS

Cooler temp slightly high.

If any non-conformances were identified:

Who was client contact?

Talked to client - proceed w/ analysis

Non-conformance resolution:

Sean Adams

AAL Employee:

[Signature]

Date: 3/6/97

Program Management/QC Signature

[Signature]

Date: 3/7/97

Temperature Terms:

TERM	DEFINITION
"Cold-A"	Client brought samples in their own cooler on ice.
"Cold-B"	Samples brought in after hours. No temp taken, however, samples were on ice and immediately put into walk-in refrigerator.
"On ice"	Cooler was emptied before a temp could be taken, however, samples were on ice.

O. Box 1980
Albuquerque, NM 88241-1980
District II - (505) 748-1283
11 S. First
Albuquerque, NM 88210
District III - (505) 334-6178
1 Rio Brazos Road
Albuquerque, NM 87410
District IV - (505) 827-7131

Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form 10-1
Originated 8-5

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Burlington Res.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>VAL VERDE PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#345 CR 3500, AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Bloomfield, NM</u>	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <u>B.</u> 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:

WASH WATER FROM CLEANING PLANT EQUIPMENT

RECEIVED

MAR 27 1997

Environmental Bureau
Oil Conservation Division

RECEIVED
MAR 28 1997
OIL CON. DIV.
DIST. 3

RECEIVED
MAR 26 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 1400 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich
Waste Management Facility Authorized Agent

TITLE: DISPOSAL MGR

DATE: 3-26-97

TYPE OR PRINT NAME: MICHAEL TALOVICH

TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Henry Z. Faint

TITLE: Geologist

DATE: 3/26/97

APPROVED BY: [Signature]

TITLE: ENGINEER

DATE: 3/27/97

Denied

Sample Note (preserved on
ICE)

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Martin
Reeling

Form C-138
Originated 8/8/95

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 checked="" type="checkbox"/>	4. Generator <u>BURLINGTON Res.</u> 5. Originating Site <u>VAL VERDE PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#345 CR 3500, AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Bloomfield, NM</u>	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <u>(B)</u> 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:

WASH WATER FROM CLEANING PLANT EQUIPMENT

RECEIVED
MAR 26 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 1400 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 3-26-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny B. Zent TITLE: Geologist DATE: 3/26/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I CRAIG A. Bock representative

for Burlington Resources

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Val Verde Plant
Originating Site: S- 14 T- 29N R- 11W 1/4 1/4 County San Juan State NM

Physical Address if appropriate: County Rd. 4937, Bldg 101A, Bloomfield, NM 87411

Source and description of waste: wash water from cleaning Plate / Frame
exchangers at val verde Plant

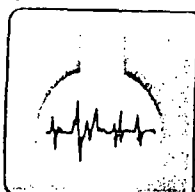
Check the appropriate line(s):

- ☐ MSDS Information sheet
☒ RCRA TCLP Analysis
☒ RCRA Metals Analysis
☒ Corrosivity, Ignitability, Reactivity
☐ Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since 3/5/97

Signature C. A. Bock
Printed Name CRAIG A. Bock
Title Environmental Representative
Date 3/25/97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

Report Generated:

March 12, 1997 14:42

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

SENT CONTRACT ENVIRONMENTAL SERV WORKORDER # : 9703041
TO: PO BOX 3376 WORK ID : MOI-VAL VERDE
FARMINGTON, NM 87499 CLIENT CODE : CONT01
DATE RECEIVED : 03/06/97

ATTN: SHAWN ADAMS

Page: 1

Lab ID: 9703041-01A
Sample ID: VALV-100

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
FLASH POINT/SW846 1010						
Flash Point	> 60	Deg Centigrade	20	1.0	03/10/97	WFLASH204
REACTIVITY/SW846 7-3						
Sulfide	NON-REACT	mg/Kg of Waste	500	1.0	03/11/97	W97114
Cyanide	NON-REACT	mg/Kg of Waste	250	1.0	03/11/97	W97114

Lab ID: 9703041-01B
Sample ID: VALV-101

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
CORROS(NACE)/SW846 1110						
Corrosivity (NACE)	ND	mm/yr	6.0	1.0	03/07/97	WNACE035

Lab ID: 9703041-01C
Sample ID: VALV-102/103

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP SV/METHOD 1311/8270B						
1,4-Dichlorobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
2-Methylphenol / O-Cresol	ND	mg/L	0.0010	290	03/08/97	TSVOA186
3/4-Methylphenol / M/P-Cresol	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Hexachloroethane	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Nitrobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Hexachlorobutadiene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
2,4,6-Trichlorophenol	ND	mg/L	0.010	290	03/08/97	TSVOA186
2,4,5-Trichlorophenol	ND	mg/L	0.010	290	03/08/97	TSVOA186
2,4-Dinitrotoluene	ND	mg/L	0.010	290	03/08/97	TSVOA186
Hexachlorobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Pentachlorophenol	ND	mg/L	0.020	290	03/08/97	TSVOA186
Pyridine	ND	mg/L	0.010	290	03/08/97	TSVOA186
TCLP SVOA XT/1311/3520	03/07/97	N/A				



Lab ID: 9703041-01D
Sample ID: VALV-104

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
pH/EPA 150.1 pH	8.7	pH Units	0.10	1.0	03/07/97	WPH479

Lab ID: 9703041-01E
Sample ID: VALV-105

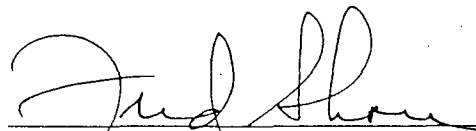
Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
% SOLIDS(TCLP XT)EPA 160.3	1.00	% (Percent)				
TCLP (ICP) DIG/1311/3005	03/09/97	N/A				
TCLP EXTRACTION/TCLP 1311	03/06/97	N/A				
TCLP METALS/1311/SW8466010						
Arsenic, As	ND	mg/L	0.40	1.0	03/10/97	M97180.97178
Barium, Ba	ND	mg/L	0.50	1.0	03/10/97	M97180.97178
Cadmium, Cd	ND	mg/L	0.0050	1.0	03/10/97	M97180.97178
Chromium, Cr	ND	mg/L	0.020	1.0	03/10/97	M97180.97178
Lead, Pb	ND	mg/L	0.050	1.0	03/10/97	M97180.97178
Mercury, Hg	ND	mg/L	0.0020	1.0	03/11/97	M97180.97178
Selenium, Se	ND	mg/L	0.050	1.0	03/10/97	M97180.97178
Silver, Ag	ND	mg/L	0.040	1.0	03/10/97	M97180.97178
TCLP(CVAA)Hg XT/SW846 7471	03/10/97	N/A				

Lab ID: 9703041-01F
Sample ID: VALV-106/107 A/B

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP ZHE / TCLP 1311	03/06/97	N/A				
ZHE/VOA/METHOD 1311/8240B						
Vinyl Chloride	ND	mg/L	0.0050	5.0	03/07/97	TVOA278
1,1-Dichloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Chloroform	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
1,2-Dichloroethane	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
2-Butanone (MEK)	ND	mg/L	0.0050	5.0	03/07/97	TVOA278
Carbon Tetrachloride	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Trichloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Benzene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Tetrachloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Chlorobenzene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278



Fred L. Shore, Ph.D.
VP of Laboratory Operations

WORKORDER COMMENTS

DATE : 03/12/97

WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

ND = Analyte "not detected" in analysis at the sample specific detection limit.

D_F = Sample "dilution factor"

NT = Analyte "not tested" per client request.

B = Analyte was also detected in laboratory method QC blank.

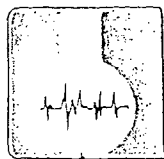
E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

***	Analytical results reported pertain only to the samples provided	***
***	for analysis and may not represent actual field conditions.	***
***		***
***	This report is not to be reproduced except in full, without the	***
***	written approval of Assaigai Analytical Inc.	***

REPORT COMMENTS



ASSAIGAI
ANALYTICAL
LABORATORIES

Chain of Custody Record

Lab Job no.: 3141 Date 3/5/97

Page 1 of 1

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8954

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 570-1116

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Client CONTRACT ENVIRONMENTAL SERVICES, INC.

Project Manager / Contact SHAWN ALANIS

Address P.O. Box 3376

Telephone No. (915) 375-1198

City / State / Zip FARMINGTON NM 87499

Fax No. same (call)

Project Name / Number MOI VAL VERDE

Samplers: (Signature) Shawn Alanis

Contract / Purchase Order / Quote CONTAMENUV

AAL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation		No. of Containers	Analysis Required								Remarks
						Temp.	Chemical		FLASH	HEAT	NACE	TCLP	TCLP SWP	PH	TCLP - MT	TCLP - UGA	
IA	VALV-100	3/5/97	12:00	LIG	8 oz glass		no	1	X								Composite Tank Sample
IB	VALV-101	"	"	"	2 1/2 x 7" Plastic		no	1		X							"
IC	VALV-102	"	"	"	4 x 6" Amber		no	1			X						"
	VALV-103	"	"	"	4 x 6" Amber		no	1				X					"
ID	VALV-104	"	"	"	2 x 5 1/4" Plastic		no	1					X				"
IE	VALV-105	"	"	"	3 1/2 x 6" Plastic		no	1						X			"
IF	VALV-106 A/B	"	"	"	UDA ^S		no	2							X		"
	VALV-107 A/B	"	"	"	UDA ^S		no	2							X		"

Relinquished by: Signature <u>Shawn Alanis</u> Printed <u>SHAWN ALANIS</u> Company <u>CONTRACT ENV SERVICES</u> Reason <u>Analyses</u>	Date <u>3/5/97</u> Time <u>2:00</u>	Received by: Signature _____ Printed _____ Company <u>FED-EX</u> Reason _____	Relinquished by: Signature _____ Printed _____ Company <u>FED-EX</u> Reason _____	Date <u>3/6/97</u> Time <u>14:5</u>	Received by: Signature <u>Shawn Alanis</u> Printed _____ Company _____ Reason _____
Method of Shipment: <u>AIR</u>		Comments: <u>"RUSH" 5-DAY</u> <u>Request DUE By 3/13/97</u> <u>Blender</u> <u>State and analyse liquid phase only</u>		After analysis, samples are to be: <input type="checkbox"/> Disposed of (additional fee) <input checked="" type="checkbox"/> Stored (30 days max) <input type="checkbox"/> Stored over 30 days (additional fee) <input type="checkbox"/> Returned to customer	
Shipment No. _____					
Special Instructions: _____					

COURIER

Contract Environmental Services, Inc.

Post Office Box 3376

Farmington, New Mexico 87499

Phone (505) 325-1198

March 4, 1997

Burlington Resources
Mr. Craig Bock
3535 E. 30th Street
Farmington, New Mexico 87401

RE: Written Procedure For Sampling Steel Tank, Spent Scale Cleaning Solution, Val Verde Plant,
Bloomfield, New Mexico

Dear Mr. Bock,

Contract Environmental Services, Inc. (CES) is pleased to present this sampling procedure for the above described site to Burlington Resources (BR). Sampling will be broken down into two (2) parts. Part one (1) will be sampling the liquid and part two (2) will be sampling the bottom sludge (if any).

Part 1 - Top to bottom liquid samples will be obtained using a 3/4" PVC sample tube. The PVC will be lowered into the fluid until the bottom is encountered. A rubber stopper will be inserted into the exposed end just above the liquid level. The PVC sampler will be extracted and the contents placed in a stainless steel canister for mixing. A total of three (3) liquid samples will be taken for compositing.

Part 2 - The bottom sludge (if any) will be sampled using a PVC sample tube with an eight (8) ounce glass sample jar secured with zip ties at one end. If sludge is encountered, a sample will be gathered from the center and each side. The three (3) sludge samples will be added to the same stainless steel canister to be composited with the liquid previously obtained.

The liquid and solids will be thoroughly mixed and samples for laboratory analysis will be gathered from the stainless steel container.

Samples will be adequately preserved as directed by the lab and carefully packaged for shipping to Assaigai Laboratory of Albuquerque for analyses. Chain-of-custody records will accompany the sample from the time they are gathered until the analyses are completed at the laboratory. The lab has been informed of our request for "Rush" analyses and have scheduled the work prior to receiving the samples. They have committed to a five (5) working day turn-around-time. Assaigai will receive the samples on Thursday morning by 10:00 am to begin the analyses. We should expect results on or before Thursday, March 13th, 1997.

All sampling equipment will be wiped down on site and either decontaminated or properly disposed of.

Contract Environmental Services, Inc. appreciates this opportunity to submit this sampling procedure to Burlington Resources and looks forward to serving your firm on this and other projects in the near future.

Sincerely,



Shawn A. Adams
Contract Environmental Services, Inc.

O. Box 1980
obbs, NM 88241-1980
Office II - (505) 748-1283
1-S. First
tesia, NM 88210
Office III - (505) 334-6178
Rio Brazos Road
cc, NM 87410
Office IV - (505) 827-7131

Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated 8/87

Submit Origin
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Bonneville Fuels Corp.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Scott E Fed #25-14</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZKC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>S-25 T-27N R-11W 1190' FNL / 360' FWL</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Left over PRAC Fluid Left in bottom of TANK (UNUSED)

only 3 constituents

RECEIVED
MAR 13 1997

OIL CON. DIV.
ENCL. 2

RECEIVED
MAR 18 1997

Environmental Bureau
Oil Conservation Division

Estimated Volume 160 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael E. Tarovich TITLE: DISPOSAL MGR DATE: 3-13-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TAROVICH TELEPHONE NO. 334-6186

(This space for State Use)

APPROVED BY: Denny G. Kent TITLE: Geologist DATE: 3/14/97
APPROVED BY: Roger [Signature] TITLE: Bureau Chief DATE: 3/14/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

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 checked="" type="checkbox"/>	4. Generator <u>Bonneville Fuels Corp.</u> 5. Originating Site <u>Scott E Fed #25-14</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZtec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>5-25 T-27N R-11W 1190' ENL / 360' FWL</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Left over FRAC Fluid Left in bottom of TANK (UNUSED)

only 3 constituents

RECEIVED
MAR 13 1997

OIL CON. DIV.
DIST. 2

Estimated Volume 160 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael E. Talovich TITLE: DISPOSAL MGR DATE: 3-13-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 321-6186

(This space for State Use)

APPROVED BY: Denny G. Feint TITLE: Geologist DATE: 3/14/97

APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I Alan L. Merrill representative

for Bonneville Fuels Corporation

Suite 1800, 1660 Lincoln, Denver CO 80264

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

1190' FNL / 360' FWL
Originating Site: S-25 T-27N R-11W 1/4 1/4 County San Juan State NM

Physical Address if appropriate: Scott E. Fed #25-14

Source and description of waste: 3% KCL with 20 lb/gal guar gel
& breaker

Check the appropriate line(s):

- ☒ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☐ Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since _____

Signature Alan L. Merrill
Printed Name Alan L. Merrill
Title Operations Engineer
Date 3/12/97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

MATERIAL SAFETY DATA SHEET
HALLIBURTON ENERGY SERVICES
DUNCAN, OKLAHOMA 73536

DATE: 03-17-97
REVISED DATE 01-17-96

EMERGENCY TELEPHONE: 405/251-4687 OR 405/251-3569
AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: WG-19 GELLING AGENT - 50 LBS PART NUMBER: 516001070
KG QTY: 50 LB BAG APPLICATION: GELLING AGENT
SERVICE USED: STIMULATION

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT: + + + + +	PERCENT	TLV	PEL
----------------------	---------	-----	-----

BAR GUM	> 60 %	10 MG/M3	15 MG/M3
---------	--------	----------	----------

***** SECTION III - PHYSICAL DATA *****

PROPERTY	MEASUREMENT
----------	-------------

APPEARANCE	OFF WHITE SOLID, POWDER
ODOR	BEAN-LIKE
SPECIFIC GRAVITY (H2O=1)	1.300
BULK DENSITY	36.00 LB/CU.FT.
H	8.5 FOR 5% SOL
SOLUBILITY IN WATER AT	
50 DEG C. GMS/100ML H2O	FORMS GEL
BIODEGRADABILITY	READILY
PERCENT VOLATILES	N/A
VAPORATION RATE(BUTYL ACETATE=1)	N/A
VAPOR DENSITY	N/A
VAPOR PRESSURE (MMHG)	N/A
BOILING POINT(760 MMHG)	N/A
MELTING POINT	N/A
FREEZE POINT	N/A
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

EPA(704) RATING:

HEALTH 1	FLAMMABILITY 1	REACTIVITY 0	SPECIAL NONE
FLASH POINT	N/A		
IGNITION TEMPERATURE	430 F /	221 C	
FLAMMABLE LIMITS (OZ. PER CU. FT.)	LOWER .80	UPPER	N/D

***** EXTINGUISHING MEDIA:

USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES:

AVOID CREATING DUST CLOUDS WITH EXTINGUISHERS.
FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING
APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.

USUAL FIRE AND EXPLOSION HAZARDS:

INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE, CARBON
MONOXIDE AND NITROGEN OXIDES.
ORGANIC DUST IN THE PRESENCE OF A SOURCE OF IGNITION CARRIES A POTENTIAL
EXPLOSION HAZARD IF THE CONCENTRATION IN THE AIR IS TOO HIGH. GOOD

HOUSEKEEPING PROCEDURES ARE REQUIRED TO MINIMIZE THIS POTENTIAL HAZARD.

***** SECTION V - HEALTH HAZARD DATA *****

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN

ACCORDING TO : "NTP, IARC, OSHA, OR, ACGIH".

PRODUCT TOXICITY DATA: TOX ORL-RAT LD50:7060 MG/KG

TOX ORL-MUS LD50:8100 MG/KG

TOX ORL-RBT LD50:7000 MG/KG

TOX BOD5=268,300 PPM

TOX COD=1,500,000 PPM

PRODUCT TLV: 10 MG/M3 (N)

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY CAUSE EYE IRRITATION.

SKIN:

CONTACT MAY CAUSE SKIN IRRITATION.

INHALATION:

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

MAY BE IRRITATING.

INGESTION:

NO DATA AVAILABLE

CHRONIC EFFECTS:

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

OTHER SYMPTOMS AFFECTED:

A REVIEW OF AVAILABLE DATA DOES NOT IDENTIFY ANY CONDITIONS WORSENERD BY

EXPOSURE TO THIS PRODUCT.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF

IRRITATION PERSISTS, SEEK PROMPT MEDICAL ATTENTION.

SKIN:

PROMPTLY WASH SKIN WITH SOAP AND WATER.

INHALATION:

REMOVE TO FRESH AIR. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION,

INGESTION:

DO NOT INDUCE VOMITING! IN GENERAL, NO TREATMENT IS NECESSARY UNLESS LARGE

QUANTITIES ARE INGESTED. HOWEVER, MEDICAL ADVICE SHOULD BE OBTAINED.

***** SECTION VI - REACTIVITY DATA *****

STABILITY: STABLE

CONDITIONS TO AVOID:

NOT APPLICABLE.

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:

NITROGEN OXIDES, CARBON DIOXIDE AND/OR CARBON MONOXIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

***** SECTION VII - SPILL OR LEAK PROCEDURES *****

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
USE PROTECTIVE EQUIPMENT. SWEEP UP AND REMOVE. AVOID CREATING OR INHALING DUST.

WASTE DISPOSAL METHOD:

IF NOT CONTAMINATED, REUSE PRODUCT.

GET APPROVAL FROM LANDFILL OPERATOR AND TRANSPORT TO SANITARY LANDFILL.

***** SECTION VIII - SPECIAL PROTECTION INFORMATION *****

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

NOT NORMALLY NECESSARY.

TOXIC DUST/MIST RESPIRATOR.

SULFUR DIOXIDE RESPIRATOR.

PROTECTIVE GLOVES:

NORMAL WORK GLOVES.

EYE PROTECTION:

GOGGLES AND/OR FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT:

NORMAL WORK COVERALLS.

***** SECTION IX - SPECIAL PRECAUTIONS *****

PRECAUTIONARY LABELING WG-19 GELLING AGENT - 50 LBS

516.001070

WARNING!

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

IRRITATING TO THE EYES, SKIN AND RESPIRATORY SYSTEM.

AIRBORNE DUST MAY BE EXPLOSIVE!

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE AWAY FROM OXIDIZERS.

STORE IN DRY LOCATION TO PROTECT PRODUCT QUALITY. REQUIRES COVERED STORAGE.

AVOID CREATING OR INHALING DUST.

AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

CONTAINER DISPOSITION:

EMPTY CONTAINER COMPLETELY. TRANSPORT CONTAINER WITH ALL CLOSURES IN PLACE.

RETURN FOR REUSE OR DISPOSE IN A SANITARY LANDFILL BY FIRST OBTAINING

LANDFILL OPERATOR'S AUTHORIZATION.

***** SECTION X - TRANSPORTATION INFORMATION *****

DOT SHIPPING DESCRIPTION:

DOT RESTRICTED

***** SECTION XI - ENVIRONMENTAL EVALUATION *****

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: N PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y

CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX

EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)

N/A

EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)

PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)

CHEMICAL CONTAINS NO TOXIC INGREDIENTS

COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES CEPA NE EEC N/D ACOIN N/D NPR NE DRSH NE

EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA OF A
HAZARDOUS WASTE

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE
DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM
VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS
GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN
BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE
DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO
SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY
SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR
CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS
SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY
OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE
REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR
DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND
SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY
PROHIBITED. HEALTH, SAFETY AND ENVIRONMENT DEPARTMENT, HALLIBURTON ENERGY
SERVICES.

MATERIAL SAFETY DATA SHEET
 HALLIBURTON ENERGY SERVICES
 DUNCAN, OKLAHOMA 73536

DATE: 03-17-97

REVISED DATE 01-17-96

EMERGENCY TELEPHONE: 405/251-4689 OR 405/251-3569

AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: GBW-3 BREAKER PART NUMBER: 070152090
 PKG QTY: 50 BAGS @ 1 LB EA APPLICATION: BREAKER
 SERVICE USED: FRACTURING

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT	PERCENT	TLV	PEL
CARBOHYDRATE	60 %	10 MG/M3	15 MG/M3

***** SECTION III - PHYSICAL DATA *****

PROPERTY	MEASUREMENT
APPEARANCE	WHITE SOLID POWDER
ODOR	ODORLESS
SPECIFIC GRAVITY (H2O=1)	1.580
BULK DENSITY	50.00 LB/CU.FT.
PH	NOT DETERMINED
SOLUBILITY IN WATER AT 70 DEG C. GMS/100ML H2O	200
BIODEGRADABILITY	READILY
PERCENT VOLATILES	N/A
EVAPORATION RATE(BUTYL ACETATE=1)	N/A
VAPOR DENSITY	N/A
VAPOR PRESSURE (MMHG)	N/D
BOILING POINT(760 MMHG)	7320 F / 160 C
FLASH POINT	N/A
FREEZE POINT	N/A
SOLUBILITY IN SEAWATER	26 GM/100 ML
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

FPA(704) RATING:
 HEALTH 1 FLAMMABILITY 1 REACTIVITY 0 SPECIAL NONE
 FLASH POINT N/A
 AUTOIGNITION TEMPERATURE NO F / NO C
 FLAMMABLE LIMITS (OZ. PER CU. FT.) LOWER N/D UPPER N/D

***** EXTINGUISHING MEDIA:

USE MEDIA APPROPRIATE FOR SURROUNDING MATERIALS.

SPECIAL FIRE FIGHTING PROCEDURES:

AVOID CREATING DUST CLOUDS WITH EXTINGUISHERS.
 FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

ORGANIC DUST IN THE PRESENCE OF A SOURCE OF IGNITION CARRIES A POTENTIAL EXPLOSION HAZARD IF THE CONCENTRATION IN THE AIR IS TOO HIGH. GOOD HOUSEKEEPING PROCEDURES ARE REQUIRED TO MINIMIZE THIS POTENTIAL HAZARD.

***** SECTION V - HEALTH HAZARD DATA *****

CALIFORNIA PROPOSITION 65:

PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:

PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN

ACCORDING TO : "NTP, IARC, OSHA, OR, ACIGH".

PRODUCT TOXICITY DATA: TOX ORL-RAT LD50:29700 MG/KG

AQU TLM26: >3300 PPM (BROWN SHRIMP)

PRODUCT TLV: 10 MG/M3 NUISANCE

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

MAY BE IRRITATING.

SKIN:

FREQUENT OR PROLONGED CONTACT WILL DRY AND DEFAT THE SKIN, POSSIBLY LEADING TO IRRITATION AND DERMATITIS. REPEATED CONTACT MAY SENSITIZE THE SKIN.

INHALATION:

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

MAY BE IRRITATING.

TREAT AS NUISANCE DUST.

INGESTION:

NO DATA AVAILABLE

CHRONIC EFFECTS:

MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.

OTHER SYMPTOMS AFFECTED:

A REVIEW OF AVAILABLE DATA DOES NOT IDENTIFY ANY CONDITIONS WORSENER BY EXPOSURE TO THIS PRODUCT.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEEK PROMPT MEDICAL ATTENTION.

SKIN:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. IF IRRITATION PERSISTS, SEEK PROMPT MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE.

INHALATION:

REMOVE TO FRESH AIR. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION,

INGESTION:

DO NOT INDUCE VOMITING! IN GENERAL, NO TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES ARE INGESTED. HOWEVER, MEDICAL ADVICE SHOULD BE OBTAINED.

***** SECTION VI - REACTIVITY DATA *****

STABILITY: STABLE

CONDITIONS TO AVOID:

NOT APPLICABLE.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE AND/OR CARBON DIOXIDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

***** SECTION VII - SPILL OR LEAK PROCEDURES *****

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

USE PROTECTIVE EQUIPMENT. SWEEP UP AND REMOVE. AVOID CREATING OR INHALING DUST.

WASTE DISPOSAL METHOD:
IF NOT CONTAMINATED, REUSE PRODUCT.
GET APPROVAL FROM LANDFILL OPERATOR AND TRANSPORT TO SANITARY LANDFILL.

***** SECTION VIII - SPECIAL PROTECTION INFORMATION *****

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

NOT NORMALLY NECESSARY.
TOXIC DUST/MIST RESPIRATOR.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION.

PROTECTIVE GLOVES:

NORMAL WORK GLOVES.

EYE PROTECTION:

SAFETY GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE EQUIPMENT:

NORMAL WORK COVERALLS.

***** SECTION IX - SPECIAL PRECAUTIONS *****

PRECAUTIONARY LABELING CBW-3 BREAKER

070.152090

CAUTION!

TREAT AS NUISANCE DUST.

AIRBORNE DUST MAY BE EXPLOSIVE!

FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.

OTHER HANDLING AND STORAGE CONDITIONS:

STORE IN DRY LOCATION TO PROTECT PRODUCT QUALITY. REQUIRES COVERED STORAGE.

AVOID CREATING OR INHALING DUST.

CONTAINER DISPOSITION:

EMPTY CONTAINER COMPLETELY. TRANSPORT CONTAINER WITH ALL CLOSURES IN PLACE.

RETURN FOR REUSE OR DISPOSE IN A SANITARY LANDFILL BY FIRST OBTAINING

LANDFILL OPERATOR'S AUTHORIZATION.

SPECIAL PRECAUTIONS:

PRODUCT HAS A SHELF LIFE OF 12 MONTHS.

***** SECTION X - TRANSPORTATION INFORMATION *****

NOT SHIPPING DESCRIPTION:

NOT RESTRICTED

***** SECTION XI - ENVIRONMENTAL EVALUATION *****

PA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: N PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): N

CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX

EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)

N/A

EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES)

PRODUCT CONTAINS NO EXTREMELY HAZARDOUS COMPONENTS

EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)

CHEMICAL CONTAINS NO TOXIC INGREDIENTS

COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES CEPA NE EEC N/D ACOIN N/D NPR NE DRSM NE

EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA OF A
HAZARDOUS WASTE

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY PROHIBITED. HEALTH, SAFETY AND ENVIRONMENT DEPARTMENT, HALLIBURTON ENERGY SERVICES.

MATERIAL SAFETY DATA SHEET
HALLIBURTON ENERGY SERVICES
DUNCAN, OKLAHOMA 73536

DATE: 03-17-97
REVISED DATE 06-12-96

EMERGENCY TELEPHONE: 405/251-4689 OR 405/251-3569
AFTER HOURS: 405/251-3760

***** SECTION I - PRODUCT DESCRIPTION *****

CHEMICAL CODE: BE-6 MICROBIOCIDICIDE PART NUMBER: 516007710
KG QTY: 48 LB FIBER DRUM APPLICATION: MICROBIOCIDICIDE
SERVICE USED: FRACTURING

***** SECTION II - COMPONENT INFORMATION *****

COMPONENT	PERCENT	TLV	PEL
1-BROMO-2-NITRO-1, 3-PROPANEDIOL	> 60 %	NOT EST	NOT EST

***** SECTION III - PHYSICAL DATA *****

PROPERTY	MEASUREMENT
----------	-------------

APPEARANCE	WHITE SOLID POWDER
COLOR	N/D
SPECIFIC GRAVITY (H2O=1)	N/D
BULK DENSITY	N/D LB/CU.FT.
PH	4 FOR 20% SOLUTION
SOLUBILITY IN WATER AT 60 DEG C. GMS/100ML H2O	SOLUBLE
BIODEGRADABILITY	N/D
PERCENT VOLATILES	NIL
EVAPORATION RATE(BUTYL ACETATE=1)	N/A
VAPOR DENSITY	>1
VAPOR PRESSURE (MMHG)	N/D
BOILING POINT(760 MMHG)	N/D
SMELT POINT	N/D
FREEZE POINT	N/D
SOLUBILITY IN SEAWATER	NOT EVALUATED
PARTITION COEF (OCTANOL IN WATER)	NOT EVALUATED

***** SECTION IV - FIRE AND EXPLOSION DATA *****

OSHA(704) RATING:
HEALTH 2 FLAMMABILITY 0 REACTIVITY 0 SPECIAL NONE
FLASH POINT > 200 F / > 93 C FLASH MTHD SFCC
AUTOIGNITION TEMPERATURE ND F / ND C
FLAMMABLE LIMITS (OZ. PER CU. FT.) LOWER N/D UPPER N/D

EXTINGUISHING MEDIA:

USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES:

FULL PROTECTIVE CLOTHING AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING
APPARATUS REQUIRED FOR FIRE FIGHTING PERSONNEL.

USUAL FIRE AND EXPLOSION HAZARDS:

IF PRODUCT IS HEATED ABOVE 140° C, THE SOLID DECOMPOSES LIBERATING HEAT,
TOXIC HYDROGEN BROMIDE FUMES, AND OXIDES OF NITROGEN. THE PRODUCT SWELLS UP
INTO A TARRY MASS WHICH BURNS READILY.

***** SECTION V - HEALTH HAZARD DATA *****

CALIFORNIA PROPOSITION 65:
PRODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.

CARCINOGENIC DETERMINATION:
PRODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
ACCORDING TO : "NTP, IARC, OSHA, OR, AICGH".

PRODUCT TOXICITY DATA: TOX ORL-RAT LD50: 180-400 MG/KG
TOX IHL-RAT LC50: 5 MG/L
TOX SKN-RBT LD50: > 1600 MG/KG

PRODUCT TLV: NOT ESTABLISHED

----- EFFECTS OF EXPOSURE -----

ROUTES OF EXPOSURE:

EYE OR SKIN CONTACT, INHALATION.

EYE:

CONTACT WILL PRODUCE SEVERE IRRITATION OR BURNS AND, IF NOT IMMEDIATELY
REMOVED, MAY LEAD TO PERMANENT EYE DAMAGE.

SKIN:

PROLONGED OR REPEATED CONTACT MAY CAUSE SEVERE IRRITATION IF NOT PROMPTLY
REMOVED.

INHALATION:

THIS PRODUCT IS EXPECTED TO BE A LOW INHALATION HAZARD.

INGESTION:

LARGE DOSES CAUSES ABDOMINAL PAIN, NAUSEA, VOMITING AND DIARRHEA.

CHRONIC EFFECTS:

NO SPECIFIC INFORMATION IS AVAILABLE ON THE CHRONIC EFFECTS OF EXPOSURE.

OTHER SYMPTOMS AFFECTED:

BECAUSE OF ITS IRRITATING PROPERTIES, THIS MATERIAL MAY AGGRAVATE AN
EXISTING DERMATITIS.

----- EMERGENCY AND FIRST AID PROCEDURES -----

EYE:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK
PROMPT MEDICAL ATTENTION.

SKIN:

IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE
REMOVING CONTAMINATED CLOTHING AND SHOES. IF IRRITATION PERSISTS, SEEK
PROMPT MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE.

INHALATION:

REMOVE TO FRESH AIR. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION,

INGESTION:

DO NOT INDUCE VOMITING! GIVE UP TO TWO (2) QUARTS OF WATER TO DILUTE.
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEEK MEDICAL
ATTENTION.

NOTE TO PHYSICIAN:

PROBABLE MUCOSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE.

***** SECTION VI - REACTIVITY DATA *****

STABILITY: STABLE

CONDITIONS TO AVOID:

STABLE AT NORMAL AMBIENT TEMPERATURES. AVOID STORAGE AT HIGH TEMPERATURES.
DECOMPOSITION OCCURS AT MELTING POINT OF 130° C. ALKALINE PH WILL LIBERATE
FORMALDEHYDE.

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDIZERS AND STRONG ALKALIES.

HAZARDOUS DECOMPOSITION PRODUCTS:

OXIDES OF NITROGEN, BROMINE AND FORMALDEHYDE.

HAZARD POLYMERIZATION: WON'T OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE.

***** SECTION VII - SPILL OR LEAK PROCEDURES *****

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

SWEEP UP MATERIAL AND PLACE IN APPROPRIATE DISPOSAL CONTAINER. USE SWEEPING COMPOUND OR OTHER CLEANING AIDS TO PICK-UP RESIDUES. WASH DOWN AREA THOROUGHLY WITH WATER. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT AS NECESSARY.

WASTE DISPOSAL METHOD:

SECURE CONTAINER AND TAKE TO AN APPROVED WASTE DISPOSAL SITE. DISPOSE OF IN ACCORDANCE WITH APPLICABLE WASTE MANAGEMENT REGULATIONS.

***** SECTION VIII - SPECIAL PROTECTION INFORMATION *****

RESPIRATORY PROTECTION (USE NIOSH/MSHA APPROVED EQUIPMENT):

NOT NORMALLY NECESSARY.
TOXIC DUST/MIST RESPIRATOR.

VENTILATION:

USE ONLY WITH ADEQUATE VENTILATION.

PROTECTIVE GLOVES:

IMPERVIOUS RUBBER GLOVES.

EYE PROTECTION:

GOGGLES AND/OR FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT:

NORMAL WORK COVERALLS.

***** SECTION IX - SPECIAL PRECAUTIONS *****

PRECAUTIONARY LABELING BE-6 MICROBIOCIDE

516.007710

WARNING!

MAY CAUSE SEVERE EYE AND SKIN IRRITATION.
FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.
EPA REGISTRATION NUMBER 48301-27-5009
EPA EST. NUMBER 5009-MO-1;CA-1;TX-1

OTHER HANDLING AND STORAGE CONDITIONS:

STORE IN DRY LOCATION TO PROTECT PRODUCT QUALITY. REQUIRES COVERED STORAGE.
AVOID CREATING OR INHALING DUST.
AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

SPECIAL PRECAUTIONS:

PRODUCT HAS A SHELF LIFE OF 24 MONTHS.

***** SECTION X - TRANSPORTATION INFORMATION *****

DOT SHIPPING DESCRIPTION:

TOXIC SOLID, ORGANIC, N.O.S. - 6.1 - UN2811 - III
(CONTAINS 2-BROMO-2-NITRO-1,3-PROPANEDIOL)

***** SECTION XI - ENVIRONMENTAL EVALUATION *****

EPA SUPERFUND(SARA) TITLE III - HAZARD CLASSIFICATION & ASSOCIATED INFORMATION

FIRE: N PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y
CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX

EPA - CERCLA/SUPERFUND, 40 CFR 302 (REPORTABLE SPILL QUANTITY)
NOT EVALUATED

EPA - SARA TITLE III, CFR 355 (EXTREMELY HAZARDOUS SUBSTANCES) NOT EVALUATED

EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)
CHEMICAL CONTAINS NO TOXIC INGREDIENTS

COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

TSCA YES CEPA NE EEC N/D ACOIN N NPR NE DRSM NE

H. EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261

IF PRODUCT BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA OF A
HAZARDOUS WASTE

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE
DATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM
VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS
GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN
BE RELIED UPON. HALLIBURTON HAS NOT ATTEMPTED TO CONCEAL IN ANY WAY THE
DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO
SUCH. FURTHER, AS HALLIBURTON CANNOT ANTICIPATE NOR CONTROL THE MANY
SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION MAY BE USED BY OUR
CUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS
SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY
OF EACH USER OF THE LISTED PRODUCT TO DETERMINE AND COMPLY WITH THE
REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE OR
DISPOSAL. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF HEALTH AND
SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY
PROHIBITED. HEALTH, SAFETY AND ENVIRONMENT DEPARTMENT, HALLIBURTON ENERGY
SERVICES.

P.O. Box 1980
Albuquerque, NM 88241-1980
District II - (505) 748-1283
11 S. First
Albuquerque, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Albuquerque, NM 87410
District IV - (505) 827-7131

Energy Minerals and Natural Resources Department
Oil Conservation Division

2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Origin C-1
Originated 8/8

Submit Origin
Plus 1 Cc
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 checked="" type="checkbox"/>	4. Generator <u>BIGA Well See.</u> 5. Originating Site <u>Washsum P</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>345 CR 3500, AZEE, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
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:

EQUIPMENT WASH DOWN WATER

RECEIVED
MAR 11 1997

OIL CON. DIV.
DIST. 3

RECEIVED
MAR - 7 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 100 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Thelovich TITLE: Disposal Mgr DATE: 3-7-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL THELOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Furt TITLE: Geologist DATE: 3/7/97
APPROVED BY: Tyler V. ... TITLE: Branch Chief DATE: 3/10/97

District I - (505) 393-6161
P.O. Box 1980
Tobbs, NM 88241-1980
District II - (505) 748-1283
111 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

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 checked="" type="checkbox"/>	4. Generator <u>BIGA WELL SER.</u> 5. Originating Site <u>WASH SUM P</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO.</u>
3. Address of Facility Operator <u>345 CR 3500, AZEE, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
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. <u>B.</u> 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:

EQUIPMENT WASH DOWN WATER

RECEIVED
MAR - 7 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 100 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 3-7-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fount TITLE: Geologist DATE: 3/7/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I Ron Fellabaum representative

for Big A Well Service

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt
X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S- T- R- 1/4 1/4 County State

Physical Address if appropriate: 708 S. TUCKER AVE. FARMINGTON, N.M.

Source and description of waste: STEAM CLEANING WATER Sump.

CITY WATER, MIXED WITH SOAP.

Check the appropriate line(s):

- MSDS Information sheet
X RCRA TCLP Analysis
X RCRA Metals Analysis
 Corrosivity, Ignitability, Reactivity
 Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since 1-1-97

Signature Ron Fellabaum

Printed Name RON FELLABAUM

Title PRESIDENT - C.O.O.

Date 3-7-97

Destination: SUNCO DISPOSAL, 345 CR 3500, AZTEC, SAN JUAN CO. N M



General Water Quality Sunco Disposal

Project ID: Big A Well Service
Sample ID: Big A Well Service
Laboratory ID: 6077
Sample Matrix: Water

Date Reported: 12/13/96
Date Sampled: 12/31/96
Time Sampled: 15:00
Date Received: 12/31/96

Parameter		Analytical Result	Units
General	Lab pH.....	6.8	s.u.
	Lab Conductivity @ 25° C.....	1,080	µmhos/cm
	Total Dissolved Solids @ 180°C.....	625	mg/L
	Total Dissolved Solids (Calc).....	616	mg/L
Anions	Total Alkalinity as CaCO ₃	129	mg/L
	Bicarbonate Alkalinity as CaCO ₃	129	mg/L
	Carbonate Alkalinity as CaCO ₃	NA	mg/L
	Hydroxide Alkalinity as CaCO ₃	NA	mg/L
	Chloride.....	112	mg/L
	Sulfate.....	202	mg/L
	Nitrate + Nitrite - N.....	NA	mg/L
	Nitrate - N.....	NA	mg/L
Cations	Nitrite - N.....	NA	mg/L
	Total Hardness as CaCO ₃	179	mg/L
	Calcium.....	55.8	mg/L
	Magnesium.....	9.67	mg/L
	Potassium.....	19	mg/L
Data Validation	Sodium.....	140	mg/L
			<u>Acceptance Level</u>
	Cation/Anion Difference.....	0.96	+/- 2 %
	TDS (180):TDS (calculated).....	1.0	1.0 - 1.2

Reference U.S.E.P.A. 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1983.
Standard Methods For The Examination Of Water And Wastewater, 18th ed., 1992.

Review



TCLP Metals Analysis

Sunco Disposal

Project ID: Big A Well Service
Sample ID: Big A Well Service
Laboratory ID: 6077
Sample Matrix: Water

Date Reported: 03/04/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date TCLP: 01/03/97

Parameter	Analytical Result (mg/L)	Regulatory Limit (mg/L)
-----------	-----------------------------	----------------------------

Trace Metals

Arsenic.....	0.006	5.0
Barium.....	0.36	100
Cadmium.....	0.019	1.0
Chromium.....	0.08	5.0
Lead.....	0.42	5.0
Mercury.....	< 0.001	0.2
Selenium.....	< 0.05	1.0
Silver.....	< 0.05	5.0

General	Percent Solids.....	0	%
---------	---------------------	---	---

Reference: Method 1311: Toxicity Characteristic Leaching Procedure; Method 7000: Methods for Determination of Metals; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

Review



PURGEABLE AROMATICS

Sunco Disposal

Project ID: Big A Well Service
Sample ID: Big A Well Service
Lab ID: 6077
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Report Date: 01/08/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/07/97

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	5.00
Toluene	14.4	5.00
Ethylbenzene	26.9	5.00
m,p-Xylenes	86.9	10.0
o-Xylene	33.8	5.00


Total BTEX	164
-------------------	------------

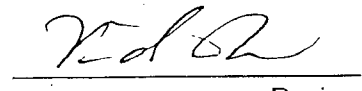
ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	94	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,
Oct. 1984.

Comments:


Analyst


Review



Chlorinated Volatile Organic Compounds
EPA Method 8010

Sunco Disposal

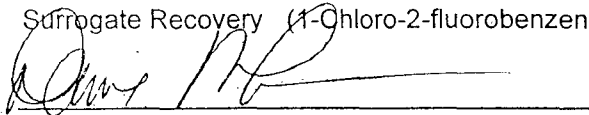
Project ID: Big A Well Service
Sample ID: Big A Well Service
Lab ID: 6077
Sample Matrix: Water
Preservative: Cool, HCl

Report Date: 03/04/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/10/97

Analyte	Concentration (µg/L)	Detection Limit (µg/L)
Bromodichloromethane	0.44	0.40
Bromoform	ND	0.40
Bromomethane	ND	0.40
Carbon Tetrachloride	ND	0.40
Chlorobenzene	ND	0.40
Chloroethane	0.87	0.40
2-Chloroethyl vinyl ether	ND	0.40
Chloroform	ND	0.40
Chloromethane	ND	0.40
Dibromochloromethane	ND	0.40
1,2-Dichlorobenzene	ND	0.40
1,3-Dichlorobenzene	ND	0.40
1,4-Dichlorobenzene	ND	0.40
Dichlorodifluoromethane	ND	0.40
1,1-Dichloroethane	ND	0.40
1,2-Dichloroethane	ND	0.20
1,1-Dichloroethene	ND	0.40
trans-1,2-Dichloroethene	ND	0.40
Dichloromethane	ND	0.40
1,2-Dichloropropane	ND	0.40
cis-1,3-Dichloropropene	ND	0.20
trans-1,3-Dichloropropene	ND	0.20
Tetrachloroethene	0.44	0.20
1,1,2,2-Tetrachloroethane	ND	0.50
1,1,1-Trichloroethane	ND	0.20
1,1,2-Trichloroethane	ND	0.20
Trichloroethene	ND	0.20
Trichlorofluoromethane	ND	0.40
Vinyl Chloride	ND	0.40

Surrogate Recovery (1-Chloro-2-fluorobenzene): 89%

70% - 130% (QC Limits)


Review

Purgeable Aromatics

Duplicate Analysis

Lab ID: 6077Dup
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Report Date: 01/08/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/07/97

Target Analyte	Original Conc. (ug/L)	Duplicate Conc. (ug/L)	Acceptance Range (ug/L)
Benzene	ND	ND	NA
Toluene	14.4	14.5	10.9 - 18.1
Ethylbenzene	26.9	30.9	18.2 - 39.7
m,p-Xylenes	86.9	96.9	NE
o-Xylene	33.8	36.9	NE

ND - Analyte not detected at the stated detection limit.


NA - Not applicable or not calculated.


NE - Duplicate acceptance range not established by the EPA.

	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
Quality Control:	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	95	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:


Analyst


Review

Purgeable Aromatics

Matrix Spike Analysis

Lab ID: 6077Spk
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Report Date: 01/08/97
Date Sampled: 12/31/96
Date Received: 12/31/96
Date Analyzed: 01/07/97

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	100	ND	96.8	94%	39 - 150
Toluene	100	14.4	109	94%	46 - 148
Ethylbenzene	100	26.9	131	104%	32 - 160
m,p-Xylenes	200	86.9	288	101%	NE
o-Xylene	100	33.8	132	98%	NE

ND - Analyte not detected at the stated detection limit.

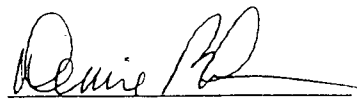
NA - Not applicable or not calculated.

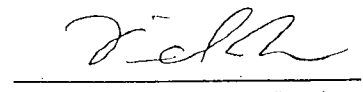
NE - Spike acceptance range not established by the EPA.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	105	88 - 110%
	Bromofluorobenzene	102	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:


Analyst


Review

PURGEABLE AROMATICS

Quality Control Report

Method Blank Analysis

Sample hydrocarbon: Water
Lab ID: MB35710

Report Date: 01/08/97
Date Analyzed: 10/07/97


Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	1.00
o-Xylene	ND	0.50


ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	101	88 - 110%
	Bromofluorobenzene	90	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:


Analyst


Review


Quality Control Report

Sunco Disposal

Date Reported: 12/09/96

Target Analyte	QC Sample ID	Concentration (µg/L)	Certified Concentration (µg/L)	Acceptance Limits
Arsenic	ERA 9969	87.3	82.4	61.8 - 97.2
Barium	ERA 9969	481	471	386 - 556
Cadmium	ERA 9969	63.9	64.7	53.1 - 76.3
Chromium	ERA 9969	168	147	121 - 173
Lead	ERA 9969	448	476	390 - 562
Mercury	WP34C2	1.92	1.76	1.26 - 2.30
Selenium	ERA 9969	100	106	79.5 - 125
Silver	ERA 9969	125	132	108 - 156

Reference: Method 1311: Toxicity Characteristic Leaching Procedure; Method 7000: Methods for Determination of Metals; Test Methods for Evaluating Solid Wates, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.



Review

General Water Quality Quality Control Report


Sunco Disposal

Report Date: 12/13/96

Parameter	Analytical Result	Certified Value	Acceptance Range	Units
Laboratory pH	9.17	9.13	8.93 - 9.33	s.u.
Conductivity	746	740	629 - 851	µmhos/cm
Total Dissolved Solids	650	642	559 - 725	mg/L
Total Alkalinity	158	159	142 - 176	mg/L
Chloride	65.0	66.3	61.7 - 70.7	mg/L
Sulfate	74.1	77.5	66.7 - 88.4	mg/L
Total Hardness	209	209	179 - 237	mg/L
Calcium	59.8	60.3	51.9 - 68.7	mg/L
Magnesium	NA	NA	NA	mg/L
Potassium	72	73	62.3 - 84.3	mg/L
Sodium	110	116	98.6 - 133	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes",
1983. Standard Methods For The Examination Of Water And Wastewater, 18th ed.,
1992.

Comments:


Review

District I - (505) 393-6161
O. Box 1980
Tobbs, NM 88241-1980
District II - (505) 748-1283
11 S. First
Tresia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Tuc, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-1
Originated 8/8

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 <u>Williams Field Serv.</u> 5. Originating Site <u>Milagro Plant</u> 6. Transporter <u>SUNCO TRUCKING</u> 8. State <u>N.M.</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	
3. Address of Facility Operator <u>345 CR 3500, AZTEC, SAN JUAN CO</u>	
7. Location of Material (Street Address or ULSTR)	
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:

CAUSTIC RINSE FROM PROCESS VESSELS, MIXED WITH CLEANING CHEMICALS

RECEIVED
FEB 14 1997

OIL CON. DIV.
DIST. 3

RECEIVED
FEB 11 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 2000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 2-11-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Dennis G. Faint TITLE: Geologist DATE: 2/11/97
RA APPROVED BY: Peter V. [Signature] TITLE: Petroleum
APPROVED BY: Peter V. [Signature] TITLE: ENGINEERING SPEC. DATE: 2/13/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Williams Field Serv.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>MILAGRO PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>345 CR 3500, AZTEC SAN JUAN CO</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
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:

CAUSTIC RINSE FROM PROCESS VESSELS, MIXED WITH CLEANING CHEMICALS

RECEIVED
FEB 11 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 2000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 2-11-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Zent TITLE: Geologist DATE: 2/11/97
APPROVED BY: _____ TITLE: _____ DATE: _____

P.O. Box 58900 Salt Lake City, Utah 84158-0900

January 30, 1997

Mr. Patricio Sanchez
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

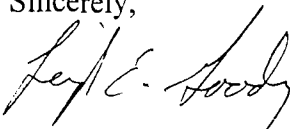
RE: Milagro Plant Wastewater GW-60

Dear Mr. Sanchez:

Enclosed, please find the analytical results of wastewater generated at Williams Field Services Company's Milagro Plant located in Bloomfield, New Mexico. The process generating the waste is the rinse out of process vessels with a caustic solution which is then neutralized. The chemicals used in the process are sodium hydroxide/caustic soda, hydrochloric acid, trisodium phosphate, and sodium metasilicate. The MSDS' are enclosed for your review.

WFS requests approval to dispose of approximately 2,000 gallons of this non-hazardous waste streams at Sunco's Class I disposal well. If you have any questions or require additional information, please do not hesitate to contact me at (801) 584-6543.

Sincerely,

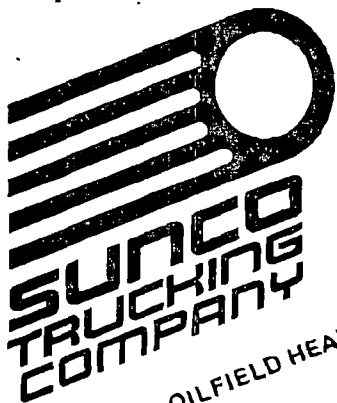


Leigh E. Gooding

enclosure

cc: Hal Stone, Sunco
Denny Foust. NMOCD





WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

" CERTIFICATE OF WASTE STATUS "

Originating Site: S- 12T-29R-11/4 1/4 County San Juan State NM
Physical Address if appropriate: 192 County Rd 4900 Bloomfield, NM 87413

Source and description of waste:

Amine Treatment Train Wash - A caustic wash which is used to wash out
process piping and vessels involved in the amine treatment train.
The wash is neutralized prior to disposal.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Leigh E. Gooding representative
for Williams Field Services

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is Exempt
X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

- ☒ MSDS Information sheet
☐ RCRA TCLP Analysis
☒ RCRA Metals Analysis
☒ Corrosivity, Ignitability, Reactivity
☒ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 12/96

Signature Leigh E. Gooding
Printed Name Leigh E. Gooding
Title Senior Environmental Specialist
Date 2/6/97

Inter-Mountain Laboratories, Inc.

Client: Williams Field Service
Project: Milagro Plant
Sample ID: Train 5 Amine Wash
Laboratory ID: 0397W00094
Sample Matrix: Water
Condition: Cool/Intact

2506 W. Main Street
Farmington, New Mexico 87401

Date Reported: 01/28/97
Date Sampled: 01/21/97
Time Sampled: 1:30 PM
Date Received: 01/21/97

Parameter	Analytical Result	Units	Units
-----------	-------------------	-------	-------

Lab pH (Corrosivity)	10.3	s.u.	
Flash Point (Ignitability).....	>140	°F	
Reactivity.....			
Total Cyanide.....	0.01	mg/L	
Sulfide.....	321	mg/L	

Trace Metals (Total)

Arsenic.....	<0.005	mg/L
Barium.....	0.01	mg/L
Cadmium.....	<0.001	mg/L
Chromium.....	0.16	mg/L
Lead.....	0.006	mg/L
Mercury.....	<0.001	mg/L
Selenium.....	<0.005	mg/L
Silver.....	<0.01	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by LM

Reviewed by JB

Effective Date: 5-25-94	Rev. No.: B	Page(s): 4	Doc. No.: COC-MSD40
CHEM ONE CORPORATION HOUSTON, TEXAS 77041-5308 PHONE: 713-896-9966 FAX: 713-896-7540			
Title: Material Safety Data Sheet SODIUM METASILICATE, ANHYDROUS		Prepared by: Clare Welker Approved by: Clare Welker	

MATERIAL SAFETY DATA SHEET

SODIUM METASILICATE, ANHYDROUS

EMERGENCY CONTACT: CHEMTREC 1-800-424-9300 NOTE: EMERGENCY TELEPHONE NUMBERS ARE TO BE USED ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS. ALL NON-EMERGENCY QUESTIONS SHOULD BE DIRECTED TO CUSTOMER SERVICE.

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: SODIUM METASILICATE, ANHYDROUS
 COMMON SYNONYMS: SILICIC ACID DISODIUM SALT; SMSA, SPECIAL 25; METSO BEADS 2048; ANHYDROUS METASILICATE
 CHEMICAL FAMILY: SILICON COMPOUNDS
 FORMULA: Na_2SiO_3
 FORMULA WT.: 284.20
 CAS NO.: 6834-92-0
 NIOSH/RTECS NO.: VV9275000

PRECAUTIONARY LABELING

HEALTH - 1 SLIGHT
 FLAMMABILITY - 0 NONE
 REACTIVITY - 0 NONE
 CONTACT - 2 MODERATE

LABORATORY PROTECTIVE EQUIPMENT: GOGGLES; LAB COAT

U.S. PRECAUTIONARY LABELING: WARNING; CAUSES IRRITATION. AVOID CONTACT WITH EYES, SKIN, CLOTHING. AVOID BREATHING DUST. KEEP IN TIGHTLY CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

INTERNATIONAL LABELING: AVOID CONTACT WITH EYES. AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER. KEEP CONTAINER TIGHTLY CLOSED.

SECTION II - COMPONENTS

COMPONENT	CAS NO.	WEIGHT %	OSHA/PEL	ACGIH/TLV
SODIUM METASILICATE, ANHYDROUS	6834-92-0	90-100	N/E	N/E

SECTION III - PHYSICAL DATA

BOILING POINT: N/A VAPOR PRESSURE (MMHG): N/A
MELTING POINT: N/A VAPOR DENSITY (AIR= 1): N/A
SPECIFIC GRAVITY: N/A (H2O= 1) EVAPORATION RATE: N/A
SOLUBILITY(H2O): APPRECIABLE (> 10%) % VOLATILES BY VOLUME: 0 (21 C)
PH: N/A
ODOR THRESHOLD (P.P.M.): N/A PHYSICAL STATE: SOLID
COEFFICIENT WATER/OIL DISTRIBUTION: N/A
APPEARANCE & ODOR: WHITE PLATELETS. ODORLESS.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (CLOSED CUP): N/A
AUTOIGNITION TEMPERATURE: N/A
FLAMMABLE LIMITS: UPPER - N/A LOWER - N/A

FIRE EXTINGUISHING MEDIA: USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE-FIGHTING PROCEDURES: NONE IDENTIFIED.

UNUSUAL FIRE & EXPLOSION HAZARDS: NONE IDENTIFIED.

TOXIC GASES PRODUCED: NONE IDENTIFIED

EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT: NONE IDENTIFIED.

EXPLOSION DATA-SENSITIVITY TO STATIC DISCHARGE: NONE IDENTIFIED.

SODMETS: PAGE 1 OF 3

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV/TWA): NOT ESTABLISHED
SHORT-TERM EXPOSURE LIMIT (STEL): NOT ESTABLISHED
PERMISSIBLE EXPOSURE LIMIT (PEL): NOT ESTABLISHED

TOXICITY OF COMPONENTS:

ORAL RAT LD50 FOR SODIUM META-SILICATE, NONAHYDRATE 1153 MG/KG

ORAL MOUSE LD50 FOR SODIUM META-SILICATE, NONAHYDRATE 770
MG/KG

CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO

CARCINOGENICITY: NONE IDENTIFIED.

REPRODUCTIVE EFFECTS: NONE IDENTIFIED.

EFFECTS OF OVEREXPOSURE:

INHALATION: IRRITATION OF UPPER RESPIRATORY TRACT

SKIN CONTACT: SEVERE IRRITATION OR BURNS

EYE CONTACT: SEVERE IRRITATION OR BURNS

SKIN ABSORPTION: NONE IDENTIFIED

INGESTION: NAUSEA, VOMITING, GASTROINTESTINAL IRRITATION, BURNS TO

MOUTH AND THROAT

CHRONIC EFFECTS: NONE IDENTIFIED

TARGET ORGANS: SKIN, EYES

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE IDENTIFIED

PRIMARY ROUTES OF ENTRY: EYE CONTACT, SKIN CONTACT, INHALATION, INGESTION

EMERGENCY AND FIRST AID PROCEDURES:

INGESTION: CALL A PHYSICIAN. IF SWALLOWED, DO NOT INDUCE VOMITING. IF CONSCIOUS, GIVE WATER, MILK, OR MILK OF MAGNESIA.

INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

SKIN CONTACT: IN CASE OF CONTACT, FLUSH SKIN WITH WATER.

EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.

SARA/TITLE III HAZARD CATEGORIES AND LISTS:

ACUTE: YES CHRONIC: YES FLAMMABILITY: NO PRESSURE: NO REACTIVITY: NO

EXTREMELY HAZARDOUS SUBSTANCE: NO

CERCLA HAZARDOUS SUBSTANCE: NO

SARA 313 TOXIC CHEMICALS: NO

TSCA INVENTORY: YES

SECTION VI - REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: NONE DOCUMENTED

INCOMPATIBLES: FLUORINE

DECOMPOSITION PRODUCTS: NONE IDENTIFIED

SECTION VII - SPILL & DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE: WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. WITH CLEAN SHOVEL, CAREFULLY PLACE MATERIAL INTO CLEAN, DRY CONTAINER AND COVER; REMOVE FROM AREA. FLUSH SPILL AREA WITH WATER.

DISPOSAL PROCEDURE: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

VENTILATION: USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION TO KEEP FUME OR DUST LEVELS AS LOW AS POSSIBLE.

RESPIRATORY PROTECTION: NONE REQUIRED WHERE ADEQUATE VENTILATION CONDITIONS EXIST. IF AIRBORNE CONCENTRATION IS HIGH, USE AN APPROPRIATE RESPIRATOR OR DUST MASK.

EYE/SKIN PROTECTION: SAFETY GOGGLES, UNIFORM, PROPER GLOVES ARE RECOMMENDED.

SECTION IX - STORAGE AND HANDLING PRECAUTIONS

STORAGE REQUIREMENTS: KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE AREA.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.):

PROPER SHIPPING NAME: CHEMICALS, N.O.I. (SODIUM METASILICATE, NOT REGULATED)

INTERNATIONAL (I.M.O.):

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

MARINE POLLUTANTS: NO

U.S. CUSTOMS HARMONIZATION NUMBER: 28391100000

DISCLAIMER:

WE BELIEVE THE TRANSPORTATION DATA AND REFERENCES CONTAINED HEREIN TO BE FACTUAL AND THE OPINION OF QUALIFIED EXPERTS. THE DATA IS MEANT AS A GUIDE TO THE OVERALL CLASSIFICATION OF THE PRODUCT AND IS NOT PACKAGE SIZE SPECIFIC. NOR SHOULD IT BE TAKEN AS A WARRANTY OR REPRESENTATION FOR WHICH THE COMPANY ASSUMES LEGAL RESPONSIBILITY. THE INFORMATION IS OFFERED SOLELY FOR YOUR CONSIDERATION, INVESTIGATION, AND VERIFICATION. ANY USE OF THE INFORMATION MUST BE DETERMINED BY THE USER TO BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS. SEE SHIPPER REQUIREMENTS 49CFR 172.3 AND EMPLOYEE TRAINING 49CFR 173.1. THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET WAS PREPARED FROM INFORMATION RETRIEVED ON THE CHEMICAL INFORMATION SYSTEM AS PROVIDED BY CIS, INC. AND MEETS THE REQUIREMENTS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACT AND REGULATIONS PROMULGATED THEREUNDER (29 CFR 1910.1200 ET. SEQ.) AND THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PERSON TRAINED IN, OR SUPERVISED BY A PERSON TRAINED IN, CHEMICAL HANDLING. THE USER IS RESPONSIBLE FOR DETERMINING THE PRECAUTIONS AND DANGERS OF THIS CHEMICAL FOR HIS OR HER PARTICULAR APPLICATION. DEPENDING ON USAGE, PROTECTIVE CLOTHING INCLUDING EYE AND FACE GUARDS AND RESPIRATORS MUST BE USED TO AVOID CONTACT WITH MATERIAL OR BREATHING CHEMICAL VAPORS/FUMES. EXPOSURE TO THIS PRODUCT MAY HAVE SERIOUS ADVERSE HEALTH EFFECTS. THIS CHEMICAL MAY INTERACT WITH OTHER SUBSTANCES. SINCE THE POTENTIAL USES ARE SO VARIED, SUPPLIER CANNOT WARN OF ALL OF THE POTENTIAL DANGERS OF USE OR INTERACTION WITH OTHER CHEMICALS OR MATERIALS. SUPPLIER DISCLAIMS ANY WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE. THE USER SHOULD RECOGNIZE THAT THIS PRODUCT CAN CAUSE SEVERE INJURY AND EVEN DEATH, ESPECIALLY IF IMPROPERLY HANDLED OR THE KNOWN DANGERS OF USE ARE NOT HEEDDED. READ ALL PRECAUTIONARY INFORMATION. AS NEW DOCUMENTED GENERAL SAFETY INFORMATION BECOMES AVAILABLE, SUPPLIER WILL PERIODICALLY REVISE THIS MATERIAL SAFETY DATA SHEET. NOTE: CHEMTREC, CANUTEC, AND NATIONAL RESPONSE CENTER EMERGENCY TELEPHONE NUMBERS ARE TO BE USED ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS. ALL NON-EMERGENCY QUESTIONS SHOULD BE DIRECTED TO CUSTOMER SERVICE.

HARCROS CHEMICALS INC
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PHOS SODA TRI CRYF FINE 50# DATE: 03/02/94 PAGE 01
PRODUCT CODE: 16-01128-01

CAS # 007601-54-9

FORMULA: $\text{Na(3)PO(4).12H(2)O.1/4NaOH}$

CHEMICAL FAMILY: Phosphates

CHEMICAL NAME AND SYNONYMS: Trisodium Phosphate Crystals;
Trisodium Phosphate Dodecahydrate;
TSP Crystals; Trisodium
Orthophosphate

SUPPLIERS NAME: Harcros Chemicals Inc
5200 Speaker Rd
Kansas City

Ks 66106

SUPPLIERS PHONE NUMBER: 913-321-3131

TRANSPROTATION EMERGENCY PHONE NUMBER: 1-800-424-9300

S.A.R.A. INFORMATION

HAZARDS: Fire:No Pressure:No Reactivity:No Acute:Yes Chronic:No
PHYSICAL DATA: Mixture:No Pure:Yes Solid:Yes Liquid:No Gas:No

SECTION I Hazardous Ingredients

Ingredient	Percent	TLV
Trisodium Phosphate Crystals (CAS # 7601-54-9)	100	PEL 15mg/m ³ Total Dust 5mg/m ³ Respirable fraction OSHA TLV 10mg/m ³ Total Dust ACGIH

SECTION II Health Hazards

Threshold Limit Value: See Section I

Potential Effects of Exposure (listed by primary routes of entry)

Eyes: Can cause eye burns.

Skin:
Strong irritant; chemical burns possible.

Inhalation:
Small amounts of dust very irritating.
Large exposure can cause tissue burns.

Ingestion:
Slightly toxic due to high pH.
Ingestion may injure mouth, throat and gastrointestinal tract.
LD(50) (Rat): 6.5g/kg.

First aid:

Eyes:
Immediately flush with water for 15 minutes while holding
eyelids open.
Get medical attention.

Skin:
Flush with water while removing contaminated clothing and shoes.
Follow by washing with soap and water.
Do not reuse clothing or shoes until cleaned.

HARCROS CHEMICALS INC
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PHOS SODA TRI CRYF FINE 50#
PRODUCT CODE: 16-01128-01

DATE: 03/02/94 PAGE 03

SECTION III Special Protection Information

CONTINUED

Skin:

Wear appropriate impervious gloves and protective clothing to prevent skin contact.
Launder contaminated clothing and clean protective equipment before reuse.

Additional Protective Measures:

Safety shower, eye bath and washing facilities should be available.

SECTION IV Fire & Explosion Hazard Data

Flash Point (Method): Non-flammable

Flammable Limits (% Volume in Air):

Upper: N/A

Lower: N/A

Extinguishing Media:

As appropriate for the surrounding fire.

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards:

Material in aqueous solution is corrosive to aluminum, galvanized iron and zinc and may generate flammable hydrogen gas as a result of this reaction.

SECTION V Physical Data

Boiling Point: Over 1000 deg. C

Melting Point: 75 deg. C. (Decomposes), loses 12H(2)O @ 100 deg. C.

Specific Gravity (H(2)O=1): 1.62 @ 68 deg. F.

Bulk Density: lbs/cu.ft.

Powder - 61-65

Granular - 58-64

Vapor Pressure (MM HG.): Non-volatile

Vapor Density (AIR=1): Non-volatile

Evaporation Rate (____=1): Non-volatile

Solubility in Water: 11.6g/100g at 77 deg. F

Percent Volatile by Volume: Non-volatile

pH: 1% solution at 77 deg. F-12.0

HARCROS CHEMICALS INC
KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PHOS SODA TRI CRYF FINE 50#
PRODUCT CODE: 16-01128-01

DATE: 03/02/94 PAGE 05

SECTION IX Additional Information

This information may be of importance to you:

Minimize skin contact.
Wash with soap and water before eating, drinking, smoking or
using toilet facilities.

Food Grade: FDA-GRAS list, permitted in foods-1979;
USDA-Permitted in meat.

Material is hygroscopic, tending to cake in storage, keep
container closed and stored in a cool dry location.

HAZARD HMIS RATING:

Health-2
Flammability-0
Reactivity-0
Special Protection-X

***** E N D O F R E P O R T *****

NAME: GENE TURNER

DATE ISSUED: 10/28/1985
DATE REVISED: 10/22/1987

< = LESS THAN
> = MORE THAN

N/A = NOT APPLICABLE
N/D = NOT DETERMINED
N/E = NOT ESTABLISHED

UNK = UNKNOWN

The information provided in this Material Safety Data Sheet has
been obtained from sources believed to be reliable.
Harcros Chemicals Inc provides no warranties, either expressed
or implied and assumes no responsibility for the accuracy or completeness
of the data contained herein. This information is offered for your infor-
mation, consideration and investigation. You should satisfy yourself that
you have all current data relevant to your particular use.
Harcros Chemicals Inc knows of no medical condition, other than those
noted on this material safety data sheet, which are generally
recognized as being aggravated by exposure to this product.

MATERIAL SAFETY DATA SHEET

MSDS NUMBER : M32413
MSDS DATE : 12-30-93
PRODUCT NAME : ~~CAUSTIC SODA~~ ANHYDROUS (ALL GRADES)
(For specific products - see Section XI)

24 HOUR EMERGENCY PHONE: 1-800-733-3665 OR 716-278-7021

I. PRODUCT IDENTIFICATION

HMIS HAZARD RATINGS

HEALTH HAZARD 3 FIRE HAZARD 0 REACTIVITY 2
Based on the National Paint & Coatings Association HMIS rating system

SARA/TITLE III HAZARD CATEGORIES (See Section X)

Immediate (ACUTE) Health: YES Reactive Hazard: YES
Delayed (Chronic) Health: NO Sudden Release of Pressure: NO
Fire Hazard: NO

MANUFACTURER'S: Occidental Chemical Corporation
NAME AND : Customer Service, Occidental Tower, Telephone
ADDRESS : P O Box 809050, Dallas, Texas 75380 (1-800-752-5151)

CHEMICAL NAME: Sodium hydroxide CAS NUMBER: 1310-73-2

SYNONYMS/COMMON NAMES: Sodium Hydroxide-Dry

CHEMICAL FORMULA: NaOH

PRODUCT USE: Metal Finishing; Industrial Cleaners; Drum Cleaners;
Petroleum Industry; Chemical Processing

DOT PROPER SHIPPING NAME: Sodium Hydroxide, solid

DOT HAZARD CLASS: 8

DOT I.D. NUMBER: UN1823

DOT PACKAGING GROUP: I I

DOT HAZARDOUS SUBSTANCE: RQ 1000 lbs. (Sodium Hydroxide)

DOT MARINE POLLUTANT: NA

ADDITIONAL DESCRIPTION REQUIREMENT: NA

II. HEALTH HAZARD INFORMATION (Continued)

EFFECTS OF OVEREXPOSURE

ACUTE:

Corrosive to all body tissues by all routes of exposure. The effect of local dermal exposure may consist of multiple areas of superficial destruction of the skin or of primary irritant dermatitis. Similarly, inhalation of dust, spray, or mist may result in varying degrees of irritation or damage to the respiratory tract tissues and an increased susceptibility to respiratory illness.

CHRONIC:

No known chronic effects.

TOXICOLOGY DATA:

Caustic soda is a corrosive material.

Sodium Hydroxide:

Acute Dermal LD50 (rabbit) 1350 mg/kg

Human Dermal Exposure

Regardless of concentration, the severity of damage and extent of its irreversibility increases with length of contact time. Prolonged contact with sodium hydroxide solutions of $\geq 1\%$ can cause a high degree of tissue destruction. The latent period, following skin contact during which no sensation of irritation occurs, varies from several hours for 0.4 - 4% solutions to 3 minutes with concentrations of 25% or greater.

SYNERGISTIC MATERIALS:

None known.

IV. FIRE AND EXPLOSION DATA

FLASH POINT: Not applicable AUTOIGNITION TEMPERATURE: Nonflammable

FLAMMABLE LIMITS IN AIR, % BY VOLUME- UPPER: Not applicable
LOWER: Not applicable

EXTINGUISHING MEDIA:

This product is not combustible. Foam, carbon dioxide, or dry chemical may be used in areas where the product is stored.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing. Avoid direct contact of this product with water as this can cause a violent exothermic reaction.

UNUSUAL FIRE AND EXPLOSION HAZARD:

Direct contact with water can cause a violent exothermic reaction. See Reactivity Section.

SENSITIVITY TO MECHANICAL IMPACT:

Not Sensitive

SENSITIVITY TO STATIC DISCHARGE:

Not Sensitive

V. SPECIAL PROTECTION

VENTILATION REQUIREMENTS:

Special ventilation is not required under normal use. Use local exhaust ventilation where dust, mist, or spray may be generated.

NOTE: Where carbon monoxide or other reaction products may be generated, special ventilation may be required.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY:

Respiratory protection is not required under normal use. Use NIOSH/MSHA approved respirator where dust, mist, or spray may be generated.

EYE:

Wear chemical safety goggles plus full face shield to protect against splashing.

GLOVES:

Wear chemical resistant gloves such as natural or butyl rubber. Gloves may be decontaminated by washing with mild soap and water.

OTHER CLOTHING AND EQUIPMENT:

Impervious protective clothing and chemically resistant safety shoes should be worn to minimize contact. Wash contaminated clothing with soap and water and dry before reuse. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1).

WARNING LABEL INFORMATION

SIGNAL WORD: DANGER

STATEMENT OF HAZARDS:

CAUSES SEVERE BURNS TO SKIN, EYES AND MUCOUS MEMBRANES.
CONTACT WITH EYES CAN CAUSE PERMANENT EYE DAMAGE.
INHALATION OF DUST, MIST, OR SPRAY CAN CAUSE SEVERE LUNG DAMAGE.
CAN REACT VIOLENTLY WITH WATER, ACIDS, AND OTHER SUBSTANCES.

PRECAUTIONARY STATEMENTS:

Do not get into eyes, on skin, on clothing.
Avoid breathing dust, mist, or spray.
Do not take internally.
Use with adequate ventilation and wear respiratory protection when exposure to dust, mist or spray is possible.
When handling, wear chemical splash goggles, face shield, rubber gloves, and protective clothing.
Wash thoroughly after handling or contact - exposure can cause burns which are not immediately painful or visible.
Keep container closed.
Product can react violently with water, acids, and other substances - read Handling and Storage instructions below carefully before using.
Product is corrosive to tin, aluminum, zinc and alloys containing these metals, and will react violently with these metals in powder form.
Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed spaces and can cause death. Follow appropriate tank entry procedures.

FIRST AID:

FOR EYES:

OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY THEN GET MEDICAL ATTENTION. IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

FOR SKIN:

IMMEDIATELY wash contaminated areas with plenty of water for at least 15 minutes. Remove contaminated clothing and footwear and wash clothing before reuse. Discard footwear which cannot be decontaminated. GET MEDICAL ATTENTION IMMEDIATELY.

IF INHALED:

Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. GET MEDICAL ATTENTION.

IF SWALLOWED:

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. If available, give several glasses of milk. If vomiting occurs spontaneously, keep airway clear. GET MEDICAL ATTENTION IMMEDIATELY.

IN CASE OF:

SPILL OR LEAK:

Leaks should be stopped. Spills, after containment, should be shoveled up or removed by vacuum truck (if liquid) to chemical waste area. Neutralize residue with dilute acid, flush spill area with water followed by liberal covering of sodium bicarbonate. Dispose of wash water and spill by-products according to federal, state, and local regulations.

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 001
Date Prepared: 01/05/96
Date Printed: 10/26/96
MSDS No: 0004462-003.001

MURIATIC ACID 22 DEGREE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: MURIATIC ACID 22 DEGREE
General or Generic ID: INORGANIC ACID

Company

Ashland Chemical Co.
P.O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
WATER		63.0- 67.0
HYDROGEN CHLORIDE	7647-01-0	35.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Exposure can cause irreversible eye damage. Symptoms may include stinging, tearing, redness, swelling, corneal damage, and blindness.

Skin

Exposure can cause irreversible skin damage. Symptoms may include redness, swelling, burns, and severe skin damage.

Swallowing

Exposure may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.

Inhalation

Exposure to dust is possible. Exposure may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract.

Symptoms of Exposure

No data

Target Organ Effects

No data

Developmental Information

No data

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 003
Date Prepared: 01/05/96
Date Printed: 10/26/96
MSDS No: 0004462-003.001

MURIATIC ACID 22 DEGREE

Fire and Explosion Hazards

No data

Extinguishing Media

water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Health - 3, Flammability - 0, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Cover the contaminated surface with sodium bicarbonate or a soda ash/flaked lime mixture (50-50). Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution. Proper mixing procedures essential. Trained personnel should conduct this procedure. Untrained personnel should be removed from the spill area.

Large Spill

Persons not wearing protective equipment should be excluded from area of spill until clean-up is completed. Stop spill at source. Dike to prevent spreading. Pump to salvage tank.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Addition to water releases heat which can result in violent boiling and spattering. Always add slowly and in small amounts. Never use hot water. Never add water to acids. Always add acids to water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

Skin Protection

Wear resistant gloves such as: natural rubber, neoprene, To prevent skin contact, wear impervious clothing and boots..

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 005
Date Prepared: 01/05/96
Date Printed: 10/26/96
MSDS No: 0004462-003.OC1

MURIATIC ACID 22 DEGREE

Physical Form
HOMOGENEOUS SOLUTION

Color
COLORLESS TO LIGHT YELLOW

Odor
No data

pH
No data

10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition
May form: acid vapors, hydrogen chloride.

Chemical Stability
Stable.

Incompatibility
Avoid contact with: alkali metals, strong alkalies, Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air..

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information
Collect and add slowly to large volume of agitated solution of soda ash and slaked lime. Add neutralized solution to excess running water in accordance with applicable regulations.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101
DOT Description:
HYDROCHLORIC ACID, SOLUTION, 8, UN1789, II

Continued on next page

MATERIAL SAFETY DATA SHEET

Ashland Chemical Co.

Page 007
Date Prepared: 01/05/96
Date Printed: 10/26/96
MSDS No: 0004462-003.001

MURIATIC ACID 22 DEGREE

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>Williams Field Serv.</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	5. Originating Site <u>GAS PLANT</u>
3. Address of Facility Operator <u>345 CR 3000, AZTEC NM</u>	6. Transporter <u>SUNCO TRUCKING</u>
7. Location of Material (Street Address or ULSTR) <u>MILAGRO PLANT</u>	8. State <u>NM</u>
9. Circle One: <input checked="" type="radio"/> 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 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:

WASTE WATER GENERATED AT MILAGRO PLANT, AMINE PLANT

Prior application for
disposal dated 11/27/96
rated these waters Non-exempt
further review at WFS
classified the waters as
exempt.

RECEIVED
JAN 28 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 200,000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 1-28-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. (505) 334-6186

(This space for State Use)

APPROVED BY: Dennis G. Feunt TITLE: Geologist DATE: 1/28/97
APPROVED BY: Emilie Busch TITLE: _____ DATE: _____



WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87408 (505) 327-0416

WILLIAMS FIELD SERVICES		# of pages 1
Date	1/27/97	From Leigh Gooding
To	Hel Stone	Co. Williams Field Services
Phone	(505) 327-4962	Phone (505) 327-4962
Fax		Fax

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-12T-29R-11 1/4 1/4 County Santa Fe State NM
 Physical Address if appropriate: 192 County Rd 4900
Bloomfield, NM 87413

Source and description of waste:

Evaporation pond water from amine
treatment plant.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Leigh Gooding representative
 for Williams Field Services Company

do hereby certify that according to the Resource Conservation and Recovery Act
 that the above described waste is ☒ Exempt

☐ Non-Exempt and that it has been identified
 as non hazardous by characteristic analysis or by product identification as required.

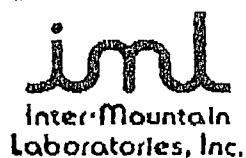
The required documentation is hereto attached:

Check the appropriate line(s):

☐ MSDS Information sheet☐ RCRA TCLP Analysis☒ RCRA Metals Analysis Previously submitted☐ Corrosivity, Ignitability, Reactivity

☒ I further certify that there has been no change in the process employed or
 chemicals stored / used at the facility generating the waste since July 1996

Signature Leigh GoodingPrinted Name Leigh GoodingTitle Senior Environmental SpecialistDate 1/27/97



2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

12 August 1998

Leigh Gooding
Williams Field Service
P. O. Box 58900
Salt Lake City, UT 84158-0900

Ms. Gooding:

Enclosed please find the report for the samples received by our laboratory for analysis on July 11, 1996.

If you have any questions about the results of these analyses, please don't hesitate to call me at your convenience.

Sincerely,

A handwritten signature in cursive script that reads "Anna Schaefer".

Anna Schaefer
Organic Analyst/IML-Farmington

Enclosure

xc: File

2508 W. Main Street
Farmington, New Mexico 87401

Client: Williams Field Service
Project: Milagro Plant
Sample ID: North Evap Pond
Laboratory ID: 0398W01325
Sample Matrix: Water
Condition: Cool/Intact

Date Reported: 08/01/96
Date Sampled: 07/11/96
Time Sampled: 9:45 AM
Date Received: 07/11/96

Parameter	Analytical Result	Units	Units
Lab pH.....	9.8	s.u.	
Lab Conductivity @ 25° C.....	9,470	umhos/cm	
Lab Resistivity @ 25° C.....	0.11	ohm/m	
Total Dissolved Solids @ 180°C.....	13,300	mg/L	
Total Hardness as CaCO3.....	93.0	mg/L	
Total Alkalinity as CaCO3.....	43,300	mg/L	
Total Phosphorous.....	118	mg/L	
Bicarbonate as HCO3.....	2,300	mg/L	38.0 meq/L
Carbonate as CO3.....	24,800	mg/L	828 meq/L
Hydroxide as OH.....	<1.00	mg/L	<1.00 meq/L
Chloride.....	2,270	mg/L	64.0 meq/L
Sulfate.....	218	mg/L	4.54 meq/L
Nitrate.....	4.07	mg/L	0.29 meq/L
Calcium.....	18.8	mg/L	0.94 meq/L
Magnesium.....	11.2	mg/L	0.92 meq/L
Sodium.....	1,090	mg/L	47.3 meq/L
Potassium.....	58.3	mg/L	1.44 meq/L
Trace Metals (Total)			
Arsenic.....	<0.005	mg/L	
Barium.....	0.10	mg/L	
Cadmium.....	0.029	mg/L	
Chromium.....	21.1	mg/L	
Lead.....	0.089	mg/L	
Mercury.....	<0.001	mg/L	
Selenium.....	0.007	mg/L	
Silver.....	<0.01	mg/L	

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by LM

Reviewed by SB

Client: Williams Field Service
Project: Milagro Plant
Sample ID: West Evap Pond
Laboratory ID: 0398W01328
Sample Matrix: Water
Condition: Cool/Intact

Date Reported: 08/01/98
Date Sampled: 07/11/98
Time Sampled: 10:00 AM
Date Received: 07/11/98

Parameter	Analytical Result	Units	Units
Lab pH.....	9.8	s.u.	
Lab Conductivity @ 25° C.....	11,100	umhos/cm	
Lab Resistivity @ 25° C.....	0.09	ohm/m	
Total Dissolved Solids @ 180°C.....	23,900	mg/L	
Total Hardness as CaCO ₃	131	mg/L	
Total Alkalinity as CaCO ₃	81,700	mg/L	
Total Phosphorous.....	184	mg/L	
Bicarbonate as HCO ₃	7,600	mg/L	125 meq/L
Carbonate as CO ₃	45,300	mg/L	1509 meq/L
Hydroxide as OH.....	<1.00	mg/L	<1.00 meq/L
Chloride.....	3,050	mg/L	86.0 meq/L
Sulfate.....	407	mg/L	8.49 meq/L
Nitrate.....	2.90	mg/L	0.21 meq/L
Calcium.....	26.7	mg/L	1.33 meq/L
Magnesium.....	15.7	mg/L	1.29 meq/L
Sodium.....	1,570	mg/L	68.3 meq/L
Potassium.....	104	mg/L	2.67 meq/L
Trace Metals (Total)			
Arsenic.....	<0.005	mg/L	
Barium.....	0.09	mg/L	
Cadmium.....	0.046	mg/L	
Chromium.....	28.3	mg/L	
Lead.....	0.060	mg/L	
Mercury.....	<0.001	mg/L	
Selenium.....	<0.005	mg/L	
Silver.....	<0.01	mg/L	

Reference: U.S.E.P.A. 800/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by WM

Reviewed by JB

Client: Williams Field Service
Project: Milagro Plant
Sample ID: South Evap Pond
Laboratory ID: 0398W01327
Sample Matrix: Water
Condition: Cool/Intact

Date Reported: 08/01/98
Date Sampled: 07/11/98
Time Sampled: 10:10 AM
Date Received: 07/11/98

Parameter	Analytical Result	Units	Units
Lab pH.....	9.8	s.u.	
Lab Conductivity @ 25° C.....	8,210	umhos/cm	
Lab Resistivity @ 25° C.....	0.12	ohm/m	
Total Dissolved Solids @ 180°C.....	10,300	mg/L	
Total Hardness as CaCO ₃	91.0	mg/L	
Total Alkalinity as CaCO ₃	43,520	mg/L	
Total Phosphorous.....	73.7	mg/L	
Bicarbonate as HCO ₃	2,800	mg/L	46.4 meq/L
Carbonate as CO ₃	24,700	mg/L	824 meq/L
Hydroxide as OH.....	<1.00	mg/L	<1.00 meq/L
Chloride.....	1,090	mg/L	30.8 meq/L
Sulfate.....	210	mg/L	4.37 meq/L
Nitrate.....	6.15	mg/L	0.58 meq/L
Calcium.....	19.6	mg/L	0.99 meq/L
Magnesium.....	10.1	mg/L	0.83 meq/L
Sodium.....	590	mg/L	25.7 meq/L
Potassium.....	59.4	mg/L	1.52 meq/L
Trace Metals (Total)			
Arsenic.....	0.006	mg/L	
Barium.....	0.10	mg/L	
Cadmium.....	0.032	mg/L	
Chromium.....	19.0	mg/L	
Lead.....	0.057	mg/L	
Mercury.....	<0.001	mg/L	
Selenium.....	0.006	mg/L	
Silver.....	<0.01	mg/L	

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by Wm

Reviewed by JB

Quality Control / Quality Assurance
Trace Metals / Known Analysis
TOTAL METALS

Client: Williams Field Service
Project: Milagro Plant
Laboratory ID: 0398W01325-1327
Sample Matrix: Water
Condition: Cool / Intact

Date Reported: 08/01/98
Date Sampled: 07/11/98
Date Received: 07/11/98

Known Analysis

Parameter	Found Value (mg/L)	Known Value (mg/L)	Percent Recovery
Arsenic	0.011	0.010	110%
Barium	0.91	1.00	91%
Cadmium	1.00	1.00	100%
Chromium	0.99	1.00	99%
Lead	0.042	0.040	105%
Mercury	0.004	0.004	110%
Selenium	0.010	0.010	100%
Silver	0.005	0.005	106%

Reference: E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.
Comments: Quality control run concurrently with the above sample lab numbers.

Reported By: LM

Reviewed By: JB

Quality Control / Quality Assurance
Trace Metals / Spike Analysis
TOTAL METALS

Client: Williams Field Service
Project: Milagro Plant
Laboratory ID: 0396W01325-1327
Sample Matrix: Water
Condition: Cool / Intact

Date Reported: 08/01/96
Date Sampled: 07/11/96
Date Received: 07/11/96

Spike Analysis

Parameter	Spike Result (mg/L)	Unspiked Sample Result (mg/L)	Spike Amount (mg/L)	Percent Recovery
Arsenic	0.027	0.002	0.030	83%
Barium	0.44	0.01	0.50	85%
Cadmium	0.45	<0.01	0.50	91%
Chromium	0.44	<0.01	0.50	86%
Lead	0.024	<0.005	0.025	96%
Mercury	0.005	<0.001	0.005	106%
Selenium	0.024	<0.005	0.025	96%
Silver	0.025	0.025	0.025	100%

Reference: E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments: Quality control run concurrently with the above sample lab numbers.

Reported By: LM

Reviewed By: JB

EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS

Client: WILLIAMS FIELD SERVICE
Sample ID: North Evap. Pond
Project ID: Milagro Plant
Lab ID: B965800 0396G01325
Matrix: Water

Date Reported: 08/07/96
Date Sampled: 07/11/96
Date Received: 07/12/96
Date Extracted: NA
Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	ug/L
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
4-Isopropyltoluene	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L

Continued

**EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS**

Client: WILLIAMS FIELD SERVICE
Sample ID: North Evap. Pond
Project ID: Millagro Plant
Lab ID: B965800
Matrix: Water

0396G01325

Date Reported: 08/07/96
Date Sampled: 07/11/96
Date Received: 07/12/96
Date Extracted: NA
Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
Continued			
Carbon Tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	5.0	ug/L
cis-1,2-Dichloroethene	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
m,p-Xylene	ND	5.0	ug/L
Methylene chloride	ND	20	ug/L
n-Butylbenzene	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
o-Xylene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Tetrachloroethene (PCE)	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Trichloroethene (TCE)	ND	5.0	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Vinyl Chloride	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

Continued

EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDSClient: WILLIAMS FIELD SERVICE
Sample ID: North Evap. Pond
Project ID: Milagro Plant
Lab ID: B965800 0396G01325
Matrix: WaterDate Reported: 08/07/96
Date Sampled: 07/11/96
Date Received: 07/12/96
Date Extracted: NA
Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	99	80 - 120
Bromofluorobenzene	100	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 8/1/96Reviewed 

1100 Research Drive
Bozeman, Montana 59715EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

Client: WILLIAMS FIELD SERVICE

Sample ID: North Evap. Pond

Project ID: Milagro Plant

Lab ID: B965800

0396G01325

Matrix: Water

Date Reported: 08/05/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: 07/15/96

Date Analyzed: 07/31/96

Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	1000	ug/L
Acenaphthene	ND	1000	ug/L
Acenaphthylene	ND	1000	ug/L
Anthracene	ND	1000	ug/L
Benzo(a)anthracene	ND	1000	ug/L
Benzo(a)pyrene	ND	1000	ug/L
Benzo(b)fluoranthene	ND	1000	ug/L
Benzo(g,h,i)perylene	ND	1000	ug/L
Benzo(k)fluoranthene	ND	1000	ug/L
Chrysene	ND	1000	ug/L
Dibenz(a,h)anthracene	ND	1000	ug/L
Fluoranthene	ND	1000	ug/L
Fluorene	ND	1000	ug/L
Indeno(1,2,3-cd)pyrene	ND	1000	ug/L
Phenanthrene	ND	1000	ug/L
Pyrene	ND	1000	ug/L

QUALITY CONTROL - Surrogate Recovery

%

QC Limits

2,4,6-Tribromophenol	71	10 - 123
2-Fluorobiphenyl	74	43 - 116
2-Fluorophenol	62	21 - 110
Nitrobenzene-d5	72	35 - 114
Phenol-d6	78	10 - 110
Terphenyl-d14	75	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile
Organics, Test Methods for Evaluating Solid Wastes, SW-846,
United States Environmental Protection Agency, November 1990.

Analyst



Reviewed



**EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS**

Client: WILLIAMS FIELD SERVICE

Sample ID: West Evap. Pond

Project ID: Milagro Plant

Lab ID: B965801

0396G01326

Matrix: Water

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	ug/L
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
4-Isopropyltoluene	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L

Continued

EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS

Client: WILLIAMS FIELD SERVICE

Sample ID: West Evap. Pond

Project ID: Milagro Plant

Lab ID: B965801

0396G01326

Matrix: Water

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
Continued			
Carbon Tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	5.0	ug/L
cis-1,2-Dichloroethane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
m,p-Xylene	ND	5.0	ug/L
Methylene chloride	ND	20	ug/L
n-Butylbenzene	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
o-Xylene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Tetrachloroethene (PCE)	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Trichloroethene (TCE)	ND	5.0	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Vinyl Chloride	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

Continued

EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS

Client: WILLIAMS FIELD SERVICE
Sample ID: West Evap. Pond
Project ID: Milagro Plant
Lab ID: B965801 0396G01326
Matrix: Water

Date Reported: 08/07/96
Date Sampled: 07/11/96
Date Received: 07/12/96
Date Extracted: NA
Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	90	80 - 120
Bromofluorobenzene	110	86 - 115
Toluene-d8	111 #	88 - 110

ND - Not Detected at Practical Quantitation Level (PQL)

- Surrogate Recovery not within control limits.

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.O. 8/7/96Reviewed X

**EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS**

Client: **WILLIAMS FIELD SERVICE**
Sample ID: South Evap. Pond
Project ID: Milagro Plant
Lab ID: B965802 0396G01327
Matrix: Water

Date Reported: 08/07/96
Date Sampled: 07/11/96
Date Received: 07/12/96
Date Extracted: NA
Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane (OBCP)	ND	5.0	ug/L
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
4-Isopropyltoluene	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L

Continued

**EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS**

Client: **WILLIAMS FIELD SERVICE**
 Sample ID: **South Evap. Pond**
 Project ID: **Milagro Plant**
 Lab ID: **B965802**
 Matrix: **Water**

0396G01327

Date Reported: **08/07/96**
 Date Sampled: **07/11/96**
 Date Received: **07/12/96**
 Date Extracted: **NA**
 Date Analyzed: **07/19/96**

Parameter	Result	PQL	Units
Continued			
Carbon Tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	5.0	ug/L
cis-1,2-Dichloroethene	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
m,p-Xylene	ND	5.0	ug/L
Methylene chloride	ND	20	ug/L
n-Butylbenzene	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
o-Xylene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Tetrachloroethene (PCE)	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Trichloroethene (TCE)	ND	5.0	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Vinyl Chloride	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

Continued

**EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS**

Client: WILLIAMS FIELD SERVICE

Sample ID: South Evap. Pond

Project ID: Milagro Plant

Lab ID: B965802

Matrix: Water

0396G01327

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	97	80 - 120
Bromofluorobenzene	105	86 - 115
Toluene-d8	105	88 - 110

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 8/7/96

Reviewed 

**EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS**

Client: **WILLIAMS FIELD SERVICE**
Sample ID: **South Evap. Pond**
Project ID: **Milagro Plant**
Lab ID: **B965802**
Matrix: **Water**

0396G01327

Date Reported: **08/05/96**
Date Sampled: **07/11/96**
Date Received: **07/12/96**
Date Extracted: **07/15/96**
Date Analyzed: **07/30/96**

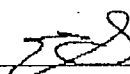
Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	400	ug/L
Acenaphthene	ND	400	ug/L
Acenaphthylene	ND	400	ug/L
Anthracene	ND	400	ug/L
Benzo(a)anthracene	ND	400	ug/L
Benzo(a)pyrene	ND	400	ug/L
Benzo(b)fluoranthene	ND	400	ug/L
Benzo(g,h,i)perylene	ND	400	ug/L
Benzo(k)fluoranthene	ND	400	ug/L
Chrysene	ND	400	ug/L
Dibenz(a,h)anthracene	ND	400	ug/L
Fluoranthene	ND	400	ug/L
Fluorene	ND	400	ug/L
Indeno(1,2,3-cd)pyrene	ND	400	ug/L
Phenanthrene	ND	400	ug/L
Pyrene	ND	400	ug/L

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	79	10 - 123
2-Fluorobiphenyl	78	43 - 116
2-Fluorophenol	69	21 - 110
Nitrobenzene-d5	78	35 - 114
Phenol-d6	32	10 - 110
Terphenyl-d14	60	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, November 1990.

Analyst



Reviewed



**LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANK**

Date Analyzed: 07/18/96
Lab ID: IBW96200A
Matrix: Water

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	0.005	mg/L
1,1,1-Trichloroethane	ND	0.005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.005	mg/L
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.005	mg/L
1,1,2-Trichloroethane	ND	0.005	mg/L
1,1-Dichloroethane	ND	0.005	mg/L
1,1-Dichloroethene	ND	0.005	mg/L
1,1-Dichloropropene	ND	0.005	mg/L
1,2,3-Trichlorobenzene	ND	0.005	mg/L
1,2,3-Trichloropropane	ND	0.005	mg/L
1,2,4-Trichlorobenzene	ND	0.005	mg/L
1,2,4-Trimethylbenzene	ND	0.005	mg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.005	mg/L
1,2-Dibromoethane (EDB)	ND	0.005	mg/L
1,2-Dichlorobenzene	ND	0.005	mg/L
1,2-Dichloroethane	ND	0.005	mg/L
1,2-Dichloropropane	ND	0.005	mg/L
1,3,5-Trimethylbenzene	ND	0.005	mg/L
1,3-Dichlorobenzene	ND	0.005	mg/L
1,3-Dichloropropane	ND	0.005	mg/L
1,4-Dichlorobenzene	ND	0.005	mg/L
1,4-Dioxane	ND	0.005	mg/L
2,2-Dichloropropane	ND	0.005	mg/L
2-Butanone (MEK)	ND	0.005	mg/L
2-Chloro-1,3-butadiene (Chloroprene)	ND	0.005	mg/L
2-Chloroethylvinyl ether	ND	0.005	mg/L
2-Chlorotoluene	ND	0.005	mg/L
2-Hexanone	ND	0.005	mg/L
3-Chloroprene (Allyl Chloride)	ND	0.005	mg/L
4-Chlorotoluene	ND	0.005	mg/L
4-Isopropyltoluene	ND	0.005	mg/L
4-Methyl-2-pentanone (MIBK)	ND	0.005	mg/L
Acetone	ND	0.005	mg/L

Continued

**LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANK**

Date Analyzed: 07/18/96
Lab ID: IBW96200A
Matrix: Water

Parameter	Result	PQL	Units
Continued			
Acetonitrile (Methylcyanide)	ND	0.005	mg/L
Acrolein	ND	0.005	mg/L
Acrylonitrile	ND	0.005	mg/L
Benzene	ND	0.005	mg/L
Bromobenzene	ND	0.005	mg/L
Bromochloromethane	ND	0.005	mg/L
Bromodichloromethane	ND	0.005	mg/L
Bromoform	ND	0.005	mg/L
Bromomethane	ND	0.005	mg/L
Carbon Disulfide	ND	0.005	mg/L
Carbon Tetrachloride	ND	0.005	mg/L
Chlorobenzene	ND	0.005	mg/L
Chloroethane	ND	0.005	mg/L
Chloroform	ND	0.005	mg/L
Chloromethane	ND	0.005	mg/L
cis-1,2-Dichloroethane	ND	0.005	mg/L
cis-1,3-Dichloropropene	ND	0.005	mg/L
Cyclohexanone	ND	0.005	mg/L
Dibromochloromethane	ND	0.005	mg/L
Dibromomethane	ND	0.005	mg/L
Dichlorodifluoromethane	ND	0.005	mg/L
Ethyl acetate	ND	0.005	mg/L
Ethyl ether	ND	0.005	mg/L
Ethyl methacrylate	ND	0.005	mg/L
Ethylbenzene	ND	0.005	mg/L
Hexachlorobutadiene	ND	0.005	mg/L
Iodomethane	ND	0.005	mg/L
Isobutanol	ND	0.005	mg/L
Isopropylbenzene	ND	0.005	mg/L
m,p-Xylene	ND	0.005	mg/L
Methacrylonitrile	ND	0.005	mg/L
Methyl methacrylate	ND	0.005	mg/L

Continued

**LAB QA/QC
 EPA METHOD 8260
 INSTRUMENT BLANK**

Date Analyzed: 07/18/96
 Lab ID: IBW96200A
 Matrix: Water

Parameter	Result	PQL	Units
Continued			
Methylene chloride	ND	0.005	mg/L
n-Butanol	ND	0.005	mg/L
n-Butylbenzene	ND	0.005	mg/L
n-Propylbenzene	ND	0.005	mg/L
Naphthalene	ND	0.005	mg/L
o-Xylene	ND	0.005	mg/L
Propionitrile	ND	0.005	mg/L
sec-Butylbenzene	ND	0.005	mg/L
Styrene	ND	0.005	mg/L
tert-Butylbenzene	ND	0.005	mg/L
Tetrachloroethene (PCE)	ND	0.005	mg/L
Toluene	ND	0.005	mg/L
trans-1,2-Dichloroethene	ND	0.005	mg/L
trans-1,3-Dichloropropene	ND	0.005	mg/L
trans-1,4-Dichlorobutene	ND	0.005	mg/L
Trichloroethene (TCE)	ND	0.005	mg/L
Trichlorofluoromethane	ND	0.005	mg/L
Vinyl Acetate	ND	0.005	mg/L
Vinyl Chloride	ND	0.005	mg/L
Xylenes (total)	ND	0.005	mg/L

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	89	80 - 120
Bromofluorobenzene	106	74 - 121
Toluene-d8	107	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst P.O. 8/2/96

Reviewed 

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/19/96
Lab ID: IBW96201A
Matrix: Water

Parameter	Result	PQL	Units
Continued			
Acetonitrile (Methylcyanide)	ND	0.005	mg/L
Acrolein	ND	0.005	mg/L
Acrylonitrile	ND	0.005	mg/L
Benzene	ND	0.005	mg/L
Bromobenzene	ND	0.005	mg/L
Bromochloromethane	ND	0.005	mg/L
Bromodichloromethane	ND	0.005	mg/L
Bromoform	ND	0.005	mg/L
Bromomethane	ND	0.005	mg/L
Carbon Disulfide	ND	0.005	mg/L
Carbon Tetrachloride	ND	0.005	mg/L
Chlorobenzene	ND	0.005	mg/L
Chloroethane	ND	0.005	mg/L
Chloroform	ND	0.005	mg/L
Chloromethane	ND	0.005	mg/L
cis-1,2-Dichloroethene	ND	0.005	mg/L
cis-1,3-Dichloropropene	ND	0.005	mg/L
Cyclohexanone	ND	0.005	mg/L
Dibromochloromethane	ND	0.005	mg/L
Dibromomethane	ND	0.005	mg/L
Dichlorodifluoromethane	ND	0.005	mg/L
Ethyl acetate	ND	0.005	mg/L
Ethyl ether	ND	0.005	mg/L
Ethyl methacrylate	ND	0.005	mg/L
Ethylbenzene	ND	0.005	mg/L
Hexachlorobutadiene	ND	0.005	mg/L
Iodomethane	ND	0.005	mg/L
Isobutanol	ND	0.005	mg/L
Isopropylbenzene	ND	0.005	mg/L
m,p-Xylene	ND	0.005	mg/L
Methacrylonitrile	ND	0.005	mg/L
Methyl methacrylate	ND	0.005	mg/L

Continued

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/19/96
Lab ID: IBW96201A
Matrix: Water

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	0.005	mg/L
1,1,1-Trichloroethane	ND	0.005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.005	mg/L
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.005	mg/L
1,1,2-Trichloroethane	ND	0.005	mg/L
1,1-Dichloroethane	ND	0.005	mg/L
1,1-Dichloroethene	ND	0.005	mg/L
1,1-Dichloropropene	ND	0.005	mg/L
1,2,3-Trichlorobenzene	ND	0.005	mg/L
1,2,3-Trichloropropane	ND	0.005	mg/L
1,2,4-Trichlorobenzene	ND	0.005	mg/L
1,2,4-Trimethylbenzene	ND	0.005	mg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.005	mg/L
1,2-Dibromoethane (EDB)	ND	0.005	mg/L
1,2-Dichlorobenzene	ND	0.005	mg/L
1,2-Dichloroethane	ND	0.005	mg/L
1,2-Dichloropropane	ND	0.005	mg/L
1,3,5-Trimethylbenzene	ND	0.005	mg/L
1,3-Dichlorobenzene	ND	0.005	mg/L
1,3-Dichloropropane	ND	0.005	mg/L
1,4-Dichlorobenzene	ND	0.005	mg/L
1,4-Dioxane	ND	0.005	mg/L
2,2-Dichloropropane	ND	0.005	mg/L
2-Butanone (MEK)	ND	0.005	mg/L
2-Chloro-1,3-butadiene (Chloroprene)	ND	0.005	mg/L
2-Chloroethylvinyl ether	ND	0.005	mg/L
2-Chlorotoluene	ND	0.005	mg/L
2-Hexanone	ND	0.005	mg/L
3-Chloroprene (Allyl Chloride)	ND	0.005	mg/L
4-Chlorotoluene	ND	0.005	mg/L
4-Isopropyltoluene	ND	0.005	mg/L
4-Methyl-2-pentanone (MIBK)	ND	0.005	mg/L
Acetone	ND	0.005	mg/L

Continued

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/19/96
Lab ID: IBW96201A
Matrix: Water

Parameter	Result	PQL	Units
Continued			
Methylene chloride	ND	0.005	mg/L
n-Butanol	ND	0.005	mg/L
n-Butylbenzene	ND	0.005	mg/L
n-Propylbenzene	ND	0.005	mg/L
Naphthalene	ND	0.005	mg/L
o-Xylene	ND	0.005	mg/L
Propionitrile	ND	0.005	mg/L
sec-Butylbenzene	ND	0.005	mg/L
Styrene	ND	0.005	mg/L
tert-Butylbenzene	ND	0.005	mg/L
Tetrachloroethene (PCE)	ND	0.005	mg/L
Toluene	ND	0.005	mg/L
trans-1,2-Dichloroethene	ND	0.005	mg/L
trans-1,3-Dichloropropene	ND	0.005	mg/L
trans-1,4-Dichlorobutene	ND	0.005	mg/L
Trichloroethene (TCE)	ND	0.005	mg/L
Trichlorofluoromethane	ND	0.005	mg/L
Vinyl Acetate	ND	0.005	mg/L
Vinyl Chloride	ND	0.005	mg/L
Xylenes (total)	ND	0.005	mg/L

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	96	80 - 120
Bromofluorobenzene	99	74 - 121
Toluene-d8	102	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst E.D. 8/7/96Reviewed ST

LAB QA/QC
EPA METHOD 8270
METHOD BLANKDate Analyzed: 07/26/96
Lab ID: MBW096196
Matrix: Water
Date Extracted: 07/15/96

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L
1,4-Dichlorobenzene	ND	10	ug/L
2,4,5-Trichlorophenol	ND	20	ug/L
2,4,6-Trichlorophenol	ND	20	ug/L
2,4-Dichlorophenol	ND	10	ug/L
2,4-Dimethylphenol	ND	10	ug/L
2,4-Dinitrophenol	ND	50	ug/L
2,4-Dinitrotoluene	ND	10	ug/L
2,6-Dinitrotoluene	ND	10	ug/L
2-Chloronaphthalene	ND	10	ug/L
2-Chlorophenol	ND	10	ug/L
2-Methylnaphthalene	ND	10	ug/L
2-Methylphenol	ND	10	ug/L
2-Nitroaniline	ND	50	ug/L
2-Nitrophenol	ND	10	ug/L
3,3'-Dichlorobenzidine	ND	20	ug/L
3-Methylphenol/4-Methylphenol	ND	10	ug/L
3-Nitroaniline	ND	50	ug/L
4,6-Dinitro-2-methylphenol	ND	50	ug/L
4-Bromophenyl-phenylether	ND	10	ug/L
4-Chloro-3-methylphenol	ND	20	ug/L
4-Chloroaniline	ND	20	ug/L
4-Chlorophenyl-phenylether	ND	10	ug/L
4-Nitroaniline	ND	20	ug/L
4-Nitrophenol	ND	50	ug/L
Acenaphthene	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
Anthracene	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L

Continued

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/26/96
Lab ID: MBW096196
Matrix: Water
Date Extracted: 07/15/96

Parameter	Result	PQL	Units
Continued			
Benzo(g,h,i)perylene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzoic Acid	ND	50	ug/L
Benzyl Alcohol	ND	20	ug/L
bis(2-Chloroethoxy)methane	ND	10	ug/L
bis(2-Chloroethyl)ether	ND	10	ug/L
bis(2-Chloroisopropyl)ether	ND	10	ug/L
bis(2-Ethylhexyl)phthalate	ND	50	ug/L
Butylbenzylphthalate	ND	10	ug/L
Chrysene	ND	10	ug/L
Di-n-Butylphthalate	ND	50	ug/L
Di-n-Octylphthalate	ND	50	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L
Dibenzofuran	ND	10	ug/L
Diethylphthalate	ND	10	ug/L
Dimethylphthalate	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Fluorene	ND	10	ug/L
Hexachlorobenzene	ND	20	ug/L
Hexachlorobutadiene	ND	20	ug/L
Hexachlorocyclopentadiene	ND	10	ug/L
Hexachloroethane	ND	20	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Isophorone	ND	10	ug/L
N-Nitrosodi-n-propylamine	ND	10	ug/L
N-Nitrosodiphenylamine	ND	10	ug/L
Naphthalene	ND	10	ug/L
Nitrobenzene	ND	10	ug/L
Pentachlorophenol	ND	50	ug/L
Phenanthrene	ND	10	ug/L
Phenol	ND	10	ug/L
Pyrene	ND	10	ug/L

Continued

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/26/96
Lab ID: MBW096196
Matrix: Water
Date Extracted: 07/15/96

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	68	10 - 123
2-Fluorobiphenyl	55	43 - 116
2-Fluorophenol	47	21 - 110
Nitrobenzene-d5	71	35 - 114
Phenol-d6	46	10 - 110
Terphenyl-d14	57	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst



Reviewed



LAB QA/QC
EPA METHOD 8260
MATRIX SPIKEDate Analyzed: 07/19/96
Lab ID: 0596H05800 SK1 0396G01325
Matrix: Water

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spike Result (ug/L)	MS Recovery %	QC Limits Rec.
1,1-Dichloroethene	20	0	22.5	113	75 -145
Benzene	20	0	20	100	71 -120
Chlorobenzene	20	0	19.4	97	76 -127
Toluene	20	0	21.1	106	71 -127
Trichloroethene (TCE)	20	0	19.3	97	75 -130

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	103	88 -110
Bromofluorobenzene	102	76 -114
Toluene-d8	105	76 -114

Note: Spike Recoveries are calculated using zero for Sample result
if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 5 outside QC limits.

Analyst P. C. 8/7/96Reviewed 

LAB QA/QC
EPA METHOD 8260
MATRIX SPIKE

Date Analyzed: 07/18/96
Lab ID: 0596H05801 SK1 0396G01326
Matrix: Water

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spike Result (ug/L)	MS Recovery %	QC Limits Rec.
1,1-Dichloroethene	20	0	19.6	98	75 -145
Benzene	20	0	17.1	86	71 -120
Chlorobenzene	20	0	16.1	81	76 -127
Toluene	20	0	17.2	86	71 -127
Trichloroethene (TCE)	20	0	16.6	83	75 -130

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
Bromofluorobenzene	108	76 -114
1,2-Dichloroethane-d4	93	88 -110
Toluene-d8	108	76 -114

Note: Spike Recoveries are calculated using zero for Sample result
if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 5 outside QC limits.

Analyst E.D. 8/7/96

Reviewed 

**LAB QA/QC
EPA METHOD 8270
MATRIX SPIKE**

Date Analyzed: 07/26/96
Lab ID: 0596H05754 SK1
Matrix: Water
Date Extracted: 07/15/96

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spike Result (ug/L)	MS Recovery %	QC Limits Rec.
1,2,4-Trichlorobenzene	100	0	58	58	39 - 98
1,4-Dichlorobenzene	100	0	60	60	36 - 97
2,4-Dinitrotoluene	100	0	84	84	24 - 96
2-Chlorophenol	200	0	126	63	27 - 123
4-Chloro-3-methylphenol	200	0	160	80	23 - 97
4-Nitrophenol	200	0	125	63	10 - 80
Acenaphthene	100	0	70	70	46 - 118
N-Nitrosodi-n-propylamine	100	0	116	116	41 - 116
Pentachlorophenol	200	0	125	63	9 - 103
Phenol	200	0	102	51	12 - 89
Pyrene	100	0	61	61	26 - 127

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	69	10 - 123
2-Fluorobiphenyl	66	43 - 116
2-Fluorophenol	50	21 - 110
Nitrobenzene-d5	86	35 - 114
Phenol-d6	53	10 - 110
Terphenyl-d14	53	33 - 141

Note: Spike Recoveries are calculated using zero for Sample result if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 11 outside QC limits.

Analyst JS

Reviewed ST

**TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1**

Client: Williams Field Serv.
Project: Milagro Plant
Matrix: Water
Condition: Intact/Cool

Date Reported: 07/30/96
Date Sampled: 07/11/96
Date Received: 07/11/96
Date Extracted: 07/18/96
Date Analyzed: 07/18/96

N. Evap. Pond	0396W01325	* 108	5.0
W. Evap. Pond	0396W01326	* 69.8	5.0
S. Evap. Pond	0396W01327	* 61.6	5.0

ND - Analyte not detected at stated detection level.

References: **Method 418.1:** Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3510: Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.

Comments: *Samples were analyzed 07/18/96 and were over the calibration curve. Extract was discarded and there was no sample left to reanalyze. On 07/22/96 a 250mg/L point was analyzed to show that the calibration curve is in fact linear at this level so the data for these samples could be reported with confidence.

Analyst:

Reviewed:

TOTAL PETROLEUM HYDROCARBONS
Quality Assurance/Quality Control

Client: Williams Field Services
Project: Milagro Plant
Matrix: water
Condition: Intact/Cool

Date Reported: 07/30/96
Date Sampled: 07/11/96
Date Received: 07/11/96
Date Extracted: 07/18/96
Date Analyzed: 07/18/96

Duplicate Analysis

0396G01326	68.8	71.6	mg/L	4.0%
------------	------	------	------	------

Method Blank Analysis

Method Blank	ND	mg/L	1.0
--------------	----	------	-----

Spike Analysis

Method Blank	13.3	ND	12.5	106%	70-130%
--------------	------	----	------	------	---------

Known Analysis

QC	21.1	20.6	103%	70-130%
----	------	------	------	---------

References: Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3510: Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.

Analyst: alt

Reviewed: AB

CHAIN OF CUSTODY RECORD

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>SG INTERESTS</u> 5. Originating Site <u>FIELD LOCATION</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>345 CR 3500 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>S15-T33-R8W</u>	
9. Circle One: (A) All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

PRODUCED WATER MIXED WITH REFINED OIL

RECEIVED
JAN - 6 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 30 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MANAGER DATE: 1-6-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 334-6186

(This space for State Use)

APPROVED BY: Denny G. Feunt TITLE: Geologist DATE: 1/6/97

APPROVED BY: Ernie Buda TITLE: ~ DATE: ~

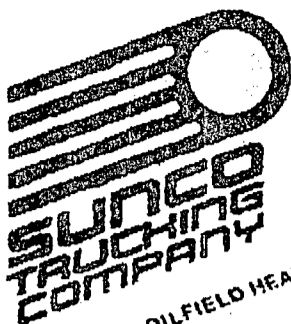
Jan. 3, 1996

Hal Stone
Sunco Trucking Co.

Appreciate your help on this. Attached is the supplied form and the MSDS sheets on the product. I'll be in the office Monday. Please call if you need any additional information. Thanks again Hal.

Dennis

Cover + 6



WATER AND OILFIELD HEAVY HAULING P.O. BOX 445, FARMINGTON, NM 87409 (505) 327-0416

" CERTIFICATE OF WASTE STATUS "

Originating Site: S15 T-33 R-8W 1/4 1/4 County LaPlata State Co.
Physical Address if appropriate: Just past mile marker 12 on Highway 318
west of Ignacio Colorado

Source and description of waste:

Bypass liquid from water pump. Includes approximately 80%
produced water and 20% 80 weight oil.

Destination: Sunco Diesel, 345 CR 3500, Aztec, San Juan Co. N.M.

I, Dennis R. Reimers representative
for SG Interests

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is X Exempt
Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required

The required documentation is hereto attached:

Check the appropriate line(s):

- ☒ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☐ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since

Signature Dennis R. Reimers
Printed Name Dennis R. Reimers
Title Engineering Manager
Date January 3, 1997



MATERIAL SAFETY DATA SHEET

MSDS NUMBER ▶ 264,040-4

PAGE 1

24 HOUR EMERGENCY ASSISTANCE		GENERAL MSDS ASSISTANCE	
SHELL: 713-473-0461 CHEMTREC: 800-424-9300		SHELL: 713-241-4819	
ACUTE HEALTH	FLAMMABLE	REACTIVITY	HAZARD RATING
+	1	0	HAZARD RATING ▶ LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4
*For acute and chronic health effects refer to the discussion in Section III			

BE SAFE
READ THIS PRODUCT
SAFETY INFORMATION
... AND
PASS IT ON
(PRODUCT LIABILITY LAW
REQUIRES IT)

SECTION I	NAME
PRODUCT ▶	SHELL SPIRAX(R) HEAVY DUTY 85W/140
CHEMICAL NAME ▶	MIXTURE (SEE SEC. IIIA)
CHEMICAL FAMILY ▶	PETROLEUM HYDROCARBON; GEAR OIL
SHELL CODE ▶	88212

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL SPIRAX HEAVY DUTY 85W/140	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED RESIDUAL OIL	64742-57-0	75-80
2	SOL. REF., HYDROTREATED, HEAVY PARAFFINIC DIST.	64742-84-7	0-10
3	SEVERELY HYDROTREATED HEAVY NAPHTHENIC DIST.	64742-82-5	0-20
4	ADDITIVE PACKAGE	MIXTURE	<10

SECTION II-B		ACUTE TOXICITY DATA	
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 4 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT
BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MINIMALLY IRRITATING TO THE EYE.

SKIN CONTACT
BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MILDLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT CAN RESULT IN VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE.

INHALATION
INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST FROM THIS PRODUCT MAY CAUSE MINOR IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

PRODUCT NAME: SHELL EPIRAX(R) HEAVY DUTY 88W/140 MSDS 888,000-4
PAGE 2

INGESTION
EATERS OF COMPONENT INFORMATION: THIS PRODUCT IS NOT TO BE EATEN. IT IS SLIGHTLY TOXIC IF SWALLOWED.
SIGNS AND SYMPTOMS
IRRITATION AS NOTED ABOVE.

AGGRAVATED MEDICAL CONDITIONS
PREEXISTING SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

SECTION IV OCCUPATIONAL EXPOSURE LIMITS					
NO.	PEL/TWA	OSHA	PEL/STEL	ACGIH	TLV/STEL
1	5 MG/M3	NONE	NONE	5 MG/M3	10 MG/M3
OIL MIST, MINERAL					

SECTION V EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT
FLUSH WITH WATER FOR 10 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

SKIN CONTACT
REMOVE CONTAMINATED CLOTHING AND Wipe EXCESS OFF. WASH WITH SOAP AND WATER OR A WATERLESS HAND CLEANER FOLLOWED BY SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

INHALE
REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION.

INGESTION
DO NOT INDUCE VOMITING. IN GENERAL NO TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES OF PRODUCT ARE INGESTED. HOWEVER, GET MEDICAL ADVICE.

NOTE TO PHYSICIAN
IN GENERAL, EMESIS INDUCTION IS UNNECESSARY IN HIGH VISCOSITY, LOW VOLATILITY PRODUCTS, I.E., MOST OILS AND GREASES.

SECTION VI SUPPLEMENTAL HEALTH INFORMATION

NONE IDENTIFIED.

SECTION VII PHYSICAL DATA		
BOILING POINT: NOT AVAILABLE (DEG F)	SPECIFIC GRAVITY: 0.8084 (H2O=1)	VAPOR PRESSURE: NOT AVAILABLE (MM HG)
MELTING POINT: -15 (POUR POINT) (DEG F)	SOLUBILITY: NEGLIGIBLE (IN WATER)	VAPOR DENSITY: NOT AVAILABLE (AIR=1)

PRODUCT NAME: SHELL SPIRAX(R) HEAVY DUTY 68H/140

MSDS 004.040-4
PAGE 3

EVAPORATION RATE (N-BUTYL ACETATE = 1): NOT AVAILABLE

VIS. C5
(40 DEG C):380APPEARANCE AND ODDR:
BROWN LIQUID. SLIGHT HYDROCARBON ODDR.-----
SECTION VIII FIRE AND EXPLOSION HAZARDS
-----FLASH POINT AND METHOD:
425 DEG F (PMCC)FLAMMABLE LIMITS % VOLUME IN AIR
LOWER: N/AV UPPER: N/AVEXTINGUISHING MEDIA
USE WATER FOG, FOAM, DRY CHEMICAL OR CO₂. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS
MATERIAL WILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONTAINED FIRE-SPACE WITHOUT FULL BURNER GEAR (HELMET WITH FACE SHIELD, BURNER COATS, GLOVES AND RUBBER BOOTS) INCLUDING A POSITIVE-PRESSURE HIGH-APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.-----
SECTION IX REACTIVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:
AVOID HEAT, OPEN FLAMES AND OXIDIZING MATERIALS.HAZARDOUS DECOMPOSITION PRODUCTS
THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID, PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.-----
SECTION X EMPLOYEE PROTECTION
-----RESPIRATORY PROTECTION
IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SECTION IV) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS AND PARTICULATES.PROTECTIVE CLOTHING
WEAR CHEMICAL RESISTANT GLOVES AND OTHER PROTECTIVE CLOTHING AS REQUIRED TO MINIMIZE SKIN CONTACT. WEAR SAFETY GOGGLES TO AVOID EYE CONTACT. TEST DATA FROM PUBLISHED LITERATURE AND/OR GLOVE AND CLOTHING MANUFACTURERS INDICATE THE BEST PROTECTION IS PROVIDED BY NITRILE GLOVES.-----
SECTION XI ENVIRONMENTAL PROTECTION
-----SPILL OR LEAK PROCEDURES
MAY BURN ALTHOUGH NOT READILY IGNITABLE. USE CAUTIOUS JUDGMENT WHEN CLEANING UP LARGE SPILLS. *** LARGE SPILLS *** WEAR RESPIRATOR AND PROTECTIVE CLOTHING AS APPROPRIATE. SHUT OFF SOURCE OF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ADSORBENT SUCH AS CLAY, SAND, OR OTHER SUITABLE MATERIALS; DISPOSE OF PROPERLY. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE. *** SMALL SPILLS *** TAKE UP WITH AN ADSORBENT MATERIAL AND DISPOSE OF PROPERLY.



ENVIRONMENTAL DATA SHEET

EDS NUMBER ▶ 864.040-2

PAGE 1

37443 (8-97)

PRODUCT ▶	SHELL SPIRAX(R) HEAVY DUTY 85W/140
PRODUCT CODE ▶	59212

SECTION I		PRODUCT/COMPOSITION	
NO.	COMPONENT	CAS NUMBER	PERCENT
P	SHELL SPIRAX HEAVY DUTY 85W/140	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED RESIDUAL OIL	64742-57-0	75-80
2	SOL. REF., HYDROTREATED, HEAVY PARAFFINIC DIST.	64742-54-7	0-10
3	SEVERELY HYDROTREATED HEAVY NAPHTHENIC DIST.	64742-52-5	0-20
4	ADDITIVE PACKAGE	MIXTURE	<10

SECTION II		SARA TITLE III INFORMATION			
NO.	EMS RG (LBS) (*1)	EMS TPQ (LBS) (*2)	SEC 313 (*3)	313 CATEGORY (*4)	311/312 CATEGORIES (*5)

BASED ON THE DATA AVAILABLE TO SHELL THIS PRODUCT IS NOT REGULATED BY SARA, TITLE III

FOOTNOTES

- *1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC.302
- *2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC 302
- *3 = TOXIC CHEMICAL, SEC 313
- *4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.85 C), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
- *5 = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING
 - HEALTH H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD H-2 = DELAYED (CHRONIC) HEALTH HAZARD
 - PHYSICAL P-3 = FIRE HAZARD P-4 = SUDDEN RELEASE OF PRESSURE HAZARD
 - P-5 = REACTIVE HAZARD

SECTION III ENVIRONMENTAL RELEASE INFORMATION

THIS PRODUCT IS CLASSIFIED AS AN OIL UNDER SECTION 311 OF THE CLEAN WATER ACT. SPILLS ENTERING (A) SURFACE WATERS OR (B) ANY WATER COURSES OR SEWERS ENTERING/LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER. 800-424-8802.

SECTION IV RCRA INFORMATION

PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH LOCAL REGULATIONS

TEL: 1-505-525-8222

FRALEY & CO., INC.

PRODUCT NAME: SHELL SPIRAX(R) HEAVY DUTY 85W/140

SSE 804,040,000
PAGE 2

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

DATE PREPARED: MARCH 22, 1990

SHELL OIL COMPANY
SAFETY, INDUSTRIAL HYGIENE AND ENVIRONMENT
P. O. BOX 4220
HOUSTON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(713) 241-2282

FOR EMERGENCY ASSISTANCE PLEASE CALL
SHELL: (713) 479-9481
CHEMTREC: (800) 424-9300

90' 100' ON ST: 15:18 NO. 001 P. 06
JAN 03 97 17:20

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

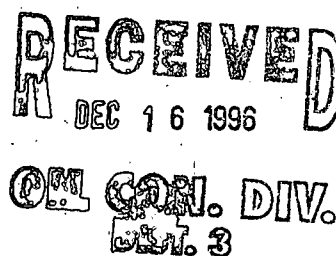
Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>Phillips Petroleum</u> 5. Originating Site <u>Field Locations</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#345 CR 3500, AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
9. <u>Circle One</u> : <input checked="" type="radio"/> 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 type="radio"/> 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:

CORROSION INHIBITER MIXED WITH DIESEL FUEL
AND ASSOCIATED FLOWBACK FLUIDS

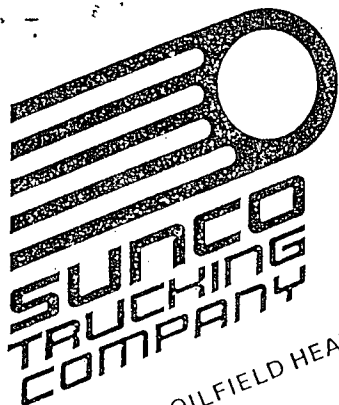


Estimated Volume 876 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

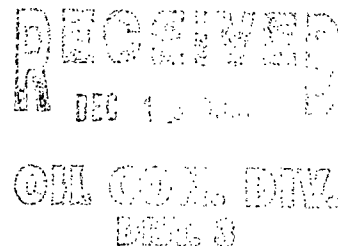
SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 12-16-96
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Font TITLE: Geologist DATE: 12/16/96
APPROVED BY: [Signature] TITLE: Dist Sum. DATE: 12/16/96



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416



" CERTIFICATE OF WASTE STATUS "

Originating Site: S-9 T-31R-8 1/4_{se}1/4_{ne} County San Juan, State NM
Physical Address if appropriate: _____

Source and description of waste:

15 bbls Tretolite CGO 118F

Corrosion Inhibitor mixed with equal

amount of diesel used to treat casing,

tubing, related equipment and lines.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is x Exempt
Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

MSDS Information sheet

RCRA TCLP Analysis

RCRA Metals Analysis

Corrosivity, Ignitability, Reactivity

x I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature Richard Allred

Printed Name Richard Allred

Title Production/Rig Supervisor

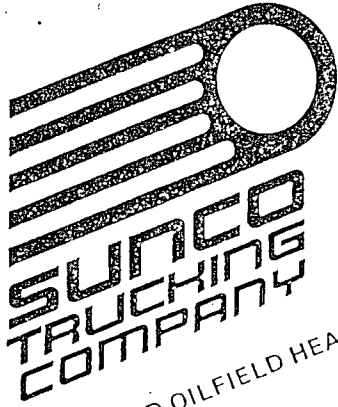
Date 12-13-96

ATTACHMENT: List of wells that flow into this CDP.

UNIT 32-8 CDP #3

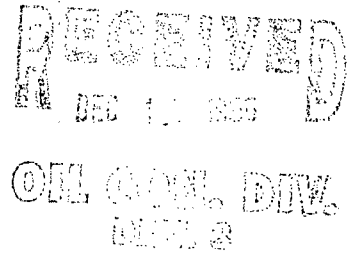
UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #3 32-8			09/15/92		C65044-00
S. J. 32-8	221	06/04/93	06/04/93	SW 09-31N-8W	C65044-01
S. J. 32-8	222	06/04/93	06/04/93	NE 09-31N-8W	C65044-02
S. J. 32-8	223	02/23/93	02/23/93	SW 10-31N-8W	C65044-03
S. J. 32-8	224	03/14/91	09/15/92	NE 10-31N-8W	C65044-04
S. J. 32-8	225	11/04/92	11/04/92	SW 15-31N-8W	C65044-05
S. J. 32-8	226	02/10/93	03/20/94	NE 15-31N-8W	C65044-06
S. J. 32-8	227	02/05/93	02/05/93	SW 16-31N-8W	C65044-07
S. J. 32-8	228	11/20/92	11/20/92	NE 16-31N-8W	C65044-08
* S. J. 32-8	234	11/03/92	11/03/92	SW 21-31N-8W	C65044-09
S. J. 32-8	235	05/21/93	05/21/93	NE 21-31N-8W	C65044-10
S. J. 32-8	240	12/17/91	09/15/92	SW 03-31N-8W	C65044-11
S. J. 32-8	241	10/17/91	09/15/92	NE 04-31N-8W	C65044-12
S. J. 32-8	242	11/02/92	11/02/92	SW 04-31N-8W	C65044-13
S. J. 32-8	243	02/26/93	02/26/93	SW 11-31N-8W	C65044-14
S. J. 32-8	248	02/26/93	02/26/93	NE 11-31N-8W	C65044-15
S. J. 32-8	249	06/30/93	06/30/93	NE 03-31N-8W	C65044-16
S. J. 32-8	250	01/22/92	09/15/92	SW 33-32N-8W	C65044-17

- * CHECK METER - PRODUCING THRU EL PASO LINE TRUNK "O", METER 97999 - 12/24/95
 * BACK TO CDP EFFECTIVE 11/01/96, NO LONGER CHECK METER



WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416



" CERTIFICATE OF WASTE STATUS "

San Juan,
Originating Site: S-27T-32 R-8 1/4 Se 1/4 ne County _____ State NM
Physical Address if appropriate: _____

Source and description of waste:

15 bbls Tretolite CGO 118F
Corrosion Inhibitor mixed with equal
amount of Diesel used to treat casing,
tubing, related equipment and lines.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Co.

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

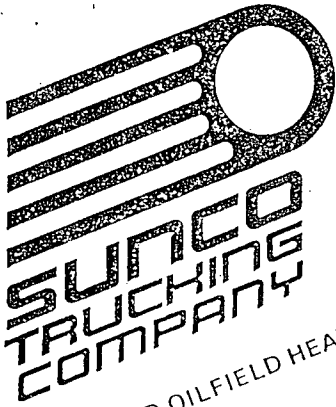
- ☐ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☒ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature [Signature]
Printed Name Richard Allred
Title Production/Rig Supervisor
Date 12-13-96

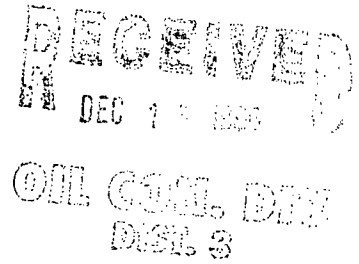
ATTACHMENT: List of wells that flow into this CDP.

UNIT 32-8 CDP #2

UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #2 32-8			07/21/92		B65044-00
S. J. 32-8	202	03/11/91	07/21/92	SW 27-32N-8W	B65044-01
					B65044-02
S. J. 32-8	208	05/01/90	07/21/92	SW 29-32N-8W	B65044-03
S. J. 32-8	230	01/16/92	07/21/92	NE 28-32N-8W	B65044-04
S. J. 32-8	231	10/18/91	07/21/92	SW 28-32N-8W	B65044-05
S. J. 32-8	232	08/27/91	07/21/92	NE 29-32N-8W	B65044-06
S. J. 32-8	233	01/09/92	08/11/93	NE 30-32N-8W	B65044-07
S. J. 32-8	239	10/10/91	08/11/93	SW 30-32N-8W	B65044-08
S. J. 32-8	203	07/06/93	07/06/93	NE 33-32N-8W	B65044-09
S. J. 32-8	204	07/07/93	07/07/93	SW 34-32N-8W	B65044-10
S. J. 32-8	205	07/16/93	07/16/93	NE 34-32N-8W	B65044-11
S. J. 32-8	218	07/12/93	07/12/93	NE 35-32N-8W	B65044-12
S. J. 32-8	219	07/12/93	07/12/93	SW 35-32N-8W	B65044-13



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416



" CERTIFICATE OF WASTE STATUS "

Originating Site: S-14 T-31 R- 8 1/4 sw 1/4 se County San Juan, State NM
Physical Address if appropriate: _____

Source and description of waste:

4 bbls Tretolite CGO 118F

Corrosion Inhibitor mixed with equal
amount of diesel used to treat casing,
tubing, related equipment and lines.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is X Exempt
Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

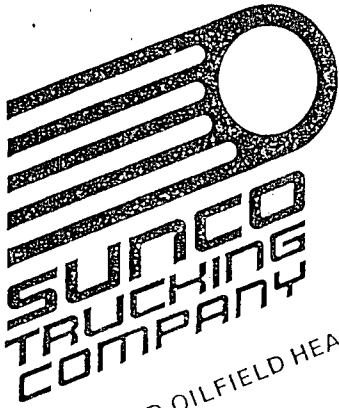
- ☐ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☒ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature R A Allred
Printed Name Richard Allred
Title Production/Rig Supervisor
Date 12-13-96

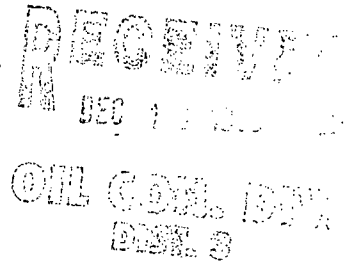
ATTACHMENT: List of wells that flow into this CDP.

UNIT 32-8 CDP #1

UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #1 32-8			08/07/92		A65044-00
BLANCO	201	05/30/90	08/07/92	SW 35-31N-8W	A65044-01
BLANCO	202	08/28/91	08/07/92	NE 26-31N-8W	A65044-02
BLANCO	203	08/28/91	08/07/92	NE 35-31N-8W	A65044-03
BLANCO	204 R	01/22/93	01/22/93	SW 26-31N-8W	A65044-14
S. J. 32-8	207	05/30/90	09/29/92	SW 22-31N-8W	A65044-05
S. J. 32-8	220	11/22/90	08/12/92	SW 24-31N-8W	A65044-06
S. J. 32-8	236	08/14/92	08/14/92	NE 22-31N-8W	A65044-07
S. J. 32-8	237	07/04/91	08/07/92	NE 23-31N-8W	A65044-08
S. J. 32-8	238	03/13/91	08/07/92	SW 23-31N-8W	A65044-09
S. J. 32-8	244	02/02/93	02/02/93	NE 14-31N-8W	A65044-10
S. J. 32-8	245	10/30/92	10/30/92	SW 14-31N-8W	A65044-11
S. J. 32-7	227 COM	03/11/91	08/07/92	SW 18-31N-7W	A65044-12
S. J. 32-8	206	09/09/92	09/09/92	NE 24-31N-8W	A65044-13



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416



" CERTIFICATE OF WASTE STATUS "

Originating Site: S-34 T-32R-7 1/4_{sw} 1/4_{sw} County San Juan, State NM
Physical Address if appropriate: _____

Source and description of waste:

46 bbls Tretolite CGO 118F

Corrosion Inhibitor mixed with equal
amount of diesel used to treat casing,
tubing, related equipment and lines.

Destination : Sunco Disposal , 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is x Exempt
Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

MSDS Information sheet

RCRA TCLP Analysis

RCRA Metals Analysis

Corrosivity, Ignitability , Reactivity

x I futher certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature R A Allred

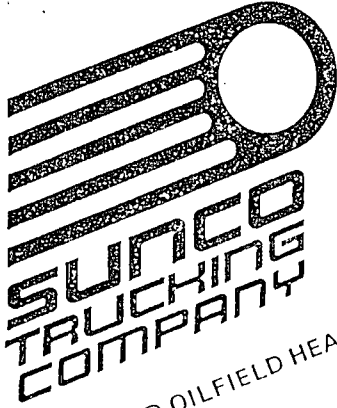
Printed Name Richard Allred

Title Production/Rig Supervisor

Date 12-13-96

ATTACHMENT: List of wells that flow to this CDP.

UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #1 32-7					A65043-00
S. J. 32-7	203	01/11/90	--	NE 22-32N-7W	A65043-01
S. J. 32-7	204	01/23/90	11/10/92	NE 36-32N-7W	A65043-02
S. J. 32-7	207	09/25/91	11/10/92	SW 27-32N-7W	A65043-03
S. J. 32-7	208	10/08/91	11/10/92	NE 34-32N-7W	A65043-04
S. J. 32-7	209	03/22/91	11/10/92	NE 35-32N-7W	A65043-05
S. J. 32-7	211	04/14/93	04/14/93	SW 35-32N-7W	A65043-06
S. J. 32-7	213 COM	09/26/91	09/30/92	SE 07-31N-7W	A65043-07
S. J. 32-7	214	10/08/91	09/30/92	SW 34-32N-7W	A65043-08
S. J. 32-7	217	08/28/91	09/30/92	NE 04-31N-7W	A65043-09
S. J. 32-7	218	10/08/91	09/30/92	SW 05-31N-7W	A65043-10
S. J. 32-7	219	08/28/91	09/30/92	NE 05-31N-7W	A65043-11
S. J. 32-7	221	09/24/91	09/30/92	NE 08-31N-7W	A65043-12
S. J. 32-7	229	04/22/92	09/30/92	NE 09-31N-7W	A65043-13
S. J. 32-7	231	01/06/92	09/30/92	SW 17-31N-7W	A65043-14
S. J. 32-7	232	04/14/93	04/14/93	SW 08-31N-7W	A65043-15
S. J. 32-7	216	01/20/93	01/20/93	SW 04-31N-7W	A65043-16
S. J. 32-7	224 COM	01/26/93	01/26/93	SW 21-32N-7W	A65043-17
S. J. 32-7	234	01/19/93	01/19/93	NE 32-32N-7W	A65043-18
S. J. 32-7	235	01/19/93	01/19/93	SW 29-32N-7W	A65043-19
S. J. 32-7	222	01/26/93	01/26/93	NE 20-32N-7W	A65043-20
S. J. 32-7	233	09/03/93	09/03/93	SW 20-32N-7W	A65043-21
S. J. 32-7	236	09/10/93	09/10/93	SW 28-32N-7W	A65043-22
S. J. 32-7	237	09/08/93	09/08/93	NE 28-32N-7W	A65043-23
S. J. 32-7	238	09/08/93	09/08/93	NE 29-32N-7W	A65043-24
S. J. 32-7	215	08/19/91	06/23/93	SW 32-32N-7W	A65043-25



WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

RECEIVED
DEC 13 1996

OIL CON. DIV.
DIST. 2

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-1 T-30 R-6 1/4 SW 1/4 EW County _____ State NM Rio Arriba,
Physical Address if appropriate: _____

Source and description of waste:

15 bbls Tretolite CGO 118F

Corrosion inhibitor mixed with equal
amount of Diesel used to treat casing,
tubing, related equipment and lines.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is X Exempt
_____ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

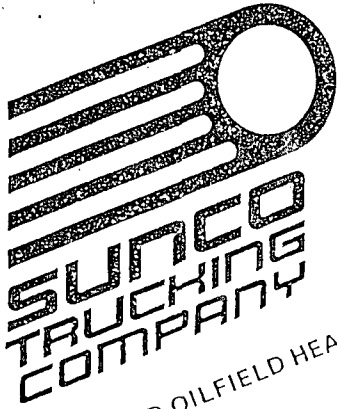
- ___ MSDS Information sheet
- ___ RCRA TCLP Analysis
- ___ RCRA Metals Analysis
- ___ Corrosivity, Ignitability, Reactivity

X I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature Richard Allred
Printed Name Richard Allred
Title Production/Rig Supervisor
Date 12-13-96

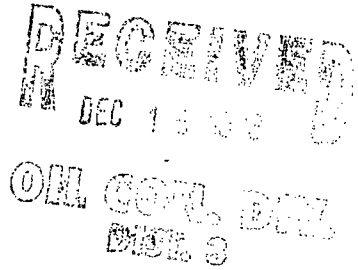
ATTACHMENT: List of wells that flow into this CDP.

UNIT	WELL #	FIRS DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #1 31-6			09/23/92		A65039-00
CDP #1 31-6			09/23/92		A65039-99
S. J. 30-5	202	03/08/90	09/23/92	NE 06-30N-5W	A65039-01
S. J. 30-5	203	07/28/90	09/23/92	SW 06-30N-5W	A65039-02
S. J. 30-5	204	01/15/92	09/23/92	NE 07-30N-5W	A65039-03
S. J. 31-6	231	01/10/92	11/17/92	SW 27-31N-6W	A65039-04
S. J. 31-6	233	07/10/91	11/24/92	NE 29-31N-6W	A65039-05
S. J. 30-5	215	02/06/91	09/23/92	NE 08-30N-5W	A65039-07
S. J. 30-5	205	09/24/93	09/24/93	SW 07-30N-6W	A65039-08
S. J. 31-6	201	02/23/90	09/23/92	NE 01-30N-6W	A65039-09
S. J. 31-6	202	01/19/90	09/23/92	SW 01-30N-6W	A65039-10
S. J. 31-6	203	09/28/89	11/06/92	NE 03-30N-6W	A65039-11
S. J. 31-6	204	10/09/89	10/21/92	SW 03-30N-6W	A65039-12
S. J. 31-6	205	10/09/89	11/06/92	NE 04-30N-6W	A65039-13
S. J. 31-6	206	10/10/89	10/21/92	SW 04-30N-6W	A65039-14
S. J. 31-6	207	10/25/89	09/23/92	NE 06-30N-6W	A65039-15
S. J. 31-6	210	08/26/91	09/23/92	NE 02-30N-6W	A65039-16
S. J. 31-6	211	12/30/89	09/23/92	SW 02-30N-6W	A65039-17
S. J. 31-6	212	11/15/90	11/05/92	NE 05-30N-6W	A65039-18
S. J. 31-6	213	03/14/90	06/28/93	SW 05-30N-6W	A65039-19
S. J. 31-6	214	01/22/91	09/23/92	NE 36-31N-6W	A65039-20
S. J. 31-6	215	03/06/91	09/23/92	SW 36-31N-6W	A65039-21
S. J. 31-6	216	01/17/91	09/23/92	NE 35-31N-6W	A65039-22
S. J. 31-6	217	08/23/91	09/23/92	SW 35-31N-62	A65039-23
S. J. 31-6	218	10/22/91	09/23/92	NE 34-31N-6W	A65039-24
S. J. 31-6	219	03/07/91	09/23/92	SW 34-31N-6W	A65039-25
S. J. 31-6	220	01/14/92	11/06/92	NE 33-31N-6W	A65039-26
S. J. 31-6	221	08/26/91	11/05/92	SW 33-31N-6W	A65039-27
S. J. 31-6	222	01/21/92	11/23/92	NE 32-31N-6W	A65039-28
S. J. 31-6	223	08/21/90	11/06/92	SW 32-31N-6W	A65039-29
S. J. 31-6	224	09/19/91	11/05/92	NE 31-31N-6W	A65039-30
S. J. 31-6	225R	09/18/91	10/05/92	SW 31-31N-6W	A65039-31
S. J. 31-6	228	11/13/92	11/13/92	NE 28-31N-6W	A65039-32
S. J. 31-6	229	11/11/92	11/11/92	SW 28-31N-6W	A65039-33
S. J. 31-6	230	03/22/90	11/06/92	NE 27-31N-6W	A65039-34
S. J. 31-6	234R	06/23/95	06/23/95	SW 29-31N-6W	A65039-35



WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416



" CERTIFICATE OF WASTE STATUS "

Originating Site: S-18 T-30R-5 1/4nw1/4sw County _____ State NM
Physical Address if appropriate: _____

Source and description of waste:

77 bbls Tretolite CGO 118F

Corrosion Inhibitor mixed with equal

amount of diesel used to treat casing,
tubing, related equipment and lines.

Destination : Sunco Disposal , 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is x Exempt
_____ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

___ MSDS Information sheet

___ RCRA TCLP Analysis

___ RCRA Metals Analysis

___ Corrosivity, Ignitability , Reactivity

x I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature Richard Allred

Printed Name Richard Allred

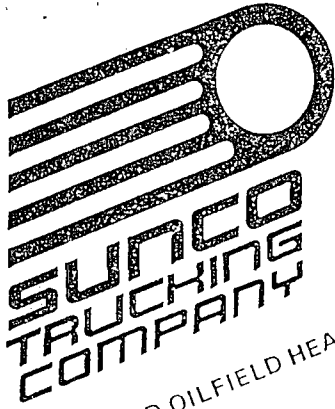
Title Production/Rig Supervisor

Date 12-13-96

ATTACHMENT: List of wells that flow into this CDP.

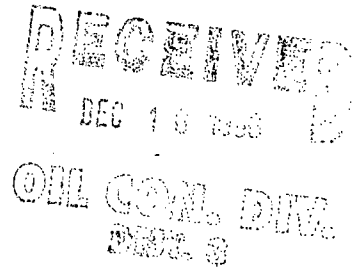
UNIT 30-5 CDP #1

UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #1 30-5			07/07/92		A65038-00
CDP #1 30-5			02/16/94		A65038-99
S. J. 30-5	201	02/09/90	11/23/92	SW 19-30N-5W	A65038-01
S. J. 30-5	206	10/07/91	07/07/92	NE 18-30N-5W	A65038-02
S. J. 30-5	207	01/15/92	07/07/92	SW 18-30N-5W	A65038-03
S. J. 30-5	208	03/08/91	07/07/92	NE 19-30N-5W	A65038-04
S. J. 30-5	209	06/27/90	08/13/92	NE 30-30N-5W	A65038-05
S. J. 30-5	217	01/19/91	07/07/92	SW 21-30N-5W	A65038-07
S. J. 30-5	218	02/20/91	07/07/92	NE 17-30N-5W	A65038-08
S. J. 30-5	219	05/23/91	07/07/92	SW 16-30N-5W	A65038-09
S. J. 30-5	223	01/29/93	01/29/93	NE 20-30N-5W	A65038-10
S. J. 30-5	224	07/10/91	07/07/92	SW 17-30N-5W	A65038-11
S. J. 30-5	225	06/01/93	06/01/93	NE 29-30N-5W	A65038-16
S. J. 30-5	226	06/17/91	07/07/92	SW 29-30N-5W	A65038-12
S. J. 30-5	227	05/23/91	07/07/92	NE 28-30N-5W	A65038-13
S. J. 30-5	229	05/20/91	07/07/92	NE 21-30N-5W	A65038-14
S. J. 30-5	230	07/21/92	07/21/92	NE 32-30N-5W	A65038-15
S. J. 30-5	236	10/18/93	10/18/93	SW 27-30N-5W	A65038-17
S. J. 30-5	228	06/01/93	06/01/93	SW 28-30N-5W	A65038-18
S. J. 30-5	234	10/19/93	10/19/93	SW 22-30N-5W	A65038-19
S. J. 30-5	235	10/18/93	10/18/93	NE 07-30N-5W	A65038-20
S. J. 30-5	237	06/02/93	06/02/93	NE 16-30N-5W	A65038-21
S. J. 30-5	238	10/18/93	10/18/93	NW 34-30N-5W	A65038-22
S. J. 30-5	240	10/18/93	10/18/93	NE 22-30N-5W	A65038-23
S. J. 30-5	241	10/19/93	10/19/93	SW 23-30N-5W	A65038-24
S. J. 30-5	242	10/15/93	10/15/93	SW 34-30N-5W	A65038-25
S. J. 30-5	232	12/13/93	12/13/93	NE 33-30N-5W	A65038-26
S. J. 30-5	246	12/21/93	12/21/93	SW 26-30N-5W	A65038-27
S. J. 30-5	239	01/11/94	01/11/94	SW 15-30N-5W	A65038-28
S. J. 30-5	216R	12/29/93	12/29/93	SW 20-30N-5W	A65038-29
S. J. 30-5	210	05/30/91	05/10/96	SW 30-30N-5W	A65010-01



WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416



" CERTIFICATE OF WASTE STATUS "

Originating Site: S-19T-29 R-6 1/4 se 1/4 se County Rio Arriba State NM
Physical Address if appropriate: _____

Source and description of waste:

125 bbls Tretolite CGO 118F
Corrosion Inhibitor mixed with equal
amount of diesel used to treat casing,
tubing, related equipment and lines.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is x Exempt
Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

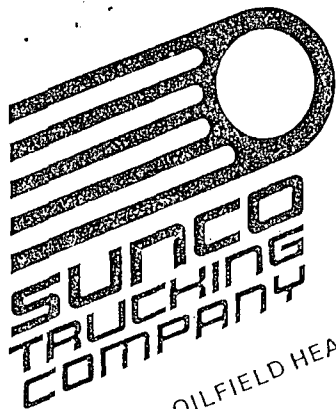
- ☐ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☒ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature Richard Allred
Printed Name Richard Allred
Title Production/Rig Supervisor
Date 12-13-96

ATTACHMENT: List of wells that flow into the CDP.

UNIT 29-6 CDP #4

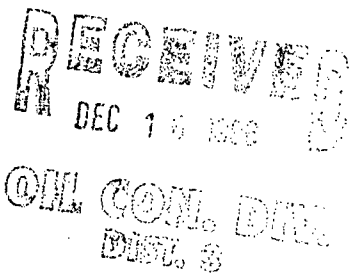
UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #4 29-6			05/11/93		D65037-00
CDP #4 29-6			05/11/93		D65037-99
S. J. 29-6	203	05/14/93	05/14/93	SW 07-29N-6W	D65037-01
S. J. 29-6	205	05/11/93	05/11/93	SW 21-29N-6W	D65037-02
S. J. 29-6	208	03/30/90	05/11/93	SW 17-29N-6W	D65037-03
S. J. 29-6	209	03/30/90	05/11/93	NE 17-29N-6W	D65037-04
S. J. 29-6	210	05/19/93	05/19/93	SW 20-29N-6W	D65037-05
S. J. 29-6	211	05/19/93	05/19/93	NE 20-29N-6W	D65037-06
S. J. 29-6	236	05/18/93	05/18/93	SW 18-29N-6W	D65037-07
S. J. 29-6	240	05/18/93	05/18/93	NE 18-29N-6W	D65037-08
S. J. 29-6	241	05/18/93	05/18/93	NE 19-29N-6W	D65037-09
S. J. 29-6	242	05/18/93	05/18/93	SW 19-29N-6W	D65037-10
S. J. 29-6	246	05/12/93	05/12/93	SW 08-29N-6W	D65037-11
S. J. 29-6	258	06/21/91	05/11/93	SW 16-29N-6W	D65037-12
S. J. 29-6	262	05/11/93	05/11/93	NE 21-29N-6W	D65037-13
S. J. 29-6	260	05/12/93	05/12/93	NE 16-29N-6W	D65037-14



WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

S.J. 29-6 #3 CDP
Water Tank



" CERTIFICATE OF WASTE STATUS "

Rio Arriba,

Originating Site: S-14T-29 R-6 1/4 nw1/4 ne County _____ State NM
Physical Address if appropriate: _____

Source and description of waste:

5 bbls Tretolit CGO 118F
Corrosion Inhibitor mixed with equal
amount of diesel used to treat casing,
tubing, related equipment and lines.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is x Exempt
_____ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

___ MSDS Information sheet

___ RCRA TCLP Analysis

___ RCRA Metals Analysis

___ Corrosivity, Ignitability, Reactivity

x I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature

Printed Name Richard Allred

Title Production/Rig Supervisor

Date 12-13-96

ATTACHMENT: List of wells that flow into this CDP.

UNIT 29-6 CDP #3

UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #3 29-6			05/07/93		C65037-00
					C65037-01
S. J. 29-6	226	05/07/93	05/07/93	NE 14-29N-6W	C65037-02
					C65037-03
					C65037-04



WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87499

(505) 327-0416

J. 29-6 #1 CDP
ater Tank

RECEIVED
DEC 16 1996

OIL CON. DIV.
DIST. 3

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-4 T-29 R-6 1/4_{SW} 1/4_{NE} County Rio Arriba State NM
Physical Address if appropriate: _____

Source and description of waste:

50 bbls Tretolite CGO 118F

Corrosion Inhibitor mixed with equal

amount of Diesel used to treat casing,

tubing, related equipment and lines.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Richard Allred representative
for Phillips Petroleum Co.

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

☐ MSDS Information sheet

☐ RCRA TCLP Analysis

☐ RCRA Metals Analysis

☐ Corrosivity, Ignitability, Reactivity

☒ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since 1993

Signature

Printed Name Richard Allred

Title Production/Rig Supervisor

Date 12-13-96

Attachment: List of wells that flow to this CPD.

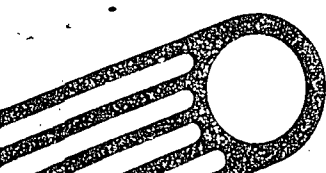
UNIT 29-6 CDP #1

UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #1 29-6			04/07/93		A65037-00
S. J. 29-6	201	12/06/90	11/01/96	NE 06-29N-6W	A65037-01
S. J. 29-6	202 C	08/10/93	08/10/93	SW 06-29N-6W	A65037-02
S. J. 29-6	204 C	07/28/93	07/28/93	NE 07-29N-6W	A65037-03
* S. J. 29-6	206	03/21/90	04/07/93	NE 04-29N-6W	A65037-04
* S. J. 29-6	216	05/22/90	04/07/93	SW 04-29N-6W	A65037-05
S. J. 29-6	217	08/28/90	04/07/93	NE 05-29N-6W	A65037-06
S. J. 29-6	218	08/15/90	05/29/96	SW 05-29N-6W	A65037-07
S. J. 29-6	245	07/09/91	05/29/96	NE 08-29N-6W	A65037-08
S. J. 29-6	202 T		12/08/95	SW 06-29N-6W	A65037-09
* S. J. 29-6	259	07/02/93	07/02/93	NE 09-29N-6W	A65037-10
S. J. 29-6	257 R	12/15/94	12/15/94	SW 10-29N-6W	A65037-11
S. J. 29-6	204 T		12/08/95	NE 07-29N-6W	A65037-12
S. J. 29-6	218	DISC.	12/08/95	SW 05-29N-6W	A65037-13

Well # C = producing thru casing

Well # T = producing thru tubing

* These wells are currently flowing to the 29-6 #2 CDP, effective 3/14/96.



**SUNCO
TRUCKING
COMPANY**

WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

" CERTIFICATE OF WASTE STATUS "

Rio Arriba

RECEIVED
DEC 16 1996
OIL CON. DIV.
DIST. 3

Rio Arriba

Source and description of waste:

Corrosion inhibitor mixed with equal

amount of diesel used to treat casing,

tubing, related equipment and lines.

I, Richard Allred representative
for Phillips Petroleum Co.

The required documentation is hereto attached:

Check the appropriate line(s):

MSDS Information sheet

RCRA TCLP Analysis

RCRA Metals Analysis

Corrosivity, Ignitability, Reactivity

X I further certify that there has been no change in the process employed or chemicals stored / used at the facility generating the waste since 1993

Signature

Printed Name Richard Allred

Title Production/Rig Supervisor

Date 12-13-96

ATTACHMENT: List of wells that flow into this CDP.

UNIT 29-6 CDP #2

UNIT	WELL #	FIRST DELIVERY DATE	MANZANARES CONNECT DATE	LOCATION	STATION #
CDP #2 29-6			12/29/92		B65037-00
S. J. 29-5	203	04/05/90	12/29/92	NE 06-29N-5W	B65037-01
S. J. 29-6	207	03/08/90	12/29/92	SW 02-29N-6W	B65037-02
S. J. 29-6	214	05/03/90	12/29/92	NE 03-29N-6W	B65037-03
S. J. 29-6	215	06/18/90	12/29/92	SW 03-29N-6W	B65037-04
S. J. 29-6	219	05/03/90	12/29/92	NE 10-29N-6W	B65037-05
S. J. 29-6	220	07/28/90	12/29/92	NE 11-29N-6W	B65037-06
S. J. 29-6	221	06/20/90	12/29/92	SW 11-29N-6W	B65037-07
S. J. 29-6	222	10/03/91	12/29/92	NE 12-29N-6W	B65037-08
S. J. 29-6	223	07/12/90	12/29/92	SW 12-29N-6W	B65037-09
S. J. 29-6	224	06/25/91	04/16/93	NE 13-29N-6W	B65037-10
S. J. 29-6	237	05/21/91	12/29/92	NE 01-29N-6W	B65037-11
S. J. 29-6	238	05/28/91	12/29/92	SW 01-29N-6W	B65037-12
S. J. 29-6	239	05/29/91	12/29/92	NE 02-29N-6W	B65037-13
S. J. 30-5	211	05/24/91	12/31/92	NE 31-30N-5W	B65037-14
S. J. 30-5	212	09/17/90	12/29/92	SW 31-30N-5W	B65037-15
S. J. 30-5	231	06/08/93	06/08/93	SW 32-30N-5W	B65037-16
S. J. 29-5	219	05/25/93	05/25/93	SW 04-29N-5W	B65037-17
S. J. 29-5	225	05/15/93	05/15/93	SW 06-29N-5W	B65037-18
S. J. 29-5	226	04/14/93	04/14/93	SW 07-29N-5W	B65037-19
S. J. 29-5	229	12/20/93	12/20/93	NE 07-29N-5W	B65037-20
S. J. 29-5	230	05/24/93	05/24/93	NE 05-29N-5W	B65037-21
S. J. 29-5	231	12/20/93	12/20/93	SW 05-29N-5W	B65037-22
S. J. 30-5	233	05/25/93	05/25/93	SW 33-30N-5W	B65037-23
S. J. 29-6	247 R	12/30/94	12/30/94	SW 10-29N-6W	B65037-24
* S. J. 29-6	206	03/21/90	04/07/93	NE 04-29N-6W	A65037-04S
* S. J. 29-6	216	05/22/90	04/07/93	SW 04-29N-6W	A65037-05S
* S. J. 29-6	259	07/02/93	07/02/93	NE 09-29N-6W	A65037-10S

* These wells were switched from the 29-6 #1 CDP to the 29-6 #2 CDP 3/14/96.

O. Box 1980
obbs, NM 88241-1980
District II - (505) 748-1283
1 S. First
District III - (505) 334-6178
1 Rio Brazos Road
District IV - (505) 827-7131

NEW Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated 8/87

Submit Origin
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Williams Field Service</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>GAS PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>345 CR 3500, AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>MILAGRO PLANT</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASTE WATER GENERATED AT MILAGRO PLANT (AMINE PLANT)

RECEIVED

DEC 03 1996

Environmental Bureau
Oil Conservation Division

RECEIVED

OIL CON. DIV.
DIST. 3

RECEIVED

NOV 27 1996

OIL CON. DIV.
DIST. 3

Estimated Volume 200,000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: Disposal mgr DATE: 11-27-96
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael Talovich TELEPHONE NO. 505 334-6186

(This space for State Use)

APPROVED BY: Dennis G. Faint TITLE: Geologist DATE: 11/27/96
APPROVED BY: Richard R. [Signature] TITLE: Petroleum Eng. Spec. DATE: 12/13/96



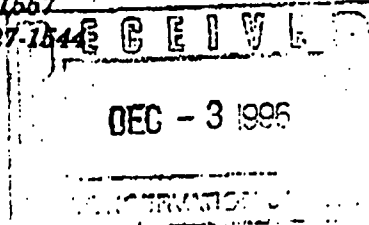
GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544



MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY



November 27, 1996

Mr. Patricio Sanchez
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Disposal of wastewater from the Milagro Plant GW-60

Dear Mr. Sanchez:

This is to follow up on our telephone conversation re: your request for a determination of whether or not wastewaters from the above referenced facility are hazardous waste. NMED has determined that even though the wastewater does contain hazardous constituents as documented in the waste analysis report from Inter-Mountain Laboratories, Inc. dated 08-01-96, this waste is considered non-hazardous under 40 CFR §261.4(b)(6)(i).

Please feel free to contact me should need additional information.

Sincerely,

James E. Seubert

James E. Seubert, Acting Program Manager
Hazardous and Radioactive Materials Bureau

xc: Leigh E. Gooding, Williams Field Services

FAX TO: HAL STONE - SHUCO TRUCKING
FROM: PATRICIO W. SANCHEZ - OCD

RECEIVED

DEC 03 1996

Environment & Energy
Oil Conservation Division

RECEIVED
DEC - 4 1996
OIL CON. DIV.
DIST. 3



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0418

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-12T-29R-11 1/4S-1/4SE County San Juan State NM
Physical Address if appropriate: 192 County Road 4900
Bloom Field, NM 87413

Source and description of waste:

Amine plant waste water. Contains approximately
6 to amine plus glycol, boiler blow down, wash
water, and glycol.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I Leigh Gooding representative
for Williams Field Services Company

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is Exempt

X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

- MSDS Information sheet
- RCRA TCLP Analysis
- RCRA Metals Analysis
- Corrosivity, Ignitability, Reactivity

X I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since July 1996

Signature Leigh Gooding
Printed Name Leigh Gooding
Title Sr. Environmental Specialist
Date 11/25/96

RECEIVED
NOV 27 1996

OIL CON. DIV.
DIST. 3

(Date of last analysis)



P.O. Box 58900 Salt Lake City, Utah 84158-0900

November 26, 1996

Mr. Patricio Sanchez
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Disposal of Wastewater From Milagro Plant GW-60

Dear Mr. Sanchez:



Enclosed, please find the representative analysis of wastewater generated at the Milagro Plant in Bloomfield, New Mexico. Based on process knowledge and the attached analysis, Williams Field Services maintains that the wastewater is non-hazardous. The chromium concentrations detected in the wastewater are a result of contact with the amine solution and stainless steel piping and vessels. The plant does not use and has never used chromium-containing chemicals in the process. The waste is generated from an industrial process which uses trivalent chromium exclusively and the process does not generate hexavalent chromium. Therefore, the waste is considered non-hazardous according to 40CFR Part 261.4 (b) (6) (I) (B).

Williams Field Services requests approval to dispose of this wastewater at Sunco's Class I Disposal Well. If you have any questions or need additional information, please do not hesitate to contact me at (801) 584-6543.

Sincerely,

Leigh E. Gooding
Sr. Environmental Specialist

cc: Mr. Denny Foust
Hal Stone, Sunco

WILLIAMS FIELD SERVICES 		# of pages 
Date: 11/26/96	From: Leigh Gooding	
To: Hal Stone	Co. Williams Field Services	
Co.	Phone #	
Fax # (505) 327-4762	Fax #	

295 Chipeta Way Salt Lake City, Utah 84108
(801) 584-7033

DELIVER TO MR. HAL STONE

FROM: OGD

STATE OF
NEW MEXICO
OIL
CONSERVATION
DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone☐ Personal

Time 7:45 AM

Date Nov. 27, 1996

Originating PartyOther Parties

Jim Seibert,

Pat Sanchez,

NMED HRMB

NMOCD

Subject

WFS - Milagro waste water - Gw-60

Regulatory Determination

"Letter / Analysis from WFS dated Nov. 26, 1996"

Discussion

Mr. Seibert agreed with the determination as cited by Ms. Geeding in the November 26, 1996 letter regarding - Disposal of Wastewater From Milagro Plant Gw-60"

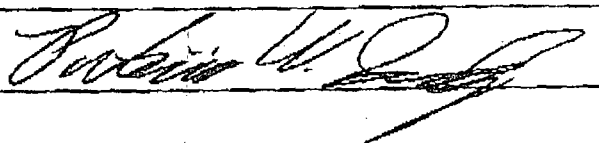
Mr. Seibert gave me a verbal approval, with a written correspondence to follow.

Conclusions or Agreements

① The wastewater per NMED, HRMB (Mr. Jim Seibert) is NON-HAZARDOUS in terms of RCRA SUBTITLE C Regulations.

Distribution File, Hal Stone,
Leigh Geeding

Signed





2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

12 August 1998

Leigh Gooding
Williams Field Service
P. O. Box 58900
Salt Lake City, UT 84158-0900

Ms. Gooding:

Enclosed please find the report for the samples received by our laboratory for analysis on July 11, 1998.

If you have any questions about the results of these analyses, please don't hesitate to call me at your convenience.

Sincerely,



Anna Schaefer
Organic Analyst/IML-Farmington

Enclosure

xc: File

2508 W. Main Street
Farmington, New Mexico 87401

Client: Williams Field Service
Project: Milagro Plant
Sample ID: North Evap Pond
Laboratory ID: 0396W01325
Sample Matrix: Water
Condition: Cool/Intact

Date Reported: 08/01/96
Date Sampled: 07/11/96
Time Sampled: 9:45 AM
Date Received: 07/11/96

Parameter	Analytical Result	Units	Units
Lab pH.....	9.8	s.u.	
Lab Conductivity @ 25° C.....	9,470	umhos/cm	
Lab Resistivity @ 25° C.....	0.11	ohm/m	
Total Dissolved Solids @ 180°C.....	13,300	mg/L	
Total Hardness as CaCO3.....	93.0	mg/L	
Total Alkalinity as CaCO3.....	43,300	mg/L	
Total Phosphorous.....	118	mg/L	
Bicarbonate as HCO3.....	2,300	mg/L	38.0 meq/L
Carbonate as CO3.....	24,800	mg/L	828 meq/L
Hydroxide as OH.....	<1.00	mg/L	<1.00 meq/L
Chloride.....	2,270	mg/L	84.0 meq/L
Sulfate.....	218	mg/L	4.54 meq/L
Nitrate.....	4.07	mg/L	0.29 meq/L
Calcium.....	18.8	mg/L	0.94 meq/L
Magnesium.....	11.2	mg/L	0.92 meq/L
Sodium.....	1,090	mg/L	47.3 meq/L
Potassium.....	56.3	mg/L	1.44 meq/L
Trace Metals (Total)			
Arsenic.....	<0.005	mg/L	
Barium.....	0.10	mg/L	
Cadmium.....	0.029	mg/L	
Chromium.....	21.1	mg/L	
Lead.....	0.069	mg/L	
Mercury.....	<0.001	mg/L	
Selenium.....	0.007	mg/L	
Silver.....	<0.01	mg/L	

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by LM

Reviewed by OB

2508 W. Main Street
Farmington, New Mexico 87401

Client: Williams Field Service
Project: Millagro Plant
Sample ID: West Evap Pond
Laboratory ID: 0398W01328
Sample Matrix: Water
Condition: Cool/Intact

Date Reported: 08/01/98
Date Sampled: 07/11/98
Time Sampled: 10:00 AM
Date Received: 07/11/98

Parameter	Analytical Result	Units	Units
Lab pH.....	9.8	s.u.	
Lab Conductivity @ 25° C.....	11,100	umhos/cm	
Lab Resistivity @ 25° C.....	0.09	ohm/m	
Total Dissolved Solids @ 180°C.....	23,900	mg/L	
Total Hardness as CaCO3.....	131	mg/L	
Total Alkalinity as CaCO3.....	81,700	mg/L	
Total Phosphorous.....	184	mg/L	
Bicarbonate as HCO3.....	7,600	mg/L	125 meq/L
Carbonate as CO3.....	45,300	mg/L	1509 meq/L
Hydroxide as OH.....	<1.00	mg/L	<1.00 meq/L
Chloride.....	3,050	mg/L	86.0 meq/L
Sulfate.....	407	mg/L	8.49 meq/L
Nitrate.....	2.90	mg/L	0.21 meq/L
Calcium.....	26.7	mg/L	1.33 meq/L
Magnesium.....	15.7	mg/L	1.29 meq/L
Sodium.....	1,570	mg/L	68.3 meq/L
Potassium.....	104	mg/L	2.67 meq/L
Trace Metals (Total)			
Arsenic.....	<0.005	mg/L	
Barium.....	0.09	mg/L	
Cadmium.....	0.046	mg/L	
Chromium.....	28.3	mg/L	
Lead.....	0.060	mg/L	
Mercury.....	<0.001	mg/L	
Selenium.....	<0.005	mg/L	
Silver.....	<0.01	mg/L	

Reference: U.S.E.P.A. 800/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by Wm

Reviewed by 93

Client: Williams Field Service
Project: Milagro Plant
Sample ID: South Evap Pond
Laboratory ID: 0398W01327
Sample Matrix: Water
Condition: Cool/Intact

2606 W. Main Street
Farmington, New Mexico 87401

Date Reported: 08/01/96
Date Sampled: 07/11/96
Time Sampled: 10:10 AM
Date Received: 07/11/96

Parameter	Analytical Result	Units	Units
Lab pH.....	9.8	s.u.	
Lab Conductivity @ 25° C.....	8,210	umhos/cm	
Lab Resistivity @ 25° C.....	0.12	ohm/m	
Total Dissolved Solids @ 180° C.....	10,300	mg/L	
Total Hardness as CaCO ₃	91.0	mg/L	
Total Alkalinity as CaCO ₃	43,520	mg/L	
Total Phosphorous.....	73.7	mg/L	
Bicarbonate as HCO ₃	2,800	mg/L	46.4 meq/L
Carbonate as CO ₃	24,700	mg/L	824 meq/L
Hydroxide as OH.....	<1.00	mg/L	<1.00 meq/L
Chloride.....	1,080	mg/L	30.8 meq/L
Sulfate.....	210	mg/L	4.37 meq/L
Nitrate.....	8.15	mg/L	0.58 meq/L
Calcium.....	19.8	mg/L	0.99 meq/L
Magnesium.....	10.1	mg/L	0.83 meq/L
Sodium.....	590	mg/L	25.7 meq/L
Potassium.....	59.4	mg/L	1.52 meq/L
Trace Metals (Total)			
Arsenic.....	0.006	mg/L	
Barium.....	0.10	mg/L	
Cadmium.....	0.032	mg/L	
Chromium.....	19.0	mg/L	
Lead.....	0.057	mg/L	
Mercury.....	<0.001	mg/L	
Selenium.....	0.006	mg/L	
Silver.....	<0.01	mg/L	

Reference: U.S.E.P.A. 600/4-78-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by lwm

Reviewed by JB

Quality Control / Quality Assurance
Trace Metals / Known Analysis
TOTAL METALS

Client: Williams Field Service
Project: Milagro Plant
Laboratory ID: 0398W01325-1327
Sample Matrix: Water
Condition: Cool / Intact

Date Reported: 08/01/96
Date Sampled: 07/11/96
Date Received: 07/11/96

Known Analysis

Parameter	Found Value (mg/L)	Known Value (mg/L)	Percent Recovery
Arsenic	0.011	0.010	110%
Barium	0.91	1.00	91%
Cadmium	1.00	1.00	100%
Chromium	0.99	1.00	99%
Lead	0.042	0.040	105%
Mercury	0.004	0.004	110%
Selenium	0.010	0.010	100%
Silver	0.005	0.005	106%

Reference: E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.
Comments: Quality control run concurrently with the above sample lab numbers.

Reported By: WJ

Reviewed By: JB

Quality Control / Quality Assurance

Trace Metals / Spike Analysis

TOTAL METALS

Client: Williams Field Service
Project: Milagro Plant
Laboratory ID: 0396W01325-1327
Sample Matrix: Water
Condition: Cool / Intact

Date Reported: 08/01/96
Date Sampled: 07/11/96
Date Received: 07/11/96

Spike Analysis

Parameter	Spike Result (mg/L)	Unspiked Sample Result (mg/L)	Spike Amount (mg/L)	Percent Recovery
Arsenic	0.027	0.002	0.030	83%
Barium	0.44	0.01	0.50	86%
Cadmium	0.45	<0.01	0.50	91%
Chromium	0.44	<0.01	0.50	88%
Lead	0.024	<0.005	0.025	95%
Mercury	0.005	<0.001	0.005	106%
Selenium	0.024	<0.005	0.025	96%
Silver	0.025	0.025	0.025	100%

Reference: E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments: Quality control run concurrently with the above sample lab numbers.

Reported By: hmm

Reviewed By: SB

**EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS**

Client: **WILLIAMS FIELD SERVICE**

Sample ID: North Evap. Pond

Project ID: Milagro Plant

Lab ID: B985800

0396G01325

Matrix: Water

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	ug/L
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
4-Isopropyltoluene	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L

Continued

EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS

Client: WILLIAMS FIELD SERVICE
Sample ID: North Evap. Pond
Project ID: Milagro Plant
Lab ID: B965800 0396G01325
Matrix: Water

Date Reported: 08/07/96
Date Sampled: 07/11/96
Date Received: 07/12/96
Date Extracted: NA
Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
Continued			
Carbon Tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	5.0	ug/L
cis-1,2-Dichloroethene	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
m,p-Xylene	ND	5.0	ug/L
Methylene chloride	ND	20	ug/L
n-Butylbenzene	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
o-Xylene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Tetrachloroethene (PCE)	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Trichloroethene (TCE)	ND	5.0	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Vinyl Chloride	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

Continued

EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS

Client: WILLIAMS FIELD SERVICE

Sample ID: North Evap. Pond

Project ID: Milagro Plant

Lab ID: B965800

Matrix: Water

0396G01325

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery

%

QC Limits

1,2-Dichloroethane-d4

99

80 - 120

Bromofluorobenzene

100

86 - 115

Toluene-d8

104

88 - 110

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 8/1/96

Reviewed 

1160 Research Drive
Bozeman, Montana 59715EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

Client: WILLIAMS FIELD SERVICE

Sample ID: North Evap. Pond

Project ID: Milagro Plant

Lab ID: B965800

0396G01325

Matrix: Water

Date Reported: 08/05/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: 07/15/96

Date Analyzed: 07/31/96

Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	1000	ug/L
Acenaphthene	ND	1000	ug/L
Acenaphthylene	ND	1000	ug/L
Anthracene	ND	1000	ug/L
Benzo(a)anthracene	ND	1000	ug/L
Benzo(a)pyrene	ND	1000	ug/L
Benzo(b)fluoranthene	ND	1000	ug/L
Benzo(g,h,i)perylene	ND	1000	ug/L
Benzo(k)fluoranthene	ND	1000	ug/L
Chrysene	ND	1000	ug/L
Dibenz(a,h)anthracene	ND	1000	ug/L
Fluoranthene	ND	1000	ug/L
Fluorene	ND	1000	ug/L
Indeno(1,2,3-cd)pyrene	ND	1000	ug/L
Phenanthrene	ND	1000	ug/L
Pyrene	ND	1000	ug/L

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	71	10 - 123
2-Fluorobiphenyl	74	43 - 116
2-Fluorophenol	62	21 - 110
Nitrobenzene-d5	72	35 - 114
Phenol-d6	78	10 - 110
Terphenyl-d14	75	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile
Organics, Test Methods for Evaluating Solid Wastes, SW-846,
United States Environmental Protection Agency, November 1990.

Analyst



Reviewed



**EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS**

Client: **WILLIAMS FIELD SERVICE**

Sample ID: West Evap. Pond

Project ID: Milagro Plant

Lab ID: 8965801

0396G01326

Matrix: Water

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,3-Trichloropropane	ND	5.0	ug/L
1,2,4-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	ug/L
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichloropropane	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
2,2-Dichloropropane	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
4-Isopropyltoluene	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L

Continued

**EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS**

Client: WILLIAMS FIELD SERVICE
 Sample ID: West Evap. Pond
 Project ID: Milagro Plant
 Lab ID: B965801 0396G01326
 Matrix: Water

Date Reported: 08/07/96
 Date Sampled: 07/11/96
 Date Received: 07/12/96
 Date Extracted: NA
 Date Analyzed: 07/18/96

Parameter	Result	PQL	Units
Continued			
Carbon Tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	5.0	ug/L
cis-1,2-Dichloroethane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
m,p-Xylene	ND	5.0	ug/L
Methylene chloride	ND	20	ug/L
n-Butylbenzene	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
o-Xylene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Tetrachloroethene (PCE)	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Trichloroethene (TCE)	ND	5.0	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Vinyl Chloride	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

Continued

**EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS**

Client: **WILLIAMS FIELD SERVICE**

Sample ID: **West Evap. Pond**

Project ID: **Milagro Plant**

Lab ID: **B965801**

0396G01326

Matrix: **Water**

Date Reported: **08/07/96**

Date Sampled: **07/11/96**

Date Received: **07/12/96**

Date Extracted: **NA**

Date Analyzed: **07/18/96**

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery

%

QC Limits

1,2-Dichloroethane-d4

90

80 - 120

Bromofluorobenzene

110

86 - 115

Toluene-d8

111 #

88 - 110

ND - Not Detected at Practical Quantitation Level (PQL)

- Surrogate Recovery not within control limits.

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.O. 8/7/96

Reviewed X

**EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS**

Client: WILLIAMS FIELD SERVICE

Sample ID: South Evap. Pond

Project ID: Milagro Plant

Lab ID: B965802

0396G01327

Matrix: Water

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
1,2,3-Trichlorobenzene	ND	5.0	ug/L
1,2,3-Trichloropropene	ND	5.0	ug/L
1,2,4-Trichlorobenzene	ND	5.0	ug/L
1,2,4-Trimethylbenzene	ND	5.0	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	ug/L
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
1,2-Dichlorobenzene	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,2-Dichloropropene	ND	5.0	ug/L
1,3,5-Trimethylbenzene	ND	5.0	ug/L
1,3-Dichlorobenzene	ND	5.0	ug/L
1,3-Dichloropropene	ND	5.0	ug/L
1,4-Dichlorobenzene	ND	5.0	ug/L
2,2-Dichloropropene	ND	5.0	ug/L
2-Chlorotoluene	ND	5.0	ug/L
4-Chlorotoluene	ND	5.0	ug/L
4-Isopropyltoluene	ND	5.0	ug/L
Benzene	ND	5.0	ug/L
Bromobenzene	ND	5.0	ug/L
Bromochloromethane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L

Continued

EPA METHOD 8260
 VOLATILE ORGANIC COMPOUNDS

Client: WILLIAMS FIELD SERVICE

Sample ID: South Evap. Pond

Project ID: Milagro Plant

Lab ID: B965802

0396G01327

Matrix: Water

Date Reported: 08/07/96

Date Sampled: 07/11/96

Date Received: 07/12/96

Date Extracted: NA

Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
Continued			
Carbon Tetrachloride	ND	5.0	ug/L
Chlorobenzene	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	5.0	ug/L
cis-1,2-Dichloroethane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Ethylbenzene	ND	5.0	ug/L
Hexachlorobutadiene	ND	5.0	ug/L
Isopropylbenzene	ND	5.0	ug/L
m,p-Xylene	ND	5.0	ug/L
Methylene chloride	ND	20	ug/L
n-Butylbenzene	ND	5.0	ug/L
n-Propylbenzene	ND	5.0	ug/L
Naphthalene	ND	5.0	ug/L
o-Xylene	ND	5.0	ug/L
sec-Butylbenzene	ND	5.0	ug/L
Styrene	ND	5.0	ug/L
tert-Butylbenzene	ND	5.0	ug/L
Tetrachloroethene (PCE)	ND	5.0	ug/L
Toluene	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Trichloroethene (TCE)	ND	5.0	ug/L
Trichlorofluoromethane	ND	5.0	ug/L
Vinyl Chloride	ND	5.0	ug/L
Xylenes (total)	ND	5.0	ug/L

Continued

**EPA METHOD 8260
VOLATILE ORGANIC COMPOUNDS**

Client: WILLIAMS FIELD SERVICE
Sample ID: South Evap. Pond
Project ID: Milagro Plant
Lab ID: B965802
Matrix: Water

0396G01327

Date Reported: 08/07/96
Date Sampled: 07/11/96
Date Received: 07/12/96
Date Extracted: NA
Date Analyzed: 07/19/96

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	97	80 - 120
Bromofluorobenzene	105	86 - 115
Toluene-d8	105	88 - 110

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Rev. 1, November 1992.

Analyst E.D. 8/7/96

Reviewed ST

**EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS**

Client: **WILLIAMS FIELD SERVICE**

Sample ID: **South Evap. Pond**

Project ID: **Milagro Plant**

Lab ID: **B965802**

Matrix: **Water**

0396G01327

Date Reported: **08/05/96**

Date Sampled: **07/11/96**

Date Received: **07/12/96**

Date Extracted: **07/15/96**

Date Analyzed: **07/30/96**

Parameter	Result	PQL	Units
3-Methylcholanthrene	ND	400	ug/L
Acenaphthene	ND	400	ug/L
Acenaphthylene	ND	400	ug/L
Anthracene	ND	400	ug/L
Benzo(a)anthracene	ND	400	ug/L
Benzo(a)pyrene	ND	400	ug/L
Benzo(b)fluoranthene	ND	400	ug/L
Benzo(g,h,i)perylene	ND	400	ug/L
Benzo(k)fluoranthene	ND	400	ug/L
Chrysene	ND	400	ug/L
Dibenz(a,h)anthracene	ND	400	ug/L
Fluoranthene	ND	400	ug/L
Fluorene	ND	400	ug/L
Indeno(1,2,3-cd)pyrene	ND	400	ug/L
Phenanthrene	ND	400	ug/L
Pyrene	ND	400	ug/L

QUALITY CONTROL - Surrogate Recovery

%

QC Limits

2,4,6-Tribromophenol	79	10 - 123
2-Fluorobiphenyl	78	43 - 116
2-Fluorophenol	69	21 - 110
Nitrobenzene-d5	78	35 - 114
Phenol-d6	32	10 - 110
Terphenyl-d14	60	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8270, Gas Chromatography/Mass Spectrometry for Semivolatile
Organics, Test Methods for Evaluating Solid Wastes, SW-846,
United States Environmental Protection Agency, November 1990.

Analyst



Reviewed



**LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANK**

Date Analyzed: 07/18/96
Lab ID: IBW96200A
Matrix: Water

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	0.005	mg/L
1,1,1-Trichloroethane	ND	0.005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.005	mg/L
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.005	mg/L
1,1,2-Trichloroethane	ND	0.005	mg/L
1,1-Dichloroethane	ND	0.005	mg/L
1,1-Dichloroethene	ND	0.005	mg/L
1,1-Dichloropropene	ND	0.005	mg/L
1,2,3-Trichlorobenzene	ND	0.005	mg/L
1,2,3-Trichloropropane	ND	0.005	mg/L
1,2,4-Trichlorobenzene	ND	0.005	mg/L
1,2,4-Trimethylbenzene	ND	0.005	mg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.005	mg/L
1,2-Dibromoethane (EDB)	ND	0.005	mg/L
1,2-Dichlorobenzene	ND	0.005	mg/L
1,2-Dichloroethane	ND	0.005	mg/L
1,2-Dichloropropane	ND	0.005	mg/L
1,3,5-Trimethylbenzene	ND	0.005	mg/L
1,3-Dichlorobenzene	ND	0.005	mg/L
1,3-Dichloropropane	ND	0.005	mg/L
1,4-Dichlorobenzene	ND	0.005	mg/L
1,4-Dioxane	ND	0.005	mg/L
2,2-Dichloropropane	ND	0.005	mg/L
2-Butanone (MEK)	ND	0.005	mg/L
2-Chloro-1,3-butadiene (Chloroprene)	ND	0.005	mg/L
2-Chloroethylvinyl ether	ND	0.005	mg/L
2-Chlorotoluene	ND	0.005	mg/L
2-Hexanone	ND	0.005	mg/L
3-Chloroprene (Allyl Chloride)	ND	0.005	mg/L
4-Chlorotoluene	ND	0.005	mg/L
4-Isopropyltoluene	ND	0.005	mg/L
4-Methyl-2-pentanone (MIBK)	ND	0.005	mg/L
Acetone	ND	0.005	mg/L

Continued

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/18/96
Lab ID: IBW95200A
Matrix: Water

Parameter	Result	PQL	Units
Continued			
Acetonitrile (Methylcyanide)	ND	0.005	mg/L
Acrolein	ND	0.005	mg/L
Acrylonitrile	ND	0.005	mg/L
Benzene	ND	0.005	mg/L
Bromobenzene	ND	0.005	mg/L
Bromochloromethane	ND	0.005	mg/L
Bromodichloromethane	ND	0.005	mg/L
Bromoform	ND	0.005	mg/L
Bromomethane	ND	0.005	mg/L
Carbon Disulfide	ND	0.005	mg/L
Carbon Tetrachloride	ND	0.005	mg/L
Chlorobenzene	ND	0.005	mg/L
Chloroethane	ND	0.005	mg/L
Chloroform	ND	0.005	mg/L
Chloromethane	ND	0.005	mg/L
cis-1,2-Dichloroethane	ND	0.005	mg/L
cis-1,3-Dichloropropene	ND	0.005	mg/L
Cyclohexanone	ND	0.005	mg/L
Dibromochloromethane	ND	0.005	mg/L
Dibromomethane	ND	0.005	mg/L
Dichlorodifluoromethane	ND	0.005	mg/L
Ethyl acetate	ND	0.005	mg/L
Ethyl ether	ND	0.005	mg/L
Ethyl methacrylate	ND	0.005	mg/L
Ethylbenzene	ND	0.005	mg/L
Hexachlorobutadiene	ND	0.005	mg/L
Iodomethane	ND	0.005	mg/L
Isobutanol	ND	0.005	mg/L
Isopropylbenzene	ND	0.005	mg/L
m,p-Xylene	ND	0.005	mg/L
Methacrylonitrile	ND	0.005	mg/L
Methyl methacrylate	ND	0.005	mg/L

Continued

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/18/96
Lab ID: IBW96200A
Matrix: Water

Parameter	Result	PQL	Units
Continued			
Methylene chloride	ND	0.005	mg/L
n-Butanol	ND	0.005	mg/L
n-Butylbenzene	ND	0.005	mg/L
n-Propylbenzene	ND	0.005	mg/L
Naphthalene	ND	0.005	mg/L
o-Xylene	ND	0.005	mg/L
Propionitrile	ND	0.005	mg/L
sec-Butylbenzene	ND	0.005	mg/L
Styrene	ND	0.005	mg/L
tert-Butylbenzene	ND	0.005	mg/L
Tetrachloroethene (PCE)	ND	0.005	mg/L
Toluene	ND	0.005	mg/L
trans-1,2-Dichloroethene	ND	0.005	mg/L
trans-1,3-Dichloropropene	ND	0.005	mg/L
trans-1,4-Dichlorobutene	ND	0.005	mg/L
Trichloroethene (TCE)	ND	0.005	mg/L
Trichlorofluoromethane	ND	0.005	mg/L
Vinyl Acetate	ND	0.005	mg/L
Vinyl Chloride	ND	0.005	mg/L
Xylenes (total)	ND	0.005	mg/L

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	89	80 - 120
Bromofluorobenzene	106	74 - 121
Toluene-d8	107	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst P.O. 8/7/96Reviewed 

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/19/96
Lab ID: IBW96201A
Matrix: Water

Parameter	Result	PQL	Units
Continued			
Acetonitrile (Methylcyanoide)	ND	0.005	mg/L
Acrolein	ND	0.005	mg/L
Acrylonitrile	ND	0.005	mg/L
Benzene	ND	0.005	mg/L
Bromobenzene	ND	0.005	mg/L
Bromochloromethane	ND	0.005	mg/L
Bromodichloromethane	ND	0.005	mg/L
Bromoform	ND	0.005	mg/L
Bromomethane	ND	0.005	mg/L
Carbon Disulfide	ND	0.005	mg/L
Carbon Tetrachloride	ND	0.005	mg/L
Chlorobenzene	ND	0.005	mg/L
Chloroethane	ND	0.005	mg/L
Chloroform	ND	0.005	mg/L
Chloromethane	ND	0.005	mg/L
cis-1,2-Dichloroethene	ND	0.005	mg/L
cis-1,3-Dichloropropene	ND	0.005	mg/L
Cyclohexanone	ND	0.005	mg/L
Dibromochloromethane	ND	0.005	mg/L
Dibromomethane	ND	0.005	mg/L
Dichlorodifluoromethane	ND	0.005	mg/L
Ethyl acetate	ND	0.005	mg/L
Ethyl ether	ND	0.005	mg/L
Ethyl methacrylate	ND	0.005	mg/L
Ethylbenzene	ND	0.005	mg/L
Hexachlorobutadiene	ND	0.005	mg/L
Iodomethane	ND	0.005	mg/L
Isobutanol	ND	0.005	mg/L
Isopropylbenzene	ND	0.005	mg/L
m,p-Xylene	ND	0.005	mg/L
Methacrylonitrile	ND	0.005	mg/L
Methyl methacrylate	ND	0.005	mg/L

Continued

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/19/96
Lab ID: IBW96201A
Matrix: Water

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	0.005	mg/L
1,1,1-Trichloroethane	ND	0.005	mg/L
1,1,2,2-Tetrachloroethane	ND	0.005	mg/L
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.005	mg/L
1,1,2-Trichloroethane	ND	0.005	mg/L
1,1-Dichloroethane	ND	0.005	mg/L
1,1-Dichloroethene	ND	0.005	mg/L
1,1-Dichloropropene	ND	0.005	mg/L
1,2,3-Trichlorobenzene	ND	0.005	mg/L
1,2,3-Trichloropropane	ND	0.005	mg/L
1,2,4-Trichlorobenzene	ND	0.005	mg/L
1,2,4-Trimethylbenzene	ND	0.005	mg/L
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.005	mg/L
1,2-Dibromoethane (EDB)	ND	0.005	mg/L
1,2-Dichlorobenzene	ND	0.005	mg/L
1,2-Dichloroethane	ND	0.005	mg/L
1,2-Dichloropropane	ND	0.005	mg/L
1,3,5-Trimethylbenzene	ND	0.005	mg/L
1,3-Dichlorobenzene	ND	0.005	mg/L
1,3-Dichloropropane	ND	0.005	mg/L
1,4-Dichlorobenzene	ND	0.005	mg/L
1,4-Dioxane	ND	0.005	mg/L
2,2-Dichloropropane	ND	0.005	mg/L
2-Butanone (MEK)	ND	0.005	mg/L
2-Chloro-1,3-butadiene (Chloroprene)	ND	0.005	mg/L
2-Chloroethylvinyl ether	ND	0.005	mg/L
2-Chlorotoluene	ND	0.005	mg/L
2-Hexanone	ND	0.005	mg/L
3-Chloroprene (Allyl Chloride)	ND	0.005	mg/L
4-Chlorotoluene	ND	0.005	mg/L
4-Isopropyltoluene	ND	0.005	mg/L
4-Methyl-2-pentanone (MIBK)	ND	0.005	mg/L
Acetone	ND	0.005	mg/L

Continued

LAB QA/QC
EPA METHOD 8260
INSTRUMENT BLANKDate Analyzed: 07/19/96
Lab ID: IBW96201A
Matrix: Water

Parameter	Result	PQL	Units
Continued			
Methylene chloride	ND	0.005	mg/L
n-Butanol	ND	0.005	mg/L
n-Butylbenzene	ND	0.005	mg/L
n-Propylbenzene	ND	0.005	mg/L
Naphthalene	ND	0.005	mg/L
o-Xylene	ND	0.005	mg/L
Propionitrile	ND	0.005	mg/L
sec-Butylbenzene	ND	0.005	mg/L
Styrene	ND	0.005	mg/L
tert-Butylbenzene	ND	0.005	mg/L
Tetrachloroethene (PCE)	ND	0.005	mg/L
Toluene	ND	0.005	mg/L
trans-1,2-Dichloroethene	ND	0.005	mg/L
trans-1,3-Dichloropropene	ND	0.005	mg/L
trans-1,4-Dichlorobutene	ND	0.005	mg/L
Trichloroethene (TCE)	ND	0.005	mg/L
Trichlorofluoromethane	ND	0.005	mg/L
Vinyl Acetate	ND	0.005	mg/L
Vinyl Chloride	ND	0.005	mg/L
Xylenes (total)	ND	0.005	mg/L

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	96	80 - 120
Bromofluorobenzene	99	74 - 121
Toluene-d8	102	81 - 117

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst E. D. 8/7/96Reviewed ST

LAB QA/QC
EPA METHOD 8270
METHOD BLANKDate Analyzed: 07/26/96
Lab ID: MBW096196
Matrix: Water
Date Extracted: 07/15/96

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	10	ug/L
1,2-Dichlorobenzene	ND	10	ug/L
1,3-Dichlorobenzene	ND	10	ug/L
1,4-Dichlorobenzene	ND	10	ug/L
2,4,5-Trichlorophenol	ND	20	ug/L
2,4,6-Trichlorophenol	ND	20	ug/L
2,4-Dichlorophenol	ND	10	ug/L
2,4-Dimethylphenol	ND	10	ug/L
2,4-Dinitrophenol	ND	50	ug/L
2,4-Dinitrotoluene	ND	10	ug/L
2,6-Dinitrotoluene	ND	10	ug/L
2-Chloronaphthalene	ND	10	ug/L
2-Chlorophenol	ND	10	ug/L
2-Methylnaphthalene	ND	10	ug/L
2-Methylphenol	ND	10	ug/L
2-Nitroaniline	ND	50	ug/L
2-Nitrophenol	ND	10	ug/L
3,3'-Dichlorobenzidine	ND	20	ug/L
3-Methylphenol/4-Methylphenol	ND	10	ug/L
3-Nitroaniline	ND	50	ug/L
4,6-Dinitro-2-methylphenol	ND	50	ug/L
4-Bromophenyl-phenylether	ND	10	ug/L
4-Chloro-3-methylphenol	ND	20	ug/L
4-Chloroaniline	ND	20	ug/L
4-Chlorophenyl-phenylether	ND	10	ug/L
4-Nitroaniline	ND	20	ug/L
4-Nitrophenol	ND	50	ug/L
Acenaphthene	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
Anthracene	ND	10	ug/L
Benzo(a)anthracene	ND	10	ug/L
Benzo(a)pyrene	ND	10	ug/L
Benzo(b)fluoranthene	ND	10	ug/L

Continued

LAB QA/QC
EPA METHOD 8270
METHOD BLANK

Date Analyzed: 07/26/96
 Lab ID: MBW096196
 Matrix: Water
 Date Extracted: 07/15/96

Parameter	Result	PQL	Units
Continued			
Benzo(g,h,i)perylene	ND	10	ug/L
Benzo(k)fluoranthene	ND	10	ug/L
Benzoic Acid	ND	50	ug/L
Benzyl Alcohol	ND	20	ug/L
bis(2-Chloroethoxy)methane	ND	10	ug/L
bis(2-Chloroethyl)ether	ND	10	ug/L
bis(2-Chloroisopropyl)ether	ND	10	ug/L
bis(2-Ethylhexyl)phthalate	ND	50	ug/L
Butylbenzylphthalate	ND	10	ug/L
Chrysene	ND	10	ug/L
Di-n-Butylphthalate	ND	50	ug/L
Di-n-Octylphthalate	ND	50	ug/L
Dibenz(a,h)anthracene	ND	10	ug/L
Dibenzofuran	ND	10	ug/L
Diethylphthalate	ND	10	ug/L
Dimethylphthalate	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Fluorene	ND	10	ug/L
Hexachlorobenzene	ND	20	ug/L
Hexachlorobutadiene	ND	20	ug/L
Hexachlorocyclopentadiene	ND	10	ug/L
Hexachloroethane	ND	20	ug/L
Indeno(1,2,3-cd)pyrene	ND	10	ug/L
Isophorone	ND	10	ug/L
N-Nitrosodi-n-propylamine	ND	10	ug/L
N-Nitrosodiphenylamine	ND	10	ug/L
Naphthalene	ND	10	ug/L
Nitrobenzene	ND	10	ug/L
Pentachlorophenol	ND	50	ug/L
Phenanthrene	ND	10	ug/L
Phenol	ND	10	ug/L
Pyrene	ND	10	ug/L

Continued

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/26/96
Lab ID: MBW096196
Matrix: Water
Date Extracted: 07/15/96

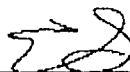
Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	68	10 - 123
2-Fluorobiphenyl	55	43 - 116
2-Fluorophenol	47	21 - 110
Nitrobenzene-d5	71	35 - 114
Phenol-d6	46	10 - 110
Terphenyl-d14	57	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst



Reviewed



LAB QA/QC
EPA METHOD 8260
MATRIX SPIKE

Date Analyzed: 07/19/96
Lab ID: 0596H05800 SK1 0396G01325
Matrix: Water

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spike Result (ug/L)	MS Recovery %	QC Limits Rec.
1,1-Dichloroethene	20	0	22.5	113	75 -145
Benzene	20	0	20	100	71 -120
Chlorobenzene	20	0	19.4	97	76 -127
Toluene	20	0	21.1	106	71 -127
Trichloroethene (TCE)	20	0	19.3	97	75 -130

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	103	88 -110
Bromofluorobenzene	102	76 -114
Toluene-d8	105	76 -114

Note: Spike Recoveries are calculated using zero for Sample result
if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 5 outside QC limits.

Analyst L. V. 8/7/96

Reviewed 

LAB QA/QC
EPA METHOD 8260
MATRIX SPIKE

Date Analyzed: 07/18/96
Lab ID: 0598H05801 SK1 0396G01326
Matrix: Water

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spike Result (ug/L)	MS Recovery %	QC Limits Rec.
1,1-Dichloroethane	20	0	19.6	98	75 -145
Benzene	20	0	17.1	86	71 -120
Chlorobenzene	20	0	16.1	81	76 -127
Toluene	20	0	17.2	86	71 -127
Trichloroethene (TCE)	20	0	16.6	83	75 -130

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
Bromofluorobenzene	108	76 -114
1,2-Dichloroethane-d4	93	88 -110
Toluene-d8	108	76 -114

Note: Spike Recoveries are calculated using zero for Sample result
if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 5 outside QC limits.

Analyst E.O. 8/7/96

Reviewed 

LAB QA/QC
EPA METHOD 8270
MATRIX SPIKEDate Analyzed: 07/26/96
Lab ID: 0596H05754 SK1
Matrix: Water
Date Extracted: 07/15/96

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spike Result (ug/L)	MS Recovery %	QC Limits Rec.
1,2,4-Trichlorobenzene	100	0	58	58	39 - 98
1,4-Dichlorobenzene	100	0	60	60	36 - 97
2,4-Dinitrotoluene	100	0	84	84	24 - 96
2-Chlorophenol	200	0	126	63	27 - 123
4-Chloro-3-methylphenol	200	0	160	80	23 - 97
4-Nitrophenol	200	0	125	63	10 - 80
Acenaphthene	100	0	70	70	46 - 118
N-Nitrosodi-n-propylamine	100	0	116	116	41 - 116
Pentachlorophenol	200	0	125	63	9 - 103
Phenol	200	0	102	51	12 - 89
Pyrene	100	0	61	61	26 - 127

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	69	10 - 123
2-Fluorobiphenyl	66	43 - 116
2-Fluorophenol	50	21 - 110
Nitrobenzene-d5	86	35 - 114
Phenol-d6	53	10 - 110
Terphenyl-d14	53	33 - 141

Note: Spike Recoveries are calculated using zero for Sample result
if Sample result was less than PQL (Practical Quantitation Level).

Spike Recovery: 0 out of 11 outside QC limits.

Analyst



Reviewed



TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1

Client: Williams Field Serv.
Project: Milagro Plant
Matrix: Water
Condition: Intact/Cool

Date Reported: 07/30/96
Date Sampled: 07/11/96
Date Received: 07/11/96
Date Extracted: 07/18/96
Date Analyzed: 07/18/96

Sample	ID	Conc. (mg/L)	Limit (mg/L)
N. Evap. Pond	0396W01325	* 108	5.0
W. Evap. Pond	0396W01326	* 69.8	5.0
S. Evap. Pond	0396W01327	* 61.6	5.0

ND - Analyte not detected at stated detection level.

References: **Method 418.1:** Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3510: Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.

Comments: *Samples were analyzed 07/18/96 and were over the calibration curve. Extract was discarded and there was no sample left to reanalyze. On 07/22/96 a 250mg/L point was analyzed to show that the calibration curve is in fact linear at this level so the data for these samples could be reported with confidence.

Analyst: JS

Reviewed: JB

TOTAL PETROLEUM HYDROCARBONS
Quality Assurance/Quality Control

Client: Williams Field Services
Project: Milagro Plant
Matrix: water
Condition: Intact/Cool

Date Reported: 07/30/96
Date Sampled: 07/11/96
Date Received: 07/11/96
Date Extracted: 07/18/96
Date Analyzed: 07/18/96

Duplicate Analysis

Sample ID	Concentration 1 (mg/L)	Concentration 2 (mg/L)	Recovery (%)	Acceptance Range (%)
0396G01326	68.8	71.6	mg/L	4.0%

Method Blank Analysis

Sample ID	Concentration 1 (mg/L)	Concentration 2 (mg/L)	Recovery (%)	Acceptance Range (%)
Method Blank	ND	ND	mg/L	1.0

Spike Analysis

Sample ID	Concentration 1 (mg/L)	Concentration 2 (mg/L)	Recovery (%)	Acceptance Range (%)
Method Blank	13.3	ND	12.5	106% 70-130%

Known Analysis

Sample ID	Concentration 1 (mg/L)	Concentration 2 (mg/L)	Recovery (%)	Acceptance Range (%)
QC	21.1	20.6	103%	70-130%

References: Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3510: Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.

Analyst: elt

Reviewed: JB

CHAIN OF CUSTODY RECORD

Leigh Gooding
WFS

Client/Project Name <i>Williams Field Services</i>			Project Location <i>Malaga Plant</i>			ANALYSES / PARAMETERS					
Sampler (Signature) <i>Bruce North</i>			Chain of Custody Tape No.								Remarks
Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	VOC's 8260	Semi-Volat 8270	Heavy Metals	Nutrient for total P	TPH	
<i>North Evap Pond</i>	<i>7/11/96</i>	<i>9:45</i>		<i>waste water</i>	<i>7</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>7 T-mk hai</i>
<i>West Evap Pond</i>	<i>7/11/96</i>	<i>10:00</i>		<i>waste water</i>	<i>7</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>5 two 82</i>
<i>South Evap Pond</i>	<i>7/11/96</i>	<i>10:10</i>		<i>waste water</i>	<i>7</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>2/2nd hai to</i>
											<i>TPH 418.1</i>
											<i>Tap blank</i>
											<i>used</i>
											<i>coincident</i>
											<i>North has VOA for 8260, recorder emit</i>
Relinquished by: (Signature) <i>Bruce North</i>			Date <i>7-11-96</i>	Time <i>11:42am</i>	Received by: (Signature) <i>Leigh Gooding</i>			Date <i>7-11-96</i>	Time <i>11:42am</i>		
Relinquished by: (Signature) <i>Leigh Gooding</i>			Date <i>7-11-96</i>	Time <i>12:55</i>	Received by: (Signature) <i>Jim Walker</i>			Date <i>7-11-96</i>	Time <i>12:55</i>		
Relinquished by: (Signature)			Date	Time	Received by laboratory: (Signature)			Date	Time		

Inter-Mountain Laboratories, Inc.

<input type="checkbox"/> 1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945	<input type="checkbox"/> 1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945	<input type="checkbox"/> 2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737	<input type="checkbox"/> 1160 Research Dr. Bozeman, Montana 59715 Telephone (406) 598-8450	<input type="checkbox"/> 11183 SH 30 College Station, TX 77845 Telephone (409) 776-8945	<input type="checkbox"/> 3304 Longmire Drive College Station, TX 77845 Telephone (409) 774-4999
---	--	--	--	---	---

37678

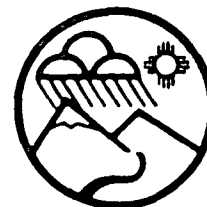
NOV 25 '96 02:53PM W. FIELD SVCS.

P.33/33



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544



MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

DEC - 3 1996

November 27, 1996

Mr. Patricio Sanchez
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

RECEIVED
DEC 11 1996

OIL CON. DIV.
DIST. 3

RE: Disposal of wastewater from the Milagro Plant GW-60

Dear Mr. Sanchez:

This is to follow up on our telephone conversation re: your request for a determination of whether or not wastewaters from the above referenced facility are hazardous waste. NMED has determined that even though the wastewater does contain hazardous constituents as documented in the waste analysis report from Inter-Mountain Laboratories, Inc. dated 08-01-96, this waste is considered non-hazardous under 40 CFR §261.4(b)(6)(i).

Please feel free to contact me should need additional information.

Sincerely,

James E. Seubert

James E. Seubert, Acting Program Manager
Hazardous and Radioactive Materials Bureau

xc: Leigh E. Gooding, Williams Field Services

RECEIVED

DEC 03 1996

Environment & Energy
Oil Conservation Division

<XC: DENNY FAUST>

Office of the Secretary of Energy, Minerals and Natural Resources
P.O. Box 1980
Albuquerque, NM 88241-1980
District II - (505) 748-1283
11 S. First
Albuquerque, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Albuquerque, NM 87410
District IV - (505) 827-7131

New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-1
Originated 8/81

Submit Orig
Plus 1 C
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 checked="" type="checkbox"/>	4. Generator <u>MID-AMERICA Pipeline Co.</u> 5. Originating Site <u>Compressor STA.</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>345 CR 3500, AZTEC</u>	8. State <u>N.M.</u>
7. Location of Material (Street Address or ULSTR) <u>HUFFERMAN STATION</u> <u>LYBROOK STATION</u>	
9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <u>B.</u> 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:

STORM WATER MIXED WITH COMPRESSOR FLUIDS (IE) WATER
AND OILS

This is fluid from 2 compressor stations

1500 GALS Each

SUNCO
declined to accept
non-exempt water
DEPT

RECEIVED

SEP 16 1996

Environmental Bureau
Oil Conservation Division

RECEIVED
SEP - 9 1996

OIL CON. DIV.
DIST. 3

Estimated Volume 3000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talavich TITLE: DISPOSAL MGR DATE: 9-9-96
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALAVICH TELEPHONE NO. 334-6186

Roger - This lab data is outdated and lacks quality control

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: 9/9/96
APPROVED BY: Roger L. Chubb TITLE: Bureau Chief DATE: 9/17/96

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95
Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>MID-AMERICA PIPELINE Co.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>COMPRESSOR STA.</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>345 CR 3500, AZTEC</u>	8. State <u>N.M.</u>
7. Location of Material (Street Address or ULSTR) <u>HUFFERMAN STATION LYBROOK STATION</u>	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

STORM WATER MIXED WITH COMPRESSOR FLUIDS(IE) WATER
AND OILS
This is fluid from 2 COMPRESSOR STATIONS
1500 GALS EACH

RECEIVED
SEP - 9 1996
OIL CON. DIV.
DIST. 3

Estimated Volume 3000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 9-9-96
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 334-6186

Roger This lab data is outdated, lacks quality control

(This space for State Use)

APPROVED BY: _____	TITLE: _____	DATE: <u>9/9/96</u>
APPROVED BY: _____	TITLE: _____	DATE: _____



WATER AND OIL FIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0418

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-__ T-__ R-__ 1/4__ 1/4__ County__ State__

Physical Address if appropriate: _____

Source and description of waste:

MED-AMERICA PIPELINE PUMP STATIONS: HUEKOWO
AND LYBROOK. WASTE WILL BE A MIX OF RAIN WATER
+ OIL.

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I MARK R. POSTMA representative
for MED-AMERICA PIPELINE

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is Exempt
✓ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

MSDS Information sheet

RCRA TCLP Analysis

RCRA Metals Analysis

Corrosivity, Ignitability, Reactivity

I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since _____

Signature Mark R. Postma

Printed Name MARK R. POSTMA

Title FIELD TECHNICAL SUPERVISOR

Date 9-9-96

Fax 325-7714
Phone 325-0789

Mid-America Pipeline Co.
Attn: John Mobley
5414 U.S. Hwy 64.
Farmington, NM 87401

MAPCO
Huerfano Station
Environmental Drain Sump
~1500 gal

MAPCO
Lybrook Station
Environmental Drain Sump
~1500 gal

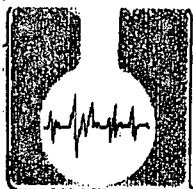
CONTRACT ENVIRONMENTAL SERVICES, INC.

JAYSON BLANCHARD
Field Engineer



Post Office Box 505
Kirtland, New Mexico 87417-0505

505-325-1198



ASSAIGA ANALYTICAL LABORATORIES

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259

3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

 Report Generated:
July 27, 1995 10:01

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

 SENT MID-AMERICA PIPELINE
TO: 559 NEW MEXICO HWY 544
AZTEC, NM 87410

 WORKORDER # : 9507019
WORK ID : HUERFANO STATION ENV. DRAIN
CLIENT CODE : MID04
DATE RECEIVED : 07/06/95

ATTN: DENNIS HOLLAND

Page: 1

 Lab ID: 9507019-01A
Sample ID: TCLP-METALS

 Collected: 07/05/95 13:30:00
Matrix: WATER

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
% SOLIDS(TCLP XT)EPA 160.3	2.70	% (Percent)				
TCLP (FAA) DIG/1311/3005	07/11/95	N/A				
TCLP (GFAA)DIG/1311/3005	07/13/95	N/A				
TCLP EXTRACTION/TCLP 1311	07/07/95	N/A				
TCLP METALS/1311/SW846 AA						
Arsenic, As	ND	mg/L	0.0050	5.0	07/21/95	WCV116,WGF368WF447
Barium, Ba	ND	mg/L	0.50	5.0	07/13/95	WCV116,WGF368WF447
Cadmium, Cd	ND	mg/L	0.0030	5.0	07/12/95	WCV116,WGF368WF447
Chromium, Cr	ND	mg/L	0.020	5.0	07/12/95	WCV116,WGF368WF447
Lead, Pb	ND	mg/L	0.10	5.0	07/12/95	WCV116,WGF368WF447
Mercury, Hg	ND	mg/L	0.0020	2.0	07/14/95	WCV116,WGF368WF447
Selenium, Se	ND	mg/L	0.0050	5.0	07/20/95	WCV116,WGF368WF447
Silver, Ag	ND	mg/L	0.010	5.0	07/11/95	WCV116,WGF368WF447
TCLP(CVAA)Hg XT/SW846 7471	07/13/95	N/A				

 Lab ID: 9507019-01B
Sample ID: TCLP-SUM

 Collected: 07/05/95 13:30:00
Matrix: WATER

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP EXTRACTION/TCLP 1311	07/07/95	N/A				
TCLP HERB XT/SM 509B	07/17/95	N/A				
TCLP HERBICIDES/SM509B						
2,4'-D	ND	mg/L	0.00010	50	07/18/95	THERB39
2,4,5'-TP	ND	mg/L	0.00010	50	07/18/95	THERB39
2,4,5'-T	ND	mg/L	0.00010	50	07/18/95	THERB39
TCLP PEST XT/1311/3520	07/12/95	N/A				
TCLP PESTICIDES/1311/8080A						
gamma-BHC (lindane)	ND	mg/L	0.000010	50	07/20/95	TPEST25
Chlordane	ND	mg/L	0.000020	50	07/20/95	TPEST25
Endrin	ND	mg/L	0.000010	50	07/20/95	TPEST25
Heptachlor	ND	mg/L	0.000010	50	07/20/95	TPEST25
Heptachlor Epoxide	ND	mg/L	0.000010	50	07/20/95	TPEST25
Methoxychlor	ND	mg/L	0.000020	50	07/20/95	TPEST25
Toxaphene	ND	mg/L	0.0010	50	07/20/95	TPEST25
TCLP SV/METHOD 1311/8270B						
1,4-Dichlorobenzene	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
2-Methylphenol / O-Cresol	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
3/4-Methylphenol / M/P-Cresol	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
Hexachloroethane	ND	mg/L	0.0010	8900	07/20/95	TSVOA122



Page: 2

Lab ID: 9507019-01B

Sample ID: TCLP-SUM

Collected: 07/05/95 13:30:00

Matrix: WATER

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP SV/METHOD 1311/8270B						
Nitrobenzene	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
Hexachlorobutadiene	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
2,4,6-Trichlorophenol	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
2,4,5-Trichlorophenol	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
2,4-Dinitrotoluene	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
Hexachlorobenzene	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
Pentachlorophenol	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
Pyridine	ND	mg/L	0.0010	8900	07/20/95	TSVOA122
TCLP SVOA XT/1311/3520	07/13/95	N/A				

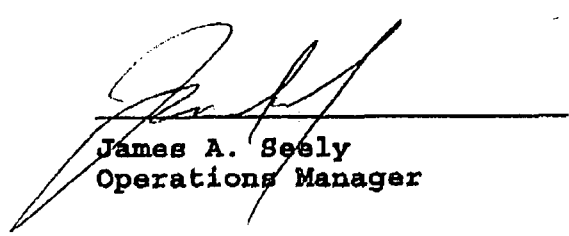
Lab ID: 9507019-01C

Sample ID: TCLP-VOA

Collected: 07/05/95 13:30:00

Matrix: WATER

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP ZHE / TCLP 1311						
ZHE/VOA/METHOD 1311/8240B	07/17/95	N/A				
Vinyl Chloride	ND	mg/L	0.0050	40	07/20/95	TVOA188
1,1-Dichloroethene	ND	mg/L	0.0010	40	07/20/95	TVOA188
Chloroform	ND	mg/L	0.0010	40	07/20/95	TVOA188
1,2-Dichloroethane	ND	mg/L	0.0010	40	07/20/95	TVOA188
2-Butanone (MEK)	0.34	mg/L	0.0050	40	07/20/95	TVOA188
Carbon Tetrachloride	ND	mg/L	0.0010	40	07/20/95	TVOA188
Trichloroethene	ND	mg/L	0.0010	40	07/20/95	TVOA188
Benzene	0.097	mg/L	0.0010	40	07/20/95	TVOA188
Tetrachloroethene	ND	mg/L	0.0010	40	07/20/95	TVOA188
Chlorobenzene	ND	mg/L	0.0010	40	07/20/95	TVOA188



James A. Seely
Operations Manager

WORKORDER COMMENTS

DATE : 07/27/95

WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

ND = Analyte "not detected" in analysis at the sample specific detection limit.

D_F = Sample "dilution factor"

NT = Analyte "not tested" per client request.

B = Analyte was also detected in laboratory method QC blank.

E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

REPORT COMMENTS

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/>	4. Generator <u>Bowen Tools</u>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>Bowen Yard</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>345 CR 3500, AZTEC</u>	8. State <u>N.M.</u>
7. Location of Material (Street Address or ULSTR) <u>#14 CR 5860</u>	
9. Circle One: <input checked="" type="radio"/> 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 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.	

RECEIVED
SEP - 6 1996

BRIEF DESCRIPTION OF MATERIAL:

WASH WATER FROM PUMP

City water used with power washer to clean Downhole

oil field tools only.

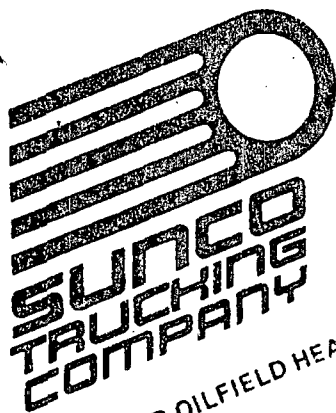
Discussed in Phone conversation with R. Anderson of OCD
AND D. Foust. AND M. TALOVICH (SUNCO) 10am 9-5-96

Estimated Volume 1100 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR. DATE: 9-5-96
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 334-6186

(This space for State Use)

APPROVED BY: Denny G. Foust TITLE: Geologist DATE: 9/6/96
APPROVED BY: Laura K. Sued TITLE: Geologist DATE: 9/6/96



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-__ T-__ R-__ 1/4__ 1/4__ County SJ State NM
Physical Address if appropriate: #14 CR 5860 FARMINGTON

Source and description of waste:

CITY WATER USED TO CLEAN TOOLS - NO OTHER
MATERIAL IS WASHED WITH THIS WATER OR ANY
OTHER WASTE IS PUT IN SUMP - WATER GOES
THRU SEPARATOR FIRST. THIS WATER IS ONLY USED TO CLEAN
OILFIELD TOOLS

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M.

I GARY DAVIS - GARY DAVIS representative
for BOWEN TOOLS, INC.

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

☐ MSDS Information sheet

☐ RCRA TCLP Analysis

☐ RCRA Metals Analysis

☐ Corrosivity, Ignitability, Reactivity

☐ I further certify that there has been no change in the process employed or
chemicals stored / used at the facility generating the waste since _____

Signature GARY DAVIS
Printed Name GARY DAVIS
Title DISTRICT MANAGER
Date 9/5/96

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	4. Generator <u>AXELSON</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	5. Originating Site <u>AXELSON YARD</u>
3. Address of Facility Operator <u>345 CR 3500 AZTEC</u>	6. Transporter <u>SUNCO</u>
7. Location of Material (Street Address or ULSTR) <u>1416 LA PLATA HWY FARMINGTON</u>	8. State <u>N.M.</u>
9. Circle One: <input checked="" type="radio"/> 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 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:

Sump water

RECEIVED
AUG 21 1996
OIL CON. DIV.
DIST. 3

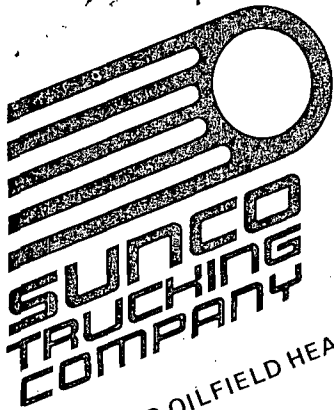
Exempt status verbal opinion from
Roger Anderson. D&T

Estimated Volume 800 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael E. Talovich TITLE: Disposal Manager DATE: 8-20-96
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 334-6186

(This space for State Use)

APPROVED BY: Denny G. Feunt TITLE: Geologist DATE: 8/21/96
APPROVED BY: Ernie Burch TITLE: Geologist DATE: 7/21/96



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

" CERTIFICATE OF WASTE STATUS "

Originating Site: S-__ T-__ R-__ 1/4__ 1/4__ County__ State__
Physical Address if appropriate: 1416 LA PLATA HWY, FARMINGTON

Source and description of waste:

SUMP WASH WATER

Destination : Sunco Disposal , 345 CR 3500, Aztec, San Juan Co. N.M.

I Eddie SOSAYA representative
for DRESSER OIL TOOLS / AXELSON

do hereby certify that according to the Resource Conservation and Recovery Act
that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

The required documentation is hereto attached:

Check the appropriate line(s):

N/A

- ☐ MSDS Information sheet
- ☐ RCRA TCLP Analysis
- ☐ RCRA Metals Analysis
- ☐ Corrosivity, Ignitability , Reactivity
- ☐ I futher certify that there has been no change in the process employed or chemicals stored / used at the facility generating the waste since _____

Signature Eddie Sosaya
Printed Name Eddie SOSAYA
Title DISTRICT MANAGER
Date 08-20-96

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	4. Generator <u>BOWEN</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	5. Originating Site <u>BOWEN YARD</u>
3. Address of Facility Operator <u>CR 3500 #345, AZTEC NM</u>	6. Transporter <u>SUNCO</u>
7. Location of Material (Street Address or ULSTR) <u>BOWEN YARD</u>	8. State <u>NM</u>
9. <u>Circle One</u> : <input checked="" type="radio"/> 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 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:

City water used to clean downhole tools, STORED IN TUMP

RECEIVED
DEC 17 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 800 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael T. Kovick TITLE: Disposal Mgr DATE: 12-17-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL T. KOVICK TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Dennis G. Kent TITLE: Geologist DATE: 12/17/97
APPROVED BY: Ernie Busch TITLE: Geologist DATE: 12/17/97

CERTIFICATE OF WASTE STATUS

1. Generator (Name): Address: Bowen Tools/Division #14 CR 5860 Farmington, nm	3. Location (Street Address &/or ULSTR):
2. Originating Site (Name): Shop Sump (TANK)	4. Destination Name: SINCO DISPOSAL

5. Source and Description of Waste: City water used to clean Tools - No other waste is washed with this water or any other waste is put in sump. water goes thru separator first. This water is only used to clean oilfield Tools.

I, Gary Halliburton representative for: Bowen Tools / Division do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988 regulatory determination, the above described waste is: (Check appropriate classification)

☒ EXEMPT oilfield waste

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

For Non-exempt waste only the following documentation is attached (check appropriate items):

- ☐ MSDS Information
- ☐ RCRA TCLP Analysis
- ☐ Chain of Custody
- ☐ Other (Description)

Name (Signature): Gary Halliburton

Printed Name: Gary Halliburton

Title: District Manager

Date: 12/17/97

Attach list of originating sites as appropriate.

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

DEC 01 1997

Environmental Bureau
Oil Conservation Division

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Burlington Resources</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>VAL VERDE PLANT</u>
2. Management Facility Destination <u>Sumco Disposal</u>	6. Transporter <u>Sumco Trucking</u>
3. Address of Facility Operator	8. State <u>New Mexico</u>
7. Location of Material (Street Address or ULSTR) <u>Bloomfield, N.M.</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

SPENT WASH WATER FROM CLEANING PLATE AND FRAME EXCHANGERS
AND AMINE REBOILERS

RECEIVED
NOV 25 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 120 Bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Hal Stone TITLE: MANAGER DATE: 11-25-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Hal Stone TELEPHONE NO. 334-6186

(This space for State Use)

APPROVED BY: Denny G. Fendt TITLE: Geologist DATE: 11/25/97
APPROVED BY: Matthew G. Kelly TITLE: Env. Geologist DATE: 12-1/97

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

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 checked="" type="checkbox"/>	4. Generator <u>Burlington Resources</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	5. Originating Site <u>VAL VERDE PLANT</u>
3. Address of Facility Operator	6. Transporter <u>SUNCO TRUCKING</u>
7. Location of Material (Street Address or ULSTR) <u>Bloomfield, N.M.</u>	8. State <u>New Mexico</u>
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <u>B.</u> 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:

Spent WASH WATER FROM CLEANING PLATE AND FRAME EXCHANGERS
AND AMINE REBOILERS

RECEIVED
NOV 25 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 120 Bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Hal Stone TITLE: MANAGER DATE: 11-25-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: HAL STONE TELEPHONE NO. 334-6186

(This space for State Use)

APPROVED BY: Denny G. Fant TITLE: Geologist DATE: 11/25/97

APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: BURLINGTON RESOURCES 3535 EAST 30th STREET FARMINGTON, NM 87402	2. Destination Name: Sunco Disposal
3. Originating Site (name): Val Verde Plant	Location of the Waste (Street address &/or ULSTR): Section 14, Township 29N, Range 11W
Attach list of originating sites as appropriate.	
4. Source and Description of Waste: Spent wash water from cleaning plate and frame exchangers and amine reboilers at Val Verde Plant.	

I, Ed Hasely representative for:

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 only the following documentation is attached (check appropriate items):

MSDS Information
☒ RCRA Hazardous Waste Analysis
☒ Chain of Custody

Other (description):
There has been no change in the subject waste stream at the
facility since the 3/5/97 sample.

Name (Original Signature):

Ed Hasely

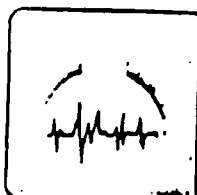
Title:

SR STAFF ENVIRONMENTAL REPRESENTATIVE

Date:

11/24/97

RECEIVED
NOV 25 1997
OIL CON. DIV.
DIST. 3



**ASSAIGAI
ANALYTICAL
LABORATORIES, INC.**

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

Report Generated:
March 12, 1997 14:42

**CERTIFICATE OF ANALYSIS
RESULTS BY SAMPLE**

SENT CONTRACT ENVIRONMENTAL SERV WORKORDER # : 9703041
TO: PO BOX 3376 WORK ID : MOI-VAL VERDE
FARMINGTON, NM 87499 CLIENT CODE : CONT01
DATE RECEIVED : 03/06/97

ATTN: SHAWN ADAMS

Page: 1

Lab ID: 9703041-01A
Sample ID: VALV-100

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
FLASH POINT/SW846 1010						
Flash Point	> 60	Deg Centigrade	20	1.0	03/10/97	WFLASH204
REACTIVITY/SW846 7-3						
Sulfide	NON-REACT	mg/Kg of Waste	500	1.0	03/11/97	W97114
Cyanide	NON-REACT	mg/Kg of Waste	250	1.0	03/11/97	W97114

Lab ID: 9703041-01B
Sample ID: VALV-101

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
CORROS(NACE)/SW846 1110						
Corrosivity (NACE)	ND	mm/yr	6.0	1.0	03/07/97	WNACE035

Lab ID: 9703041-01C
Sample ID: VALV-102/103

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP SV/METHOD 1311/8270B						
1,4-Dichlorobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
2-Methylphenol / O-Cresol	ND	mg/L	0.0010	290	03/08/97	TSVOA186
3/4-Methylphenol / M/P-Cresol	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Hexachloroethane	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Nitrobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Hexachlorobutadiene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
2,4,6-Trichlorophenol	ND	mg/L	0.010	290	03/08/97	TSVOA186
2,4,5-Trichlorophenol	ND	mg/L	0.010	290	03/08/97	TSVOA186
2,4-Dinitrotoluene	ND	mg/L	0.010	290	03/08/97	TSVOA186
Hexachlorobenzene	ND	mg/L	0.0010	290	03/08/97	TSVOA186
Pentachlorophenol	ND	mg/L	0.020	290	03/08/97	TSVOA186
Pyridine	ND	mg/L	0.010	290	03/08/97	TSVOA186
TCLP SVOA XT/1311/3520-	03/07/97	N/A				



b ID: 9703041-01D
Sample ID: VALV-104

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
pH/EPA 150.1 pH	8.7	pH Units	0.10	1.0	03/07/97	WPH479

Lab ID: 9703041-01E
Sample ID: VALV-105

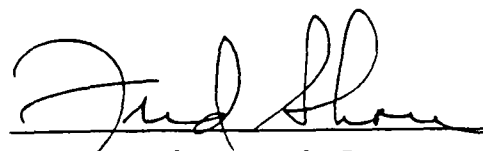
Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
% SOLIDS(TCLP XT)EPA 160.3	1.00	% (Percent)				
TCLP (ICP) DIG/1311/3005	03/09/97	N/A				
TCLP EXTRACTION/TCLP 1311	03/06/97	N/A				
TCLP METALS/1311/SW8466010						
Arsenic, As	ND	mg/L	0.40	1.0	03/10/97	M97180.97178
Barium, Ba	ND	mg/L	0.50	1.0	03/10/97	M97180.97178
Cadmium, Cd	ND	mg/L	0.0050	1.0	03/10/97	M97180.97178
Chromium, Cr	ND	mg/L	0.020	1.0	03/10/97	M97180.97178
Lead, Pb	ND	mg/L	0.050	1.0	03/10/97	M97180.97178
Mercury, Hg	ND	mg/L	0.0020	1.0	03/11/97	M97180.97178
Selenium, Se	ND	mg/L	0.050	1.0	03/10/97	M97180.97178
Silver, Ag	ND	mg/L	0.040	1.0	03/10/97	M97180.97178
TCLP(CVAA)Hg XT/SW846 7471	03/10/97	N/A				

Lab ID: 9703041-01F
Sample ID: VALV-106/107 A/B

Collected: 03/05/97 12:00:00
Matrix: LIQUID

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TCLP ZHE / TCLP 1311	03/06/97	N/A				
ZHE/VOA/METHOD 1311/8240B						
Vinyl Chloride	ND	mg/L	0.0050	5.0	03/07/97	TVOA278
1,1-Dichloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Chloroform	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
1,2-Dichloroethane	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
2-Butanone (MEK)	ND	mg/L	0.0050	5.0	03/07/97	TVOA278
Carbon Tetrachloride	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Trichloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Benzene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Tetrachloroethene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278
Chlorobenzene	ND	mg/L	0.0010	5.0	03/07/97	TVOA278



Fred L. Shore, Ph.D.
VP of Laboratory Operations

WORKORDER COMMENTS

DATE : 03/12/97
WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

ND = Analyte "not detected" in analysis at the sample specific detection limit.

D_F = Sample "dilution factor"

NT = Analyte "not tested" per client request.

B = Analyte was also detected in laboratory method QC blank.

E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.

LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

*** Analytical results reported pertain only to the samples provided ***
*** for analysis and may not represent actual field conditions. ***

*** This report is not to be reproduced except in full, without the ***
*** written approval of Assaigai Analytical Inc. ***

REPORT COMMENTS

ASSAIGAI ANALYTICAL LABORATORIES

Chain of Custody Record

Lab Job no.: 2-11 Date 3/1/97

Page 1 of 1

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87111
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 970-1116

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Client CRATER ENVIRONMENTAL SERVICES, INC

Project Manager / Contact Suzanne Adams

Address PO Box 3376

Telephone No. (505) 375-1198

City / State / Zip Flagstaff AZ 86004

Fax No. (505) 375-1198

Project Name / Number MOT VAL U-100E

Samplers: (Signature) Suzanne Adams

Contract / Purchase Order / Quote CRATER ENV

AAL FRACTION NUMBER	Field Sample Number/Location	Date	Time	Sample Type	Type / Size of Container	Preservation		Analysis Required										Remarks
						Temp.	Chemical	No. of Containers	FLASH	HEAT	NACE	TCLP	TCLP SW-846	TCLP SW-846	TCLP - SW-846	TCLP - SW-846	TCLP - SW-846	
1A	VALV-100	3/1/97	12:00	LIC	8 oz glass		no	1	X									Composite Tank Sample
1F	VALV-101	"	"	"	2 1/2 x 7" Plastic		no	1		+								"
1C	VALV-102	"	"	"	4 x 6" Amber		no	1			X							"
	VALV-103	"	"	"	4 x 6" Amber		no	1				X						"
1D	VALV-104	"	"	"	2 x 5 1/4" Plastic		no	1					X					"
1E	VALV-105	"	"	"	3 1/2 x 6" Plastic		no	1						X				"
1F	VALV-106 A/B	"	"	"	UDAS		no	2							X			"
	VALV-107 A/B	"	"	"	UDAS		no	2							X			"

Relinquished by: Suzanne Adams
Signature
Printed
Company CRATER ENV SERVICES
Reason Analysis

Date 3/1/97
Time 2:00

Received by: FEEL-EX
Signature
Printed
Company
Reason

Relinquished by: FEEL-EX
Signature
Printed
Company
Reason

Date 3/1/97
Time 1:15

Received by: FEEL-EX
Signature
Printed
Company
Reason

Method of Shipment: FEEL-EX
Shipment No. 1
Special Instructions: FEEL-EX

Comments: "PUSH" 5-DAY
RECEIVED BY 3/13/97
blended
State and Analyse Liquid phase only

After analysis, samples are to be:
☐ Disposed of (additional fee)
☒ Stored (30 days max)
☐ Stored over 30 days (additional fee)
☐ Returned to customer

COURIER

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>MAXYNE Kutz 11-19-97</i>	4. Generator <i>EL PASO field service</i>
2. Management Facility Destination <i>SUNCO DISPOSAL</i>	5. Originating Site <i>KUTZ PLANT</i>
3. Address of Facility Operator <i>CR 3500 #345 AZTEC, NM</i>	6. Transporter <i>SUNCO</i>
7. Location of Material (Street Address or ULSTR) <i>KUTZ PLANT</i>	8. State <i>NM</i>
9. Circle One: <input checked="" type="radio"/> 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 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:

*Cleanout of Dehydrator water with cleaning agent
MSDS attached*

RECEIVED
NOV 24 1997
OIL CON. DIV.
DIST. 3

Estimated Volume *80661s* cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: *Michael T. [Signature]* TITLE: *MANAGER* DATE: *11-19-97*
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: *MICHAEL TADOVIC* TELEPHONE NO. _____

(This space for State Use)

APPROVED BY: *Eric Busch* TITLE: *Geo* DATE: *11-19-97*
APPROVED BY: *Henry G. Faut* TITLE: *Geologist* DATE: *11/24-97*

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: EL PASO FIELD SERVICES PO BOX 4550 FARMINGTON, NM 87489 ATTN: SANDRA MILLER	2. Destination Name: SUNCO DISPOSAL
3. Originating Site (name): KUTZ PLANT <small>Attach list of originating sites as appropriate</small>	Location of the Waste (Street address &/or ULSTR): SEC. 15 T. 29N R. 12W SAN JUAN COUNTY, NM 2 MI. NORTH OF HWY 64 ON CR 5569
4. Source and Description of Waste <div style="text-align: center; font-size: 1.2em;"> DEHYDRATOR CONTACTOR WASH WATER </div>	

RECEIVED
 NOV 24 1997
 OIL CON. DIV.
 DIST. 3

I, SANDRA D. MILLER representative for:
(Print Name)
EL PASO FIELD SERVICES do hereby certify that,
 according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,
 1988, regulatory determination, the above described waste is: (Check appropriate classification)

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

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

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

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

Name (Original Signature): Sandra D Miller
 Title: ENVIRONMENTAL MANAGER
 Date: 11/19/97

RHONE-POULENC BASIC CHEMICALS CO.
1 Corporate Drive Box 881 Shelton, CT. 06484 (203)925-3300
24-HOUR EMERGENCY TELEPHONE CHEMTREC 1-800-424-9300

PRODUCT NAME:

Page: 1 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992
Supersedes: JANUARY 11, 1990

I. IDENTIFICATION

CHEMICAL NAME OF PRIMARY COMPONENT(S): Trisodium phosphate, dodecahydrate

FORMULA: $4(\text{Na}_3\text{PO}_4 \cdot 12 \text{H}_2\text{O})\text{NaOH}$

FORMULA WEIGHT: 1560

SYNONYMS: sodium orthophosphate dodecahydrate

CAS# & NAME: 10101-89-0 Phosphoric acid, trisodium salt, dodecahydrate

II. INGREDIENTS/SUMMARY OF HAZARDS

<u>INGREDIENT(S)</u>	<u>CAS NUMBER</u>	<u>OSHA HAZARDOUS (H)/ NON-HAZARDOUS (NH)</u>	<u>PERCENT</u>
Trisodium phosphate dodecahydrate	10101-89-0	H	100

WARNING STATEMENTS:

DANGER! CAUSES EYE BURNS. CAUSES SKIN AND RESPIRATORY TRACT IRRITATION.

Avoid contact with eyes, skin or clothing. Wear appropriate protective clothing and devices when handling. Wash thoroughly after handling. Avoid breathing dust.

(See Section VI for complete Health Hazard Data)

NATIONAL FIRE PROTECTION ASSOCIATION RATING
HAZARDOUS MATERIALS IDENTIFICATION SYSTEM

	NFPA	HMIS
HEALTH	3	3
FIRE	0	0
REACTIVITY	0	0

(4=Extreme/Severe 3=High/Serious
2=Moderate 1=Slight 0=Minimum)

SARA TITLE III HAZARD CLASSIFICATION

IMMEDIATE (ACUTE) HEALTH	YES
DELAYED (CHRONIC) HEALTH	NO
FIRE	NO
SUDDEN RELEASE OF PRESSURE	NO
REACTIVE	NO

PRODUCT NAME:

Page: 2 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

III. PHYSICAL DATA

MELTING POINT [°C (°F)]:	Loses water of hydration @ 77°C (170°F)
pH:	11.8 (1% aqueous solution)
SOLUBILITY IN WATER [@ 25°C]:	30g/100g saturated solution
APPEARANCE AND ODOR:	white granular solid / odorless

(For additional technical information call 1-800-642-4200)

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT [°C (°F)]:	Noncombustible
FLAMMABLE LIMITS IN AIR:	Not applicable
AUTOIGNITION TEMPERATURE [°C (°F)]:	Not applicable
EXTINGUISHING MEDIA:	Not combustible. Use appropriate extinguishing media for material that is supplying fuel.

SPECIAL FIRE FIGHTING PROCEDURES:

Provide for the protection of employees and residents:

- Evacuate residents who are downwind of fire.
- Prevent unauthorized entry to fire area.
- Persons who may have been exposed to contaminated smoke should be examined by a physician and treated appropriately.
- Dike area to prevent runoff and contamination of water sources.

Notify local authorities that firemen should:

- Wear protective clothing and use self-contained breathing apparatus.
- Be immediately relieved from duty, if exposed to contaminated smoke and checked for symptoms of overexposure. These should not be mistaken for heat exhaustion or smoke inhalation. See section VI, Health Hazard Data for symptoms of overexposure, first aid procedures, and notes to physician.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Thermal decomposition products may be hazardous and include phosphorus oxides and sodium oxide.

In aqueous solutions, may react with certain metals to form flammable hydrogen gas.

V. REACTIVITY DATA

STABILITY: Stable at ambient temperatures and atmospheric pressure.

CONDITIONS TO AVOID: Hygroscopic; protect from moisture.

MATERIALS TO AVOID:

Strong acids. Solutions react with metals to form flammable hydrogen gas.
May react violently with magnesium.
This material, upon contact with certain food products or their residues which contain reducing sugars, may react to form deadly carbon monoxide gas.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products may be hazardous and include phosphorus oxides and sodium oxide.

HAZARDOUS POLYMERIZATION: Will not occur.

PRODUCT NAME:

Page: 3 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES

EXPOSURE LIMITS:

No exposure limits have been established for this product by ACGIH or OSHA. However the American Industrial Hygiene Association Committee on "Workplace Environmental Exposure Levels" (WEEL) recommends: 5 mg/m³ (15 min TWA).

TOXICOLOGY DATA:

Oral LD50 (rats):	<5000 mg/kg body weight (90% mortality)	(1)
	7400 mg/kg body weight	(2)
Dermal LD50 (rabbit):	No data available.	
Inhalation LC50 (rats):	No data available.	
Skin Effects (rabbits):	Corrosive - 24 hr exposure, moist skin	(1)
Eye Effects (rabbits):	Corrosive	(1)

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY:

This product does not contain any ingredient designated by IARC, NTP, ACGIH OR OSHA as a probable human carcinogen, teratogen or mutagen.

EFFECTS OF SINGLE OVEREXPOSURE:

PRECAUTION: Persons attending the patient should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.

Swallowing: May cause irritation or corrosion of the mouth, throat, esophagus and stomach, including blistering of the mucous membranes. Aspiration of the swallowed product or vomitus can cause severe pulmonary complications. (4)

Skin Absorption: No information is available, but deep, penetrating burns are caused by contact with the material. (3,4,5)

Inhalation: Inhalation of dusts may cause irritation or burns to the nose, throat and respiratory tract, resulting in cough, chest pain and difficult breathing.

Skin Contact: Contact with the dry solid or solutions may cause severe irritation or burns if not washed or removed from the skin promptly. Irritation is likely to be severe if the skin is moist or wet. Contact with concentrated solutions may cause severe irritation or burns depending on the concentration of the product and duration of the contact. (4)

Eye Contact: Contact with the dry solid or solutions may cause severe irritation or burns. The possibility of severe eye damage exists if concentrated solutions are splashed into the eyes and not promptly and properly treated.

EFFECTS OF REPEATED OVEREXPOSURE:

Repeated exposure may lead to contact dermatitis. (3)

OTHER EFFECTS OF OVEREXPOSURE:

After swallowing, this product is capable of seriously reducing the serum level of ionic calcium. (3)

Esophageal stricture can occur weeks, months, or even years after recovery from immediate damage from swallowing. Carcinoma is a risk in later life. (3)

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Skin irritation may be aggravated in persons with existing skin lesions. Breathing of dust may aggravate acute or chronic asthma and other chronic pulmonary disease.

PRODUCT NAME:

Page: 4 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1991

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES (continued)

EMERGENCY AND FIRST AID PROCEDURES:

PRECAUTION: Persons attending the patient should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair. Remove the patient from the source of exposure and confirm that the individual is breathing. If not breathing, use artificial respiration or cardiopulmonary resuscitation (CPR). GET IMMEDIATE MEDICAL ATTENTION.

Swallowing: If victim is conscious and alert, give two or more glasses of cold water or milk to drink. DO NOT INDUCE VOMITING ! If vomiting does occur, give fluids again. Since swallowing is painful, flushing the mouth with water is often the only and best immediate therapy. NEVER give anything by mouth to an unconscious or convulsing person. GET IMMEDIATE MEDICAL ATTENTION.

Skin: Immediately wash skin with soap and plenty of water while removing contaminated clothing and shoes. Continue washing until the skin is free of the material, indicated by the disappearance of soapiness. Discard clothes and shoes in a manner which limits further exposure. GET MEDICAL ATTENTION.

Inhalation: Remove patient to fresh air. If not breathing administer cardiopulmonary resuscitation or artificial respiration. If breathing is difficult or irritation develops, administer oxygen. GET MEDICAL ATTENTION.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes using an eyewash fountain, if available. Lift upper and lower lids and rinse well under them. GET MEDICAL ATTENTION, preferably an ophthalmologist. Flush for an additional 15 minutes if a physician is not immediately available.

NOTES TO PHYSICIANS:

No specific antidote is available.

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.

INGESTION

Treat asphyxia from glottal edema by maintaining an adequate airway.

Treat shock - maintain normal blood pressure by transfusion and by the administration of 5% dextrose in saline.

If the symptoms are severe and perforation of the stomach or esophagus is suspected, give nothing by mouth until endoscopic examination has been done.

Maintain nutrition by giving carbohydrate or hyperalimentation fluid intravenously. Give prednisolone, 2 mg/kg/day in divided doses for 10 days, to reduce the progression of fibrocystic and hyaline lung disease.

Esophageal stricture may require dilation.

If a large quantity is ingested, test for hypocalcemia and treat with 10 ml of 10% calcium gluconate by slow intravenous infusion, if necessary. (3)

INHALATION

Treat shock. Treat pulmonary edema. Treat bacterial pneumonia with organism-specific chemotherapy. (3)

PRODUCT NAME:

Page: 5 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Persons involved in clean-up must wear appropriate protective equipment. To the extent possible, clean up spillage using shovels, sweeping, or vacuuming. Avoid dust generation. Place in appropriate containers for disposal. Flush area with water.

If spilled on the ground, the affected area should be scraped clean and the material placed in an appropriate container for disposal. Do not flush material to public sewer systems or any waterways. Ensure adequate decontamination of tools and equipment following clean up.

Large spills should be handled according to a predetermined plan. For assistance in developing a plan, contact the Technical Service Department, 1-800-642-4200.

WASTE DISPOSAL METHOD:

Dispose of in accordance with Local, State and Federal regulations.

NOTE: Spills are subject to CERCLA reporting requirements: RQ = 5000 lb.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Do not ingest. Avoid exposure by inhalation. Avoid getting in eyes or on skin and clothing.

Containers should be stored in a cool, dry, well ventilated area away from flammable materials and sources of heat or flame. Store away from foodstuffs or animal feed. Exercise due caution to prevent damage to or leakage from container.

ATTENTION! Potentially deadly carbon monoxide gas can form in enclosed areas or tanks when alkaline products contact food or beverage products that contain sugars. Do not enter such areas until they have been well-ventilated and carbon monoxide and oxygen levels have been determined safe. Continue to monitor atmosphere while personnel are in enclosure. For proper tank entry procedure, see ANSI Z117.1-1977.

VIII. SPECIAL PROTECTION INFORMATION

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product
- Repair and maintenance of contaminated equipment
- Clean up of leaks and spills
- Any activity that may result in exposures to concentrations that exceed exposure limits.

RESPIRATORY PROTECTION:

If use conditions generate airborne dust, handle material in an open or well-ventilated area. Use a NIOSH/MSHA approved dust mask if concentration exceeds suggested exposure limits. Use positive pressure supplied air or self-contained breathing apparatus for emergency or other conditions where a higher level of protection is required.

VENTILATION:

Provide adequate ventilation. Use local exhaust as needed to maintain airborne exposure below control limits.

PROTECTIVE CLOTHING:

Full-body protective clothing, chemical resistant gloves and boots.

EYE PROTECTION:

Face shield with chemical worker goggles.

OTHER PROTECTIVE EQUIPMENT:

Maintain a sink, safety shower and eyewash fountain in the work area. Have oxygen readily available.

RHONE-POULENC BASIC CHEMICALS CO.

PRODUCT NAME:

Page: 6 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

IX. REGULATORY STATUS

TSCA Inventory: This product is listed on the TSCA inventory.

Transportation Status:

DOT (less than RQ):	Not regulated
DOT (more than RQ):	
Proper shipping name:	Hazardous Substance, Solid, N.O.S.
Hazard Class:	ORM-E
ID Number:	NA 9188
Label:	None (ORM-E marking)

Reportable quantity (RQ)

under 49 CFR 172.101 Appendix: 5000 lbs.

SARA Title III

Section 302 Extremely Hazardous Substance List: Not listed

Section 313 Toxic Chemicals: Not listed

Reportable Quantity (RQ) under US EPA CERCLA: RQ = 5000 lb

State/International Right-to-Know Regulations:

California:	Not listed
Connecticut:	Survey
Florida:	Not listed
Illinois:	Chemical list
Louisiana:	RTK, Spill RQ=5000 lb
Massachusetts:	RTK, Spill RQ=100 lb
New Jersey:	RTK, ID# 3044; Tax
New York:	Spill
Pennsylvania:	RTK
Rhode Island:	Not listed
Canada:	Not listed

X. REFERENCES

- (1) Unpublished RP toxicity studies T-10656.
- (2) RTECS, 7/91
- (3) Dreisbach, Handbook of Poisoning, 12th edition.
- (4) Arena, Poisoning, 5th edition.
- (5) Gosselin, Clinical Toxicology of Commercial Products, 5th edition.

The information herein is given in good faith
but no warranty, expressed or implied, is made.

MSDS # 03559-90.BSC
PSIS # TRI.553.B

AS

AsLadin Southwest
Farmington, NM 87401

MATERIAL SAFETY DATA SHEET

Emergency Phone (800) 535-5053

I - IDENTIFICATION

PRODUCT NAME	DYNAMITE
PRODUCT TYPE	Liquid alkaline detergent
DATE PREPARED	6/1/92

II - PRECAUTIONARY INFORMATION

Severely irritating to eyes, skin and mucous membranes. If swallowed, can cause severe irritation of the mouth, throat, esophagus and stomach. Inhalation can cause irritation of the upper respiratory tract and lungs depending on exposure.

III - HAZARDOUS COMPONENT DATA

COMPONENT (S) CHEMICAL NAME	CAS REGISTRY NO.	ACGIH TLV	
Sodium Metasilicate	6834-92-0	2 mg/m ³	
Nonylphenoxypolyethoxyethanol	9016-45-9	N/A	
Tetrasodium ethylenediaminetetraacetate	0064-02-8	N/A	

IV - PHYSICAL DATA

APPEARANCE AND ODOR	SPECIFIC GRAVITY
Red liquid with mild odor	1.079
BOILING POINT	VAPOR DENSITY IN AIR (AIR = 1)
Similar to Water	Similar to Water
VAPOR PRESSURE	% VOLATILE, BY VOLUME
Similar to Water	None
EVAPORATION RATE	SOLUBILITY IN WATER
Similar to Water	Complete

VIII - FIRST AID

Skin: Remove contaminated clothing immediately and wash skin thoroughly for a minimum of 15 minutes with large quantities of water (preferably a safety shower). Get medical attention immediately.

Eyes: Wash eyes immediately with large amounts of water (preferably eye wash fountain), lifting the upper and lower eyelids and rotating eyeball. Continue washing for a minimum of 15 minutes. Get medical attention immediately.

Ingestion: If the person is conscious, give large quantities of water to dilute product. Do NOT induce vomiting. Get medical attention immediately.

Inhalation: Move person to fresh air. If breathing stops, administer artificial respiration. Get medical attention immediately.

IX - CHRONIC TOXICITY

This product does not contain any materials listed on the IARC, OSHA, or NPT carcinogen lists.

X - PERSONAL PROTECTION AND CONTROLS

RESPIRATORY PROTECTION

For levels which exceed or are likely to exceed 150 mg/m³ use approved high-efficiency particulate filter with full facepiece or self-contained breathing apparatus. Follow any applicable respirator use standards and regulations.

VENTILATION

As necessary to maintain concentration in air below 150 mg/m³ at all times.

SKIN PROTECTION

Wear neoprene, PVC, or rubber gloves.

EYE PROTECTION

Wear safety glasses or splashproof chemical goggles.

HYGIENE

Avoid contact with skin. Do not eat, drink, or smoke in work area. Wash hands prior to eating, drinking, or using restroom. Any protective clothing which becomes contaminated should be thoroughly cleaned before reuse.

OTHER CONTROL MEASURES

Safety shower and eye wash should be located in work area.

V - REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID
Stable	Mixture with acid or incompatible materials can cause splattering and release of heat.
INCOMPATIBILITY (MATERIALS TO AVOID)	
Acids, chlorine dioxide, phosphorus, potassium persulfate, and tetrahydrofuran.	
HAZARDOUS DECOMPOSITION PRODUCTS	
Will not decompose.	
HAZARDOUS POLYMERIZATION	
Will not occur	

VI - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS IN AIR
None	
EXTINGUISHING MEDIA	
N/A	
UNUSUAL FIRE AND EXPLOSION HAZARDS	
None	

VII - TOXICITY

EXPOSURE LIMITS	
Sodium metasilicate	ACGIH 2 mg/m ³ Ceiling OSHA None
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	
No known medical conditions aggravated by exposure	
ACUTE TOXICITY	
<u>Skin:</u> May cause irritation.	
<u>Eyes:</u> Liquid in the eye can cause severe irritation.	
<u>Ingestion:</u> Ingestion can cause severe irritation and pain in mouth, throat, esophagus and stomach.	
<u>Inhalation:</u> Inhalation of solution mist can cause mild irritation.	

KEEP FROM FREEZING

Store in closed, properly labeled containers.

DO NOT remove or deface labels.

Use of this product should be limited to properly trained individuals.

XII - SPILL, LEAK AND DISPOSAL PRACTICES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Product should be contained and recovered into containers. Cleanup personnel should follow all safety precautions during cleanup.

WASTE DISPOSAL METHOD

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

XIII - SUPPLIER INFORMATION

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the emergency planning and community right-to know act of 1988 and or 40 CFR part 372.

CAS NUMBER

CHEMICAL NAME

XIV - SHIPPING INFORMATION

The proper DOT shipping name of this product is:
None Required

The above information is believed to be accurate with respect to the formula used to manufacture this product. As data, standards and regulations change, and conditions of use and handling are beyond our control **NO WARRANTY** express or implied is made as to the completeness or continuing accuracy of this information.

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>EL Paso Field Service</u> 5. Originating Site <u>Ballard Plant</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>EPFS BALLARD PLANT 7 miles EAST of HWY 44, CR 7425</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>EPFS Ballard Plant</u>	
9. Circle One: <input checked="" type="radio"/> 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 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:

water mixed soap, wash water

WONT HAUL fluid
before the 1st of DEC 97
m.i.d.

RECEIVED
NOV 21 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 160 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: manager DATE: 11-21-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Dan G. Zant TITLE: Geologist DATE: 11-24-97

APPROVED BY: Johnny Robinson TITLE: Deputy Oil Inspector DATE: 11-24-97

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: EL PASO FIELD SERVICES PO BOX 4490 FARMINGTON, NM 87499 ATTN: SANDRA MILLER	2. Destination Name: SUNCO DISPOSAL
3. Originating Site (name): BALLARD PLANT <small>Attach list of originating sites as appropriate</small>	Location of the Waste (Street address &/or ULSTR): SEC. 26 T. 26 N R 9W San Juan County, NM 7 MI. EAST OF HWY 44 ON CR 7425
4. Source and Description of Waste DEHYDRATOR CONTACTOR WASH WATER	

RECEIVED
 NOV 24 1997
 OIL CON. DIV.
 DIST. 3

I, SANDRA D. MILLER representative for:
 (Print Name)
EL PASO FIELD SERVICES do hereby certify that,
 according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,
 1988, regulatory determination, the above described waste is: (Check appropriate classification)

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

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

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

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

Name (Original Signature): Sandra D. Miller
 Title: ENVIRONMENTAL MANAGER
 Date: 12/1/97

RHONE-POULENC BASIC CHEMICALS CO.
1 Corporate Drive Box 881 Shelton, CT. 06484 (203)925-3300
24-HOUR EMERGENCY TELEPHONE CHEMTREC 1-800-424-9300

PRODUCT NAME:

Page: 1 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992
Supercedes: JANUARY 11, 1990

I. IDENTIFICATION

CHEMICAL NAME OF PRIMARY COMPONENT(S): Trisodium phosphate, dodecahydrate

FORMULA: $4(\text{Na}_3\text{PO}_4 \cdot 12 \text{H}_2\text{O})\text{NaOH}$

FORMULA WEIGHT: 1560

SYNONYMS: sodium orthophosphate dodecahydrate

CAS# & NAME: 10101-89-0 Phosphoric acid, trisodium salt, dodecahydrate

II. INGREDIENTS/SUMMARY OF HAZARDS

<u>INGREDIENT(S)</u>	<u>CAS NUMBER</u>	<u>OSHA HAZARDOUS (H)/ NON-HAZARDOUS (NH)</u>	<u>PERCENT</u>
Trisodium phosphate dodecahydrate	10101-89-0	H	100

WARNING STATEMENTS:

DANGER! CAUSES EYE BURNS. CAUSES SKIN AND RESPIRATORY TRACT IRRITATION.

Avoid contact with eyes, skin or clothing. Wear appropriate protective clothing and devices when handling. Wash thoroughly after handling. Avoid breathing dust.

(See Section VI for complete Health Hazard Data)

NATIONAL FIRE PROTECTION ASSOCIATION RATING
HAZARDOUS MATERIALS IDENTIFICATION SYSTEM

	NFPA	HMIS
HEALTH	3	3
FIRE	0	0
REACTIVITY	0	0

(4=Extreme/Severe 3=High/Serious
2=Moderate 1=Slight 0=Minimum)

SARA TITLE III HAZARD CLASSIFICATION

IMMEDIATE (ACUTE) HEALTH	YES
DELAYED (CHRONIC) HEALTH	NO
FIRE	NO
SUDDEN RELEASE OF PRESSURE	NO
REACTIVE	NO

PRODUCT NAME:

Page: 2 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

III. PHYSICAL DATA

MELTING POINT [°C (°F)]:	Loses water of hydration @ 77°C (170°F)
pH:	11.8 (1% aqueous solution)
SOLUBILITY IN WATER (@ 25°C):	30g/100g saturated solution
APPEARANCE AND ODOR:	white granular solid / odorless

(For additional technical information call 1-800-642-4200)

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT [°C (°F)]:	Noncombustible
FLAMMABLE LIMITS IN AIR:	Not applicable
AUTOIGNITION TEMPERATURE [°C (°F)]:	Not applicable
EXTINGUISHING MEDIA:	Not combustible. Use appropriate extinguishing media for material that is supplying fuel.

SPECIAL FIRE FIGHTING PROCEDURES:

Provide for the protection of employees and residents:

- Evacuate residents who are downwind of fire.
- Prevent unauthorized entry to fire area.
- Persons who may have been exposed to contaminated smoke should be examined by a physician and treated appropriately.
- Dike area to prevent runoff and contamination of water sources.

Notify local authorities that firemen should:

- Wear protective clothing and use self-contained breathing apparatus.
- Be immediately relieved from duty, if exposed to contaminated smoke and checked for symptoms of overexposure. These should not be mistaken for heat exhaustion or smoke inhalation. See section VI, Health Hazard Data for symptoms of overexposure, first aid procedures, and notes to physician.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Thermal decomposition products may be hazardous and include phosphorus oxides and sodium oxide.

In aqueous solutions, may react with certain metals to form flammable hydrogen gas.

V. REACTIVITY DATA

STABILITY: Stable at ambient temperatures and atmospheric pressure.

CONDITIONS TO AVOID: Hygroscopic; protect from moisture.

MATERIALS TO AVOID:

Strong acids. Solutions react with metals to form flammable hydrogen gas.
May react violently with magnesium.

This material, upon contact with certain food products or their residues which contain reducing sugars, may react to form deadly carbon monoxide gas.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products may be hazardous and include phosphorus oxides and sodium oxide.

HAZARDOUS POLYMERIZATION: Will not occur.

PRODUCT NAME:

Page: 3 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES

EXPOSURE LIMITS:

No exposure limits have been established for this product by ACGIH or OSHA. However the American Industrial Hygiene Association Committee on "Workplace Environmental Exposure Levels" (WEEL) recommends: 5 mg/m³ (15 min TWA).

TOXICOLOGY DATA:

Oral LD50 (rats):	<5000 mg/kg body weight (90% mortality)	(1)
	7400 mg/kg body weight	(2)
Dermal LD50 (rabbit):	No data available.	
Inhalation LC50 (rats):	No data available.	
Skin Effects (rabbits):	Corrosive - 24 hr exposure, moist skin	(1)
Eye Effects (rabbits):	Corrosive	(1)

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY:

This product does not contain any ingredient designated by IARC, NTP, ACGIH OR OSHA as a probable human carcinogen, teratogen or mutagen.

EFFECTS OF SINGLE OVEREXPOSURE:

PRECAUTION: Persons attending the patient should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.

Swallowing: May cause irritation or corrosion of the mouth, throat, esophagus and stomach, including blistering of the mucous membranes. Aspiration of the swallowed product or vomitus can cause severe pulmonary complications. (4)

Skin Absorption: No information is available, but deep, penetrating burns are caused by contact with the material. (3,4,5)

Inhalation: Inhalation of dusts may cause irritation or burns to the nose, throat and respiratory tract, resulting in cough, chest pain and difficult breathing.

Skin Contact: Contact with the dry solid or solutions may cause severe irritation or burns if not washed or removed from the skin promptly. Irritation is likely to be severe if the skin is moist or wet. Contact with concentrated solutions may cause severe irritation or burns depending on the concentration of the product and duration of the contact. (4)

Eye Contact: Contact with the dry solid or solutions may cause severe irritation or burns. The possibility of severe eye damage exists if concentrated solutions are splashed into the eyes and not promptly and properly treated.

EFFECTS OF REPEATED OVEREXPOSURE:

Repeated exposure may lead to contact dermatitis. (3)

OTHER EFFECTS OF OVEREXPOSURE:

After swallowing, this product is capable of seriously reducing the serum level of ionic calcium. (3)

Esophageal stricture can occur weeks, months, or even years after recovery from immediate damage from swallowing. Carcinoma is a risk in later life. (3)

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Skin irritation may be aggravated in persons with existing skin lesions. Breathing of dust may aggravate acute or chronic asthma and other chronic pulmonary disease.

PRODUCT NAME:

Page: 4 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1991

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES (continued)

EMERGENCY AND FIRST AID PROCEDURES:

PRECAUTION: Persons attending the patient should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair. Remove the patient from the source of exposure and confirm that the individual is breathing. If not breathing, use artificial respiration or cardiopulmonary resuscitation (CPR). GET IMMEDIATE MEDICAL ATTENTION.

Swallowing: If victim is conscious and alert, give two or more glasses of cold water or milk to drink. DO NOT INDUCE VOMITING ! If vomiting does occur, give fluids again. Since swallowing is painful, flushing the mouth with water is often the only and best immediate therapy. NEVER give anything by mouth to an unconscious or convulsing person. GET IMMEDIATE MEDICAL ATTENTION.

Skin: Immediately wash skin with soap and plenty of water while removing contaminated clothing and shoes. Continue washing until the skin is free of the material, indicated by the disappearance of soapiness. Discard clothes and shoes in a manner which limits further exposure. GET MEDICAL ATTENTION.

Inhalation: Remove patient to fresh air. If not breathing administer cardiopulmonary resuscitation or artificial respiration. If breathing is difficult or irritation develops, administer oxygen. GET MEDICAL ATTENTION.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes using an eyewash fountain, if available. Lift upper and lower lids and rinse well under them. GET MEDICAL ATTENTION, preferably an ophthalmologist. Flush for an additional 15 minutes if a physician is not immediately available.

NOTES TO PHYSICIANS:

No specific antidote is available.

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.

INGESTION

Treat asphyxia from glottal edema by maintaining an adequate airway.
Treat shock - maintain normal blood pressure by transfusion and by the administration of 5% dextrose in saline.
If the symptoms are severe and perforation of the stomach or esophagus is suspected, give nothing by mouth until endoscopic examination has been done.
Maintain nutrition by giving carbohydrate or hyperalimentation fluid intravenously.
Give prednisolone, 2 mg/kg/day in divided doses for 10 days, to reduce the progression of fibrocystic and hyaline lung disease.
Esophageal stricture may require dilation.
If a large quantity is ingested, test for hypocalcemia and treat with 10 ml of 10% calcium gluconate by slow intravenous infusion, if necessary. (3)

INHALATION

Treat shock. Treat pulmonary edema. Treat bacterial pneumonia with organism-specific chemotherapy. (3)

PRODUCT NAME:

Page: 5 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Persons involved in clean-up must wear appropriate protective equipment. To the extent possible, clean up spillage using shovels, sweeping, or vacuuming. Avoid dust generation. Place in appropriate containers for disposal. Flush area with water.

If spilled on the ground, the affected area should be scraped clean and the material placed in an appropriate container for disposal. Do not flush material to public sewer systems or any waterways. Ensure adequate decontamination of tools and equipment following clean up.

Large spills should be handled according to a predetermined plan. For assistance in developing a plan, contact the Technical Service Department, 1-800-642-4200.

WASTE DISPOSAL METHOD:

Dispose of in accordance with Local, State and Federal regulations.

NOTE: Spills are subject to CERCLA reporting requirements: RQ = 5000 lb.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Do not ingest. Avoid exposure by inhalation. Avoid getting in eyes or on skin and clothing.

Containers should be stored in a cool, dry, well ventilated area away from flammable materials and sources of heat or flame. Store away from foodstuffs or animal feed. Exercise due caution to prevent damage to or leakage from container.

ATTENTION! Potentially deadly carbon monoxide gas can form in enclosed areas or tanks when alkaline products contact food or beverage products that contain sugars. Do not enter such areas until they have been well-ventilated and carbon monoxide and oxygen levels have been determined safe. Continue to monitor atmosphere while personnel are in enclosure. For proper tank entry procedure, see ANSI Z117.1-1977.

VIII. SPECIAL PROTECTION INFORMATION

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product
- Repair and maintenance of contaminated equipment
- Clean up of leaks and spills
- Any activity that may result in exposures to concentrations that exceed exposure limits.

RESPIRATORY PROTECTION:

If use conditions generate airborne dust, handle material in an open or well-ventilated area. Use a NIOSH/MSHA approved dust mask if concentration exceeds suggested exposure limits. Use positive pressure supplied air or self-contained breathing apparatus for emergency or other conditions where a higher level of protection is required.

VENTILATION: Provide adequate ventilation. Use local exhaust as needed to maintain airborne exposure below control limits.

PROTECTIVE CLOTHING: Full-body protective clothing, chemical resistant gloves and boots.

EYE PROTECTION: Face shield with chemical worker goggles.

OTHER PROTECTIVE EQUIPMENT:

Maintain a sink, safety shower and eyewash fountain in the work area. Have oxygen readily available.

RHONE-POULENC BASIC CHEMICALS CO.

PRODUCT NAME:

Page: 6 of 6

TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

IX. REGULATORY STATUS

TSCA Inventory: This product is listed on the TSCA inventory.

Transportation Status:

DOT (less than RQ):	Not regulated
DOT (more than RQ):	
Proper shipping name:	Hazardous Substance, Solid, N.O.S.
Hazard Class:	ORM-E
ID Number:	NA 9188
Label:	None (ORM-E marking)

Reportable quantity (RQ)

under 49 CFR 172.101 Appendix: 5000 lbs.

SARA Title III

Section 302 Extremely Hazardous Substance List: Not listed

Section 313 Toxic Chemicals: Not listed

Reportable Quantity (RQ) under US EPA CERCLA:

RQ = 5000 lb

State/International Right-to-Know Regulations:

California:	Not listed
Connecticut:	Survey
Florida:	Not listed
Illinois:	Chemical list
Louisiana:	RTK, Spill RQ=5000 lb
Massachusetts:	RTK, Spill RQ=100 lb
New Jersey:	RTK, ID# 3044; Tax
New York:	Spill
Pennsylvania:	RTK
Rhode Island:	Not listed
Canada:	Not listed

X. REFERENCES

- (1) Unpublished RP toxicity studies T-10656.
- (2) RTECS, 7/91
- (3) Dreisbach, Handbook of Poisoning, 12th edition.
- (4) Arena, Poisoning, 5th edition.
- (5) Gosselin, Clinical Toxicology of Commercial Products, 5th edition.

The information herein is given in good faith
but no warranty, expressed or implied, is made.

MSDS # 03559-90.BSC
PSIS # TRI.553.B



AsLadin Southwest
Farmington, NM 87401

MATERIAL SAFETY DATA SHEET

Emergency Phone (800) 535-5053

I - IDENTIFICATION

PRODUCT NAME	DYNAMITE
PRODUCT TYPE	Liquid alkaline detergent
DATE PREPARED	6/1/92

II - PRECAUTIONARY INFORMATION

Severely irritating to eyes, skin and mucous membranes. If swallowed, can cause severe irritation of the mouth, throat, esophagus and stomach. Inhalation can cause irritation of the upper respiratory tract and lungs depending on exposure.

III - HAZARDOUS COMPONENT DATA

COMPONENT (S) CHEMICAL NAME	CAS REGISTRY NO.	ACGIH TLV
Sodium Metasilicate	6834-92-0	2 mg/m ³
Nonylphenoxypolyethoxyethanol	9016-45-9	N/A
Tetrasodium ethylenediaminetetraacetate	0064-02-8	N/A

IV - PHYSICAL DATA

APPEARANCE AND ODOR	SPECIFIC GRAVITY
Red liquid with mild odor	1.079
BOILING POINT	VAPOR DENSITY IN AIR (AIR = 1)
Similar to Water	Similar to Water
VAPOR PRESSURE	% VOLATILE, BY VOLUME
Similar to Water	None
EVAPORATION RATE	SOLUBILITY IN WATER
Similar to Water	Complete

VIII - FIRST AID

Skin: Remove contaminated clothing immediately and wash skin thoroughly for a minimum of 15 minutes with large quantities of water (preferably a safety shower). **Get medical attention immediately.**

Eyes: Wash eyes immediately with large amounts of water (preferably eye wash fountain), lifting the upper and lower eyelids and rotating eyeball. Continue washing for a minimum of 15 minutes. **Get medical attention immediately.**

Ingestion: If the person is conscious, give large quantities of water to dilute product. Do NOT induce vomiting. **Get medical attention immediately.**

Inhalation: Move person to fresh air. If breathing stops, administer artificial respiration. **Get medical attention immediately.**

IX - CHRONIC TOXICITY

This product does not contain any materials listed on the IARC, OSHA, or NPT carcinogen lists.

X - PERSONAL PROTECTION AND CONTROLS

RESPIRATORY PROTECTION

For levels which exceed or are likely to exceed 150 mg/m^3 use approved high-efficiency particulate filter with full facepiece or self-contained breathing apparatus. Follow any applicable respirator use standards and regulations.

VENTILATION

As necessary to maintain concentration in air below 150 mg/m^3 at all times.

SKIN PROTECTION

Wear neoprene, PVC, or rubber gloves.

EYE PROTECTION

Wear safety glasses or splashproof chemical goggles.

HYGIENE

Avoid contact with skin. Do not eat, drink, or smoke in work area. Wash hands prior to eating, drinking, or using restroom. Any protective clothing which becomes contaminated should be thoroughly cleaned before reuse.

OTHER CONTROL MEASURES

Safety shower and eye wash should be located in work area.

V - REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID
Stable	Mixture with acid or incompatible materials can cause splattering and release of heat.
INCOMPATIBILITY (MATERIALS TO AVOID)	
Acids, chlorine dioxide, phosphorus, potassium persulfate, and tetrahydrofuran.	
HAZARDOUS DECOMPOSITION PRODUCTS	
Will not decompose.	
HAZARDOUS POLYMERIZATION	
Will not occur	

VI - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	None
EXTINGUISHING MEDIA	N/A
UNUSUAL FIRE AND EXPLOSION HAZARDS	
None	

VII - TOXICITY

EXPOSURE LIMITS	Sodium metasilicate ACGIH 2 mg/m ³ Ceiling OSHA None
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	
No known medical conditions aggravated by exposure	
ACUTE TOXICITY	
<p><u>Skin:</u> May cause irritation.</p> <p><u>Eyes:</u> Liquid in the eye can cause severe irritation.</p> <p><u>Ingestion:</u> Ingestion can cause severe irritation and pain in mouth, throat, esophagus and stomach.</p> <p><u>Inhalation:</u> Inhalation of solution mist can cause mild irritation.</p>	

XI - STORAGE AND HANDLING PRECAUTIONS

KEEP FROM FREEZING

Store in closed, properly labeled containers.

DO NOT remove or deface labels.

Use of this product should be limited to properly trained individuals.

XII - SPILL, LEAK AND DISPOSAL PRACTICES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Product should be contained and recovered into containers. Cleanup personnel should follow all safety precautions during cleanup.

WASTE DISPOSAL METHOD

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

XIII - SUPPLIER INFORMATION

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the emergency planning and community right-to know act of 1988 and or 40 CFR part 372.

CAS NUMBER

CHEMICAL NAME

XIV - SHIPPING INFORMATION

The proper DOT shipping name of this product is:
None Required

The above information is believed to be accurate with respect to the formula used to manufacture this product. As data, standards and regulations change, and conditions of use and handling are beyond our control **NO WARRANTY** express or implied is made as to the completeness or continuing accuracy of this information.

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>WFS</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	5. Originating Site <u>ELCEDRO STA</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	6. Transporter <u>SUNCO</u>
7. Location of Material (Street Address or ULSTR) <u>ELCEDRO STA HWY 64 NM #100.5</u>	8. State <u>NM</u>
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

water TEG - DEA

RECEIVED
NOV 19 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 160 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: [Signature] TITLE: MANAGER DATE: 11-19-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALONCH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: [Signature] TITLE: Geo DATE: 11-19-97
APPROVED BY: [Signature] TITLE: Geologist DATE: 11-21-97

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Williams Field Services Box 215 Bloomfield N.M. 87413	2. Destination Name: SUNCO SWD #1
3. Originating Site (name): El Cedro Complex Hwy 64 mm #100.5 Blanco N.M. 87412 <small>Attach list of originating sites as appropriate</small>	Location of the Waste (Street address &/or ULSTR):
4. Source and Description of Waste Water TEG-DEA	

I, ART L. Alsop (lead oper.) representative for:
(Print Name)
Williams Field Services do hereby certify that,
 according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,
 1988, regulatory determination, the above described waste is: (Check appropriate classification)

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

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

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

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

Name (Original Signature): Art L. Alsop
 Title: Lead Oper.
 Date: 11-18-97

District I - (505) 393-6161
P.O. Box 7980
Albuquerque, NM 88241-1980
District II - (505) 748-1283
411 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Santa Fe, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Revised 8/8/95
Form C-138
Originated 8/8/95

RECEIVED

NOV 19 1997

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>South Tex TREATERS</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Antler Plant</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 # 345 AZTEC, N.M.</u>	8. State <u>COLORADO</u>
7. Location of Material (Street Address or ULSTR) <u>T-32 N, R-11 W</u> <u>Sec 15</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Reboiler cleanout fluid

RECEIVED
AUG 12 1997

OIL CON. DIV.
DIST. 2

Held for characteristic analysis

Estimated Volume 120 BBLs cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: Disposal mgr DATE: 8-12-97

Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fenn TITLE: 11/14/97 Geologist DATE: 11/14/97

APPROVED BY: Martyn J. Kelly TITLE: Env. Geologist DATE: 11/20/97

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>South Tex TREATERS</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Antler Plant</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 # 345 AZTEC, N.M.</u>	8. State <u>COLORADO</u>
7. Location of Material (Street Address or ULSTR) <u>T-32N, R-11W sec 15</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Reboiler CLEANOUT FLUID

RECEIVED
AUG 12 1997
OIL CON. DIV.
DIST. 3

Held For characteristic analysis

Estimated Volume 120 BBLS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: Disposal MGR DATE: 8-12-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Teut TITLE: Geologist DATE: 11/14
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: South Tex Treaters Antler Plant P.O. Box 39 Aglee NM 87410	2. Destination Name: Sunco Disposal
3. Originating Site (name): Antler Plant <small>Attach list of originating sites as appropriate</small>	Location of the Waste (Street address &/or ULSTR): T-32N R-11 W Sec 15
4. Source and Description of Waste: Plant Reboilers - Reboiler Clean Out	

I, Doug Lloyd representative for: South-Tex Treaters 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 only the following documentation is attached (check appropriate items):

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

Name (Original Signature): [Signature]
 Title: Plant Manager
 Date: 8-10-97

**CERTIFICATE FROM OUT-OF-STATE AGENCY AUTHORIZING
REMOVAL OF RCRA NON-EXEMPT, NON-TOXIC OIL FIELD
WASTE FROM THEIR JURISDICTION TO NEW MEXICO**

I have reviewed the enclosed information concerning the non-exempt, non-toxic oil field waste material from South-Tex Treaters Antler Plant located in Section 15, Township 32N, Range 11W and agree that by its description it is non-toxic as defined by the Toxic Characteristic Leaching Procedure (TCLP) analysis.

- X** The material is non-exempt oil field waste.
- X** The material is non-toxic according to TCLP analysis. Determination of hazardous waste status cannot be determined due to the lack of ignitability, corrosivity or reactivity analyses.

THEREFORE:

As a representative for the Southern Ute Indian Tribe, I have no objection to the material being removed to New Mexico for disposal in Sunco's Disposal Well.

NAME: Michael A. Frost

TITLE: Director of Environmental Programs

SIGNATURE: Michael A. Frost

DATE: 8/25/97

AGENCY: Southern Ute Indian Tribe

ADDRESS: P.O. Box 737, Ignacio, CO 81137

PHONE: (970) 563-0135

RECEIVED
NOV 14 1997
OIL CON. DIV.
DIST. 3

Doug Lloyd
South -Tex Treaters
P.O. Box 39
Aztec, New Mexico 87410


November 11, 1997

Mr. Lloyd:

Enclosed please find the report for the sample received by our laboratory for analysis on
October 22, 1997.

If you have any questions about the results of the analyses, please don't hesitate to call
me at your convenience.

Sincerely,


Sharon Williams
Organics Lab Supervisor

Enclosure

xc: File

South-Tex Treaters

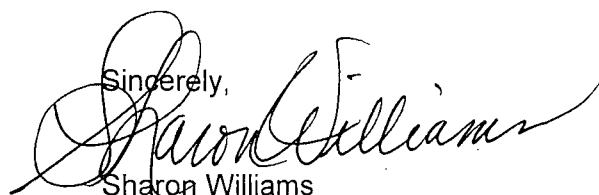
Case Narrative

On October 22, 1997, one water sample was submitted to Inter-Mountain Laboratories - Farmington for analysis. The sample was identified by project "Antler Plant". The sample was analyzed for the parameters indicated on the accompanying Chain of Custody document # 50590.

It is the policy of this laboratory to employ, whenever possible, preparatory and analytical methods which have been approved by regulatory agencies. The methods used in the analysis of the sample reported herein are found in Test Methods For Evaluation of Solid Waste, SW-846, USEPA, 1986, and Methods For Chemical Analysis of Water and Wastes, EPA-600/4-79-020, USEPA, 1983.

Quality control reports appear at the end of the analytical package and may be identified by title. If there are any questions regarding the information presented in this package, please feel free to call at your convenience.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sharon Williams".

Sharon Williams
Organic Lab Supervisor

Client: **South-Tex Treaters**
Project: Antler Plant
Sample ID: Frac Tank
Laboratory ID: 0397G02481
Sample Matrix: Liquid
Condition: Cool/Intact

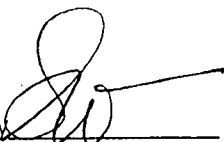
Date Reported: 11/11/97
Date Sampled: 10/22/97
Time Sampled: 11:54AM
Date Received: 10/22/97

Parameter	Analytical		
	Result	PQL	Units
Total Releasable HCN	ND*	10	mg/Kg
Total Releasable H2S	11	10	mg/Kg

*ND - Parameter not detected at stated Practical Quantitation Limit.

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods",
USEPA, Final Update 3, December, 1995.

Reported by



Reviewed by _____

Doug Lloyd
South -Tex Treaters
P.O. Box 39
Aztec, New Mexico 87410

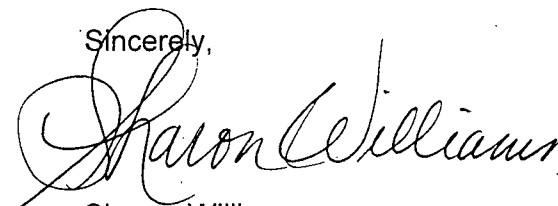
September 16, 1997

Mr. Lloyd:

Enclosed please find the reports for the samples received by our laboratory for analysis on September 2, 1997.

If you have any questions about the results of the analyses, please don't hesitate to call me at your convenience.

Sincerely,

A handwritten signature in cursive script that reads "Sharon Williams". The signature is fluid and elegant, with a large initial "S" and "W".

Sharon Williams
Organic Analyst/IML-Farmington

Enclosure

xc: File

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

Client: **South-Tex Treaters**
Project: Antlers Plant
Sample ID: Frac Tank
Laboratory ID: 0397G01866
Sample Matrix: Liquid
Condition: Cool/Intact

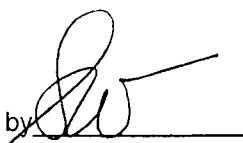
Date Reported: 09/10/97
Date Sampled: 09/02/97
Time Sampled: 3:15pm
Date Received: 09/02/97

Parameter	Analytical Result	Units
-----------	----------------------	-------

pH.....	9.3	S.U.
---------	-----	------

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes", USEPA,600/4-79-020,
Revised March, 1983.

Reported by



Reviewed by



Flash Point

Client: **South-Tex Treaters**
Project: Antlers Plant
Sample ID: Frac Tank
Laboratory ID: 0397G01866
Sample Matrix: Liquid
Condition: Intact

Date Reported: 09/16/97
Date Sampled: 09/02/97
Date Received: 09/02/97


Analyte	Result	Units
Flash Point	> 140	°F

References:

Analysis performed according to SW-846 "Test Methods for Evaluating Solid Waste: Physical / Chemical Methods" United States Environmental Protection Agency 3rd Edition, Final Update II, September, 1994.

Annual Book of ASTM Standards, Method D56.

Reported by: 

Reviewed by: 

Quality Control / Quality Assurance**Known Analysis
FLASH POINT**

Client: **South-Tex Treaters**
Project: **Antler Plant**
Sample Matrix: **Liquid**

Date Reported: **09/16/97**
Date Analyzed: **09/09/97**
Date Received: **09/02/97**

Parameter	Found Result	Known Result
p-Xylene	75°F	77°F

Reference: Analysis performed according to SW-846 "Test Methods for Evaluating Solid Waste: Physical / Chemical Methods" United States Environmental Protection Agency 3rd Edition, Final Update II, September, 1994.

Annual Book of ASTM Standards, Method D56.

Comments:

Reported by



Reviewed by





CHAIN OF CUSTODY RECORD

Client/Project Name

alex Treate

Project Location

Amber Plant

ANALYSES / PARAMETERS

Sampler: (Signature)

Chain of Custody Tape No.

Remarks

No. of
Containers

Reactive

Colloidal

Ignitable

Sample No./
Identification

Date

Time

Lab Number

Matrix

rac an

9-7-

3:15

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Signature

Date

Time

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Relinquished by: (Signature)

Date

Time

Received by laboratory: (Signature)

Date

Time

Inter-Mountain Laboratories, Inc.



1633 Terra Avenue
Sheridan, Wyoming 82801
Telephone (307) 672-8945



1701 Phillips Circle
Gillette, Wyoming 82716
Telephone (307) 682-8945



2506 West Main Street
Farmington, NM 87401
Telephone (505) 326-4737



1160 Research Drive
Bozeman, Montana 59718
Telephone (406) 586-8450



Route 3, Box 256
College Station, TX 77845
Telephone (409) 776-8945

01-50025



2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

Doug Lloyd
South -Tex Treaters
P.O. Box 39
Aztec, New Mexico 87410

August 1, 1997

Mr. Lloyd:

Enclosed please find the reports for the samples received by our laboratory for analysis on July 10, 1997.

If you have any questions about the results of the analyses, please don't hesitate to call me at your convenience.

Sincerely,

A handwritten signature in black ink, reading 'Sharon Williams'. The signature is fluid and cursive, with a large, stylized 'S' at the beginning.

Sharon Williams
Organic Analyst/IML-Farmington

Enclosure

xc: File



CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSES / PARAMETERS					
Sampler: (Signature)		Chain of Custody Tape No.		No. of Containers		Remarks			
Sample No./ Identification	Date	Time	Lab Number	Matrix					
Frac Tank	7/30/97	11:30 A		H ₂ O	2	✓			
									No pesticides + herbicides
									Headspace
									Intact
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Date	Time
				7/14/97	1:30 P	Chris Rayman		7-10-97	1330
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Date	Time
Relinquished by: (Signature)				Date	Time	Received by laboratory: (Signature)		Date	Time

☐ 1633 Terra Avenue
Sheridan, Wyoming 82801
Telephone (307) 672-8945

☐ 1701 Phillips Circle
Gillette, Wyoming 82716
Telephone (307) 682-8945

☐ 2506 West Main Street
Farmington, NM 87401
Telephone (505) 326-4737

☐ 1160 Research Drive
Bozeman, Montana 59718
Telephone (406) 586-8450

☐ Route 3, Box 256
College Station, TX 77845
Telephone (409) 776-8945

01-48686

South-Tex Treaters

Case Narrative

On July 10, 1997, two water samples were submitted to Inter-Mountain Laboratories - Farmington for analysis. The samples were identified by project "Antler Plant". The samples were analyzed for the parameters indicated on the accompanying Chain of Custody form # 01-48686.

Extraction was performed on the samples by "Toxicity Characteristic Leaching Procedure", Method 1311, SW-846, Rev. 0, July 1992.


Digestion of the extracted samples were performed by "Acid Digestion of Aqueous Samples and Extracts for Total Metals", SW-846, Rev. 1, July 1992.

Trace metals were performed on the samples by "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986..

It is the policy of this laboratory to employ, whenever possible, preparatory and analytical methods which have been approved by regulatory agencies.

Quality control reports appear at the end of the analytical package and may be identified by title. If there are any questions regarding the information presented in this package, please feel free to call at your convenience.

Sincerely,



Sharon Williams
Organics Analyst

**TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL CONCENTRATION**

Client: **South-Tex Treaters**
Project: Antler Plant
Sample ID: Frac Tank
Laboratory ID: 0397G01368
Sample Matrix: Water

Date Reported: 08/01/97
Date Sampled: 07/10/97
Date Received: 07/10/97
Date Analyzed: 07/25/97

Parameter	Result	Detection Limit	Regulatory Level	Units
Arsenic.....	<0.005	0.005	5	mg/L
Barium.....	0.20	0.01	100	mg/L
Cadmium.....	<0.004	0.004	1	mg/L
Chromium.....	<0.01	0.01	5	mg/L
Lead.....	<0.05	0.05	5	mg/L
Mercury.....	<0.001	0.001	0.2	mg/L
Selenium.....	<0.005	0.005	1	mg/L
Silver.....	<0.01	0.01	5	mg/L


ND- Analyte not detected at stated detection level.

References: Method 1311: Toxicity Characteristic Leaching Procedure,
SW-846, Rev. 0, July 1992.

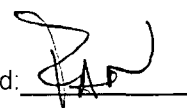
Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total
Metals, SW-846, Rev. 1, July 1992.

Comments:

Reported By



Reviewed:



CASE NARRATIVE

Client: SOUTH-TEX TREATERS
Project: Antler Plant Received on: 07/11/97
Set ID: 0597H03661 # samples: 1

Suites: TCLP Semivolatiles, TCLP Volatiles


The sample was received for analysis at Inter-Mountain Laboratories (IML), Bozeman, Montana. Enclosed are the results of these analyses.

Method 8270 for Semi-VOA:

The sample matrix contained high levels of non-target analytes that required sample dilutions prior to analysis. The dilutions were high enough to prevented the quantitative determination of surrogate recoveries. All other batch related quality control parameters were within acceptable limits.

Limits of detection for each instrument/analysis are determined by sample matrix effects, instrument performance under standard conditions, and dilution requirements to maintain chromatography output within calibration ranges. Quantitations have been calculated on an as received basis.

Quality Control reports have been included for your information and use. These reports appear at the end of the analytical package and may be identified by title. If there are any questions regarding the information presented in this package, please contact me at (800) 828-1413.



Wes Harvey
IML-Bozeman

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
HSL VOLATILE COMPOUNDS1160 Research Drive
Bozeman, Montana 59718

Client: SOUTH-TEX TREATERS

Sample ID: Frac Tank

Project ID: Antler Plant

Lab ID: B973661

Matrix: Water

0397G01368

Date Reported: 07/24/97

Date Sampled: 07/10/97

Date Received: 07/11/97

Date Extracted: 07/22/97

Date Analyzed: 07/22/97

Parameter	Result	PQL	Units
1,1-Dichloroethene	ND	0.02	mg/L
1,2-Dichloroethane	ND	0.02	mg/L
2-Butanone (MEK)	ND	0.1	mg/L
Benzene	0.038	0.02	mg/L
Carbon Tetrachloride	ND	0.02	mg/L
Chlorobenzene	ND	0.02	mg/L
Chloroform	ND	0.02	mg/L
Tetrachloroethene (PCE)	ND	0.02	mg/L
Trichloroethene (TCE)	ND	0.02	mg/L
Vinyl Chloride	ND	0.02	mg/L
QUALITY CONTROL - Surrogate Recovery	%	QC Limits	
1,2-Dichloroethane-d4	119	80 - 120	
Bromofluorobenzene	104	86 - 115	
Toluene-d8	107	88 - 110	

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260A Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, Final Update II, United States Environmental Protection Agency, September 1994.

Method 1311, Toxicity Characteristic Leaching Procedure, Test Methods for Evaluating Solid Wastes, SW-846, United States EPA, September 1994.

Analyst E.D.Reviewed WJH

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
HSL SEMI-VOLATILE COMPOUNDSClient: **SOUTH-TEX TREATERS**

Sample ID: Frac Tank

Project ID: Antler Plant

Lab ID: B973661

0397G01368

Matrix: Water

Date Reported: 07/29/97

Date Sampled: 07/10/97

Date Received: 07/11/97

Date Extracted: 07/17/97

Date Analyzed: 07/21/97

Parameter	Result	PQL	Regulatory Level	Units
1,4-Dichlorobenzene	ND	1.0	7.5	mg/L
2,4,5-Trichlorophenol	ND	2.0	400	mg/L
2,4,6-Trichlorophenol	ND	2.0	2.0	mg/L
2,4-Dinitrotoluene	ND	1.0	0.13	mg/L
Hexachloro-1,3-butadiene	ND	2.0	0.5	mg/L
Hexachlorobenzene	ND	2.0	0.13	mg/L
Hexachloroethane	ND	2.0	3.0	mg/L
m,p-Cresol	ND	1.0	200	mg/L
Nitrobenzene	ND	1.0	2.0	mg/L
o-Cresol	ND	1.0	200	mg/L
Pentachlorophenol	ND	5.0	100	mg/L
Pyridine	ND	2.0	5.0	mg/L
QUALITY CONTROL - Surrogate Recovery		%	QC Limits	
2-Fluorophenol	0 ##		21 - 100	
Phenol-d6	0 ##		10 - 94	
Nitrobenzene-d5	0 ##		35 - 114	
2-Fluorobiphenyl	0 ##		43 - 116	
2,4,6-Tribromophenol	0 ##		10 - 123	
Terphenyl-d14	0 ##		33 - 121	

ND - Not Detected at Practical Quantitation Level (PQL)

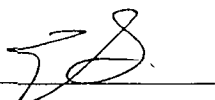
- Surrogate Recovery not within control limits due to matrix/dilution effect.

TCLP Extraction performed on 7/15/97.

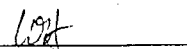
Reference: Method 8270B, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States EPA, September 1994.

Method 1311, Toxicity Characteristic Leaching Procedure, Test Methods for Evaluating Solid Wastes, SW-846, United States EPA, September 1994.

Analyst



Reviewed



Quality Control / Quality Assurance**Known Analysis****TOXICITY CHARACTERISTIC LEACHING PROCEDURE**

Client: **South-Tex Treaters**
Project: Antler Plant
Sample Matrix: Water

Date Reported: 08/01/97
Date Analyzed: 07/25/97
Date Received: 07/10/97

Known Analysis

Parameter	Found Result	Known Result	Percent Recovery	Units
Arsenic	0.011	0.010	110%	mg/L
Barium	0.96	1.00	96%	mg/L
Cadmium	1.01	1.00	101%	mg/L
Chromium	1.02	1.00	102%	mg/L
Lead	1.05	1.00	105%	mg/L
Mercury	0.004	0.004	100%	mg/L
Selenium	0.010	0.010	100%	mg/L
Silver	1.05	1.00	105%	mg/L

References: Method 1311: Toxicity Characteristic Leaching Procedure,
SW-846, Rev. 0, July 1992.

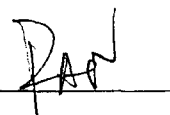
Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total
Metals, SW-846, Rev. 1, July 1992.

Comments:

Reported by



Reviewed by



Quality Control / Quality Assurance**Spike Analysis / Blank Analysis****TOXICITY CHARACTERISTIC LEACHING PROCEDURE**

Client: **South-Tex Treaters**
Project: **Antler Plant**
Sample Matrix: **Water**

Date Reported: **08/01/97**
Date Analyzed: **07/25/97**
Date Received: **07/10/97**

Spike Analysis

Parameter	Spike Result (mg/L)	Sample Result (mg/L)	Spike Added (mg/L)	Percent Recovery
Arsenic	NA	NA	NA	NA
Barium	0.45	<0.01	0.50	90%
Cadmium	0.441	<0.001	0.500	88%
Chromium	0.46	<0.01	0.50	92%
Lead	0.45	<0.05	0.50	90%
Mercury	0.025	<0.001	0.025	102%
Selenium	0.021	<0.005	0.025	84%
Silver	0.24	<0.01	0.25	96%

Method Blank Analysis

Parameter	Result	Detection Limit	Units
Arsenic	ND	0.005	mg/L
Barium	ND	0.01	mg/L
Cadmium	ND	0.004	mg/L
Chromium	ND	0.01	mg/L
Lead	ND	0.05	mg/L
Mercury	NA	0.001	mg/L
Selenium	ND	0.005	mg/L
Silver	ND	0.01	mg/L

References:

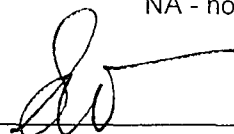
Method 1311: Toxicity Characteristic Leaching Procedure,
SW-846, Rev. 0, July 1992.

Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total
Metals, SW-846, Rev. 1, July 1992.

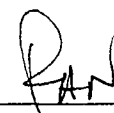
Comments:

NA - not available

Reported by



Reviewed by



QUALITY ASSURANCE / QUALITY CONTROL

**LAB QA/QC
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
METHOD BLANK**

Date Analyzed: 07/22/97
Lab ID: MBW97203C
Matrix: Water
Date Extracted 07/22/97

Parameter	Result	PQL	Units
1,1-Dichloroethene	ND	0.02	mg/L
1,2-Dichloroethane	ND	0.02	mg/L
2-Butanone (MEK)	ND	0.1	mg/L
Benzene	ND	0.02	mg/L
Carbon Tetrachloride	ND	0.02	mg/L
Chlorobenzene	ND	0.02	mg/L
Chloroform	ND	0.02	mg/L
Tetrachloroethene (PCE)	ND	0.02	mg/L
Trichloroethene (TCE)	ND	0.02	mg/L
Vinyl Chloride	ND	0.02	mg/L

QUALITY CONTROL - Surrogate Recovery %

1,2-Dichloroethane-d4	114
Bromofluorobenzene	96
Toluene-d8	106

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst B.D.

Reviewed [Signature]

**LAB QA/QC
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
MATRIX SPIKE SUMMARY**

Date Analyzed: 07/22/97
Laboratory ID: B97-3744
Sample Matrix: Liquid
Date Extracted: 7/22/97

Parameter	Spike Added mg/L	Sample Concentration mg/L	Matrix Spike Concentration mg/L	Matrix Spike Recovery (%)
Vinyl Chloride	0.05	0	0.047	94
1,1-Dichloroethene	0.05	0	0.055	110
1,2-Dichloroethane	0.05	0	0.062	124
Chloroform	0.05	0	0.057	114
Carbon Tetrachloride	0.05	0	0.058	116
Trichloroethene	0.05	0	0.048	96
Benzene	0.05	0	0.054	108
Tetrachloroethene	0.05	0	0.037	74
Chlorobenzene	0.05	0	0.051	102
Methyl Ethyl Ketone	0.1	0	0.067	67

QUALITY CONTROL:

Surrogate Recovery	%
1,2-Dichloroethane-d4	116
Toluene-d8	99
Bromofluorobenzene	98

References:

Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, Final Update II, United States Environmental Protection Agency, September 1994.

Method 1311, Toxicity Characteristic Leaching Procedure, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1994.

E.D.
Analyst

WJ
Reviewed

**TOXICITY CHARACTERISTIC LEACHING PROCEDURE - TCLP
HSL SEMI-VOLATILE COMPOUNDS
TCLP METHOD BLANK**

Date Analyzed: 07/21/97
Laboratory ID: TMB97-195
Sample Matrix: Extraction Fluid
Date Extracted: 07/17/97
TCLP Extracted: 07/15/97

Parameter	Analytical Result (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
1,4-Dichlorobenzene	ND	0.01	7.5
Hexachloroethane	ND	0.02	3
Nitrobenzene	ND	0.01	2
Hexachloro-1,3-butadiene	ND	0.02	0.5
2,4,6-Trichlorophenol	ND	0.02	2
2,4,5-Trichlorophenol	ND	0.02	400
2,4-Dinitrotoluene	ND	0.01	0.13
Hexachlorobenzene	ND	0.02	0.13
Pentachlorophenol	ND	0.05	100
o-Cresol	ND	0.01	200 **
m & p-Cresol *	ND	0.01	200 **
Pyridine	ND	0.02	5

ND - Compound not detected at stated Detection Limit
B - Compound detected in Method Blank.
* - Compounds coelute by GCMS.
** - Regulatory Limit of combined Cresols.

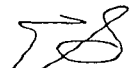
QUALITY CONTROL:

Surrogate Recoveries	%
2,4,6-Tribromophenol	85
2-Fluorobiphenyl	65
2-Fluorophenol	66
Nitrobenzene-d5	70
Phenol-d6	54
Terphenyl-d14	79


References:

Method 8270B, Semivolatile Organics - GC/MS, Test Methods for Evaluating Solid Waste,
USEPA, SW-846, Vol. IB, September 1994.

Method 1311, Toxicity Characteristic Leaching Procedure, Test Methods for Evaluating Solid Waste,
USEPA, SW-846, Vol. IB, September 1994.



Analyst



Reviewed

LAB QA/QC

TCLP SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

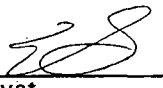
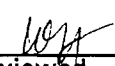
Date Analyzed: 07/21/97
Laboratory ID: TBS97-195
Sample Matrix: Water
Date Extracted: 07/17/97

ORIGINAL SAMPLE PARAMETERS

Parameter	Spike Added (mg/L)	Sample Conc. (mg/L)	MS Conc. (mg/L)	MS Recovery (%)
1,4-Dichlorobenzene	0.100	0.000	0.059	59
2,4,5-Trichlorophenol	0.100	0.000	0.021	21
2,4,6-Trichlorophenol	0.100	0.000	0.006	6
2,4-Dinitrotoluene	0.100	0.000	0.059	59
Hexachlorobenzene	0.100	0.000	0.076	76
Hexachlorobutadiene	0.100	0.000	0.069	69
Hexachloroethane	0.100	0.000	0.063	63
m,p-Cresol	0.200	0.000	0.146	73
Nitrobenzene	0.100	0.000	0.076	76
o-Cresol	0.100	0.000	0.065	65
Pentachlorophenol	0.100	0.000	0.000	0
Pyridine	0.100	0.000	0.063	63

DUPLICATE SAMPLE PARAMETERS

Parameter	Spike Added (mg/L)	MSD Conc. (mg/L)	MSD Recovery (%)	RPD (%)
1,4-Dichlorobenzene	0.100	0.062	62	5
2,4,5-Trichlorophenol	0.100	0.040	40	62
2,4,6-Trichlorophenol	0.100	0.066	66	167
2,4-Dinitrotoluene	0.100	0.064	64	8
Hexachlorobenzene	0.100	0.083	83	9
Hexachlorobutadiene	0.100	0.066	66	4
Hexachloroethane	0.100	0.065	65	3
m,p-Cresol	0.200	0.148	74	1
Nitrobenzene	0.100	0.074	74	3
o-Cresol	0.100	0.070	70	7
Pentachlorophenol	0.100	0.000	0	0
Pyridine	0.100	0.066	66	5


Analyst
Reviewed

LAB QA/QC
EPA METHOD 8270
METHOD BLANKDate Analyzed: 07/21/97
Lab ID: MBW97198
Matrix: Water
Date Extracted: 07/17/97

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	0.01	mg/L
1,2-Dichlorobenzene	ND	0.01	mg/L
1,3-Dichlorobenzene	ND	0.01	mg/L
1,4-Dichlorobenzene	ND	0.01	mg/L
2,4,5-Trichlorophenol	ND	0.01	mg/L
2,4,6-Trichlorophenol	ND	0.01	mg/L
2,4-Dichlorophenol	ND	0.01	mg/L
2,4-Dimethylphenol	ND	0.01	mg/L
2,4-Dinitrophenol	ND	0.05	mg/L
2,4-Dinitrotoluene	ND	0.01	mg/L
2,6-Dinitrotoluene	ND	0.01	mg/L
2-Chloronaphthalene	ND	0.01	mg/L
2-Chlorophenol	ND	0.01	mg/L
2-Methylnaphthalene	ND	0.01	mg/L
2-Methylphenol	ND	0.01	mg/L
2-Nitroaniline	ND	0.05	mg/L
2-Nitrophenol	ND	0.01	mg/L
3,3'-Dichlorobenzidine	ND	0.02	mg/L
3-Methylphenol/4-Methylphenol	ND	0.01	mg/L
3-Nitroaniline	ND	0.05	mg/L
4,6-Dinitro-2-methylphenol	ND	0.05	mg/L
4-Bromophenyl-phenylether	ND	0.01	mg/L
4-Chloro-3-methylphenol	ND	0.01	mg/L
4-Chloroaniline	ND	0.02	mg/L
4-Chlorophenyl-phenylether	ND	0.01	mg/L
4-Nitroaniline	ND	0.02	mg/L
4-Nitrophenol	ND	0.025	mg/L
Acenaphthene	ND	0.01	mg/L
Acenaphthylene	ND	0.01	mg/L
Anthracene	ND	0.01	mg/L
Benzo(a)anthracene	ND	0.01	mg/L
Benzo(a)pyrene	ND	0.01	mg/L
Benzo(b)fluoranthene	ND	0.01	mg/L

Continued

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/21/97
Lab ID: MBW97198
Matrix: Water
Date Extracted: 07/17/97

Parameter	Result	PQL	Units
Continued			
Benzo(g,h,i)perylene	ND	0.01	mg/L
Benzo(k)fluoranthene	ND	0.01	mg/L
Benzoic Acid	ND	0.05	mg/L
Benzyl Alcohol	ND	0.02	mg/L
bis(2-Chloroethoxy)methane	ND	0.01	mg/L
bis(2-Chloroethyl)ether	ND	0.01	mg/L
bis(2-Chloroisopropyl)ether	ND	0.01	mg/L
bis(2-Ethylhexyl)phthalate	ND	0.05	mg/L
Butylbenzylphthalate	ND	0.01	mg/L
Chrysene	ND	0.01	mg/L
Di-n-Butylphthalate	ND	0.05	mg/L
Di-n-Octylphthalate	ND	0.05	mg/L
Dibenz(a,h)anthracene	ND	0.01	mg/L
Dibenzofuran	ND	0.01	mg/L
Diethylphthalate	ND	0.01	mg/L
Dimethylphthalate	ND	0.01	mg/L
Fluoranthene	ND	0.01	mg/L
Fluorene	ND	0.01	mg/L
Hexachlorobenzene	ND	0.01	mg/L
Hexachlorobutadiene	ND	0.01	mg/L
Hexachlorocyclopentadiene	ND	0.01	mg/L
Hexachloroethane	ND	0.02	mg/L
Indeno(1,2,3-cd)pyrene	ND	0.01	mg/L
Isophorone	ND	0.01	mg/L
N-Nitrosodi-n-propylamine	ND	0.01	mg/L
N-Nitrosodiphenylamine	ND	0.01	mg/L
Naphthalene	ND	0.01	mg/L
Nitrobenzene	ND	0.01	mg/L
Pentachlorophenol	ND	0.025	mg/L
Phenanthrene	ND	0.01	mg/L
Phenol	ND	0.01	mg/L
Pyrene	ND	0.01	mg/L

Continued

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/21/97
Lab ID: MBW97198
Matrix: Water
Date Extracted: 07/17/97

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

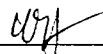
QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	56	10 - 123
2-Fluorobiphenyl	67	43 - 116
2-Fluorophenol	65	21 - 110
Nitrobenzene-d5	79	35 - 114
Phenol-d6	56	10 - 110
Terphenyl-d14	82	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst



Reviewed



District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger D. White

Form C-138
Originated 8/8/95

RECEIVED

NOV 19 1997

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>WESKEM HALL INC.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>WAREHOUSE YARD</u>
2. Management Facility Destination <u>SUNCO DISPOSAL SYSTEMS</u>	6. Transporter <u>SO WESKEM HALL</u>
3. Address of Facility Operator <u>LR 3500 #345 AZtec NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR)	
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:

GLYCOL, UNUSED product

RECEIVED
NOV 14 1997
OIL CON. DIV.
DIST. 3

Expired by date.

Estimated Volume 13 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talowich TITLE: DESIGN MGR DATE: 11-13-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael Talowich TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fourny TITLE: Geologist DATE: 11/14/97
APPROVED BY: Martina J. Kelly TITLE: Env. Geologist DATE: 11/20/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>WESKEM HALL INC.</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>WAREHOUSE YARD</u>
2. Management Facility Destination <u>SUNCO DISPOSAL SYSTEMS</u>	6. Transporter <u>SO WESKEM HALL</u>
3. Address of Facility Operator <u>LR 3500 #345 AZTEC N.M.</u>	8. State <u>N.M.</u>
7. Location of Material (Street Address or ULSTR)	
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. <u>B.</u> 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:

GLYCOL, UNUSED PRODUCT

Expired by date.

RECEIVED
NOV 14 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 13 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 11-13-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fant TITLE: Geologist DATE: 11/14/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: WESKEM HALL INC. 15. RD 5860 FARMINGTON NEW MEXICO 87401	2. Destination Name: SUNCO DISPOSAL
3. Originating Site (name): WESKEM HALL INC. 15 RD 5860 FARMINGTON NEW MEXICO 87401	
Location of the Waste (Street address &/or ULSTR): 	
<i>Attach list of originating sites as appropriate</i>	
4. Source and Description of Waste ARROFROTH 65 FROTHER POLYPROPYLENE GLYCOL POLYALKYLENE GLYCOL	
10 DRUMS. <i>Expired by date.</i>	

I, THOMAS A. NEWMAN. representative for:
 (Print Name)
WESKEM HALL 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)

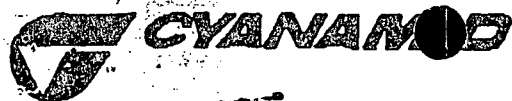
☐ EXEMPT oilfield waste ☒ NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

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

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

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

Name (Original Signature): Thomas A. Newman
 Title: District Manager
 Date: November 12, 1997

**MATERIAL SAFETY DATA**

MSDS NO. 0304-03

DATE: 10/27/89

*Aerofroth 65 Frother***PRODUCT IDENTIFICATION**

PRODUCT NAME:

~~AEROFROTH 65~~

SYNONYMS:

Polypropylene glycol

CHEMICAL FAMILY:

Polyalkylene glycol

MOLECULAR FORMULA:

HO(C₃H₆O)_nH

MOLECULAR WGT.:

Mixture

WARNING

NO WARNING STATEMENT

OSHA REGULATED COMPONENTS

COMPONENT

CAS. NO.

%

TWA/CEILING

REFERENCE

No Permissible
Exposure Limits
(PEL/TLV) have
been established
by OSHA or ACGIH.

NFPA HAZARD RATINGFire
1

Health 1 0 Reactivity

Special

FIRE: Material that must be preheated before ignition can occur.

HEALTH: Materials which on exposure would cause irritation but only minor residual injury even if no treatment is given

REACTIVITY: Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.

HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE:

The acute oral (rat) and acute dermal (rabbit) LD50 and 4-hour inhalation (rat) LC50 values for this material are 2.41 g/kg, 20 ml/kg, and greater than 3,000 ppm respectively. Direct contact with this material may cause minimal eye and skin irritation.

FIRST AID:

In case of skin contact, wash affected areas of skin with soap and water.

In case of eye contact, immediately irrigate with plenty of water for 15 minutes.

EXPOSURE CONTROL METHODS

Engineering controls are not usually necessary if good hygiene practices are followed. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. Avoid unnecessary skin contact. Impervious gloves are recommended to prevent prolonged skin contact. For operations where eye or face contact can occur, eye protection is recommended.

EMERGENCY PHONE: 201/835-3100**AMERICAN CYANAMID COMPANY, 1 CYANAMID PLAZA, WAYNE, NEW JERSEY 07470**

**FIRE AND
EXPLOSION
HAZARD
INFORMATION**

FLASH POINT:	> 200 F (> 93.3)
METHOD:	Closed Cup
FLAMMABLE LIMITS (% BY VOL):	Not Available
AUTOIGNITION TEMP:	Not Available
DECOMPOSITION TEMP:	Not Available
FIRE FIGHTING:	Use water spray, carbon dioxide or dry chemical to extinguish fires. Use water to keep containers cool. Wear self-contained, positive pressure breathing apparatus.

REACTIVITY DATA

STABILITY:	Stable
CONDITIONS TO AVOID:	None known
POLYMERIZATION:	Will Not Occur
CONDITIONS TO AVOID:	None known
INCOMPATIBLE MATERIALS:	Strong oxidizers; strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal decomposition or combustion may produce carbon monoxide and/or carbon dioxide.

**PHYSICAL
PROPERTIES**

APPEARANCE AND ODOR:	Colorless liquid; faint, sweet odor
BOILING POINT:	271 F(133 C)
MELTING POINT:	-76 F(-60 C)
VAPOR PRESSURE:	Not Available
SPECIFIC GRAVITY:	1.0009
VAPOR DENSITY:	Not Available
% VOLATILE (BY VOL):	~ 100
OCTANOL/H ₂ O PARTITION COEF.:	Not Available
pH:	Not Available
SATURATION IN AIR (BY VOL):	Not Available
EVAPORATION RATE:	Not Available
SOLUBILITY IN WATER:	Complete

**SPILL OR LEAK
PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:	Cover spills with some inert absorbent; sweep up and place in a waste disposal container. Flush area with water.
--	---

WASTE DISPOSAL

Disposal must be made in accordance with applicable governmental regulations.
--

**SPECIAL
PRECAUTIONS**

HANDLING AND STORAGE/OTHER:	None
--------------------------------	------

**D.O.T. SHIPPING
INFORMATION**

PROPER SHIPPING NAME:	NOT APPLICABLE/NOT REGULATED
HAZARD CLASS:	NOT APPLICABLE
UN/NA:	NOT APPLICABLE

D.O.T. HAZARDOUS
SUBSTANCES:(Reportable Quantity of Product)
NOT APPLICABLE

D.O.T. LABEL REQUIRED: NOT APPLICABLE

TSCA
INFORMATIONThis product is manufactured in compliance with all provisions of the
Toxic Substances Control Act, 15 U.S.C.ENVIRONMENTAL
INFORMATIONThe following components are defined as toxic chemicals subject to reporting requirements of
Section 313 of Title III and of 40 CFR 372 or subject to other EPA regulations.

SARA TITLE III						
COMPONENT	CAS. NO.	%	TPQ (lbs.)	RQ (lbs.)	S313	RCRA TSCA 12B
This product does not contain any components regulated under these sections of the EPA						

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA

Not Applicable under SARA TITLE III

Marvin A. Friedman, Ph.D., Director of Toxicology and Product Safety

This information is given without any warranty or representation. We do not assume any legal responsibility for same,
nor do we give permission, inducement, or recommendation to practice any patented invention without a license.
It is intended solely for your consideration, investigation and verification. Before using any product read its label.

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger Anderson
Form C-138
Originated 8/8/93

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Burlington Resources</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Quinn #336</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 Aztec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Quinn #336 well site</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Water, Hydrotest waste from QUINN AND MB-20 100P

RECEIVED
NOV - 5 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talanich TITLE: MGR DATE: 11-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALANICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fuent TITLE: Geologist DATE: 11/5/97
APPROVED BY: Martina J. Kelly TITLE: Env Geologist DATE: 11/7/97

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Burlington Resources</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>QUINN #336</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 Aztec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>QUINN #336 well site</u>	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <u>B.</u> 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:

Water, Hydrotest waste from QUINN AND MB-20 100P

RECEIVED
NOV - 5 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MR DATE: 11-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6188

(This space for State Use)

APPROVED BY: Denny Z. Fenty TITLE: Geologist DATE: 11/5/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: BURLINGTON RESOURCES 3535 EAST 30th STREET FARMINGTON, NM 87402	2. Destination Name: Sunco Disposal
3. Originating Site (name): Quinn Pipeline Loop Project and the MB-20 Pipeline Loop Project Attach list of originating sites as appropriate.	Location of the Waste (Street address &/or ULSTR): Quinn #336 Well Site Unit Ltr. N, Section 17, Town 31N, Range 8W
4. Source and Description of Waste: Hydrotest water from the Quinn and MB-20 looping projects. Note: Freshwater was used in the process not produced water.	

I, Craig A. Bock representative for:

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

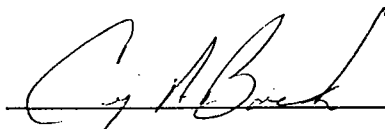
and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

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

☒ MSDS Information
☒ RCRA Hazardous Waste Analysis
☒ Chain of Custody

Other (description):

Name (Original Signature):



Title:

ENVIRONMENTAL REPRESENTATIVE

Date:

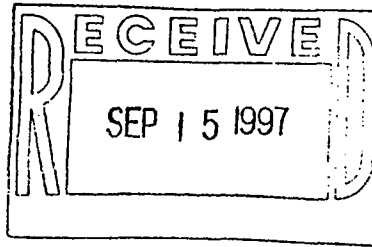
November 4, 1997



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

September 10, 1997

Mr. Robert Thompson
PHILLIPS ENVIRONMENTAL
4000 Monroe Road
Farmington, NM 87401



The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on September 3, 1997. The samples were assigned to Certificate of Analysis No.(s) 9709083 and analyzed for all parameters as listed on the chain of custody.

There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

A handwritten signature in dark ink, appearing to read 'Siok Hong Chen', is written over a horizontal line.

Siok Hong Chen
Project Manager

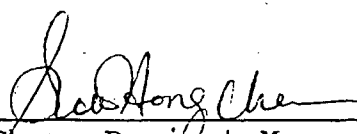


HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

SOUTHERN PETROLEUM LABORATORIES, INC.

Certificate of Analysis Number: 97-09-083

Approved for Release by:



Siok Hong Chen, Project Manager

9/10/97
Date:

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

The attached analytical data package may not be reproduced except in full without the express written approval of this laboratory.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9709083-01

Phillips Environmental
4000 Monroe Road
Farmington, NM 87401
ATTN: Robert Thompson

DATE: 09/10/97

PROJECT: BR Various Tasks
SITE:
SAMPLED BY: Philip Environmental
SAMPLE ID: Q336-1

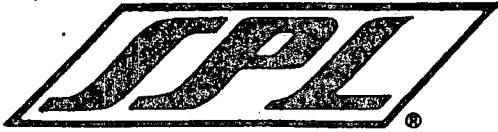
PROJECT NO: 17664
MATRIX: WATER
DATE SAMPLED: 08/28/97 14:30:00
DATE RECEIVED: 09/03/97

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNITS	
Silver, TCLP Leachate Method 6010A *** Analyzed by: PS Date: 09/09/97	ND	0.02	mg/L	
Arsenic, TCLP Leachate Method 6010A *** Analyzed by: PS Date: 09/08/97	ND	0.2	mg/L	
Barium, TCLP Leachate Method 6010A *** Analyzed by: PS Date: 09/08/97	ND	1	mg/L	
Cadmium, TCLP Leachate Method 6010A *** Analyzed by: PS Date: 09/08/97	ND	0.02	mg/L	
Chromium, TCLP Leachate Method 6010A *** Analyzed by: PS Date: 09/08/97	ND	0.02	mg/L	
Mercury, TCLP Leachate Method 7470 A*** Analyzed by: AG Date: 09/09/97	ND	0.0002	mg/L	

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance
with EPA guidelines for quality assurance.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9709083-01

Phillips Environmental
4000 Monroe Road
Farmington, NM 87401
ATTN: Robert Thompson

DATE: 09/10/97

PROJECT: BR Various Tasks
SITE:
SAMPLED BY: Philip Environmental
SAMPLE ID: Q336-1

PROJECT NO: 17664
MATRIX: WATER
DATE SAMPLED: 08/28/97 14:30:00
DATE RECEIVED: 09/03/97

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNITS	
Acid Digestion of TCLP Leachate, ICP Method 3010A *** Analyzed by: MM Date: 09/04/97	09/04/97			
Lead, TCLP Leachate Method 6010A *** Analyzed by: PS Date: 09/08/97	ND	0.1	mg/L	
TCLP Leachate Filtering Method 1311 *** Analyzed by: WLR Date: 09/04/97	09/04/97			
Selenium, TCLP Leachate Method 6010A *** Analyzed by: PS Date: 09/08/97	ND	0.2	mg/L	
TCLP Leachate Extraction Method 1311 *** Analyzed by: WLR Date: 09/04/97	09/04/97			
Zero Headspace extraction Method 1311 Analyzed by: WLR Date: 09/04/97	09/04/97			

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance
with EPA guidelines for quality assurance.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9709083-01

Phillips Environmental
4000 Monroe Road
Farmington, NM 87401
ATTN: Robert Thompson

DATE: 09/10/97

PROJECT: BR Various Tasks
SITE:
SAMPLED BY: Philip Environmental
SAMPLE ID: Q336-1

PROJECT NO: 17664
MATRIX: WATER
DATE SAMPLED: 08/28/97 14:30:00
DATE RECEIVED: 09/03/97

ANALYTICAL DATA				
PARAMETER	RESULTS	DETECTION LIMIT	UNITS	
Cyanide-Reactive Method 7.3.3.2 *** Analyzed by: BEN Date: 09/04/97	ND	10	mg/kg	
Flash Point (PM) Method ASTM D 93-96 Analyzed by: TB Date: 09/05/97	>210		°F	
pH Method 150.1 * Analyzed by: EM Date: 09/04/97	8.42		pH units	
Sulfide-Reactive Method 7.3.4.2 *** Analyzed by: BEN Date: 09/04/97	ND	100	mg/kg	

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance
with EPA guidelines for quality assurance.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9709083-01

Phillips Environmental
4000 Monroe Road
Farmington, NM 87401
ATTN: Robert Thompson

09/10/97

PROJECT: BR Various Tasks
SITE:
SAMPLED BY: Philip Environmental
SAMPLE ID: Q336-1

PROJECT NO: 17664
MATRIX: LEACHATE
DATE SAMPLED: 08/28/97 14:30:00
DATE RECEIVED: 09/03/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS	RL ▲
ortho-Cresol	ND	50	ug/L	200000
meta, para-Cresols	ND	100	ug/L	200000
1,4-Dichlorobenzene	ND	50	ug/L	7500
2,4-Dinitrotoluene	ND	50	ug/L	130
Hexachlorobenzene	ND	50	ug/L	130
Hexachlorobutadiene	ND	50	ug/L	500
Hexachloroethane	ND	50	ug/L	3000
Nitrobenzene	ND	50	ug/L	2000
Pentachlorophenol	ND	250	ug/L	100000
Pyridine	ND	50	ug/L	5000
2,4,5-Trichlorophenol	ND	100	ug/L	400000
2,4,6-Trichlorophenol	ND	50	ug/L	2000

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
Nitrobenzene-d5	50 ug/L	96	35	114
2-Fluorobiphenyl	50 ug/L	100	43	116
Terphenyl-d14	50 ug/L	103	33	141
Phenol-d5	75 ug/L	73	10	110
2-Fluorophenol	75 ug/L	77	21	110
2,4,6-Tribromophenol	75 ug/L	104	10	123

ANALYZED BY: LH DATE/TIME: 09/05/97 10:17:00
LEACHATE EXTRACTION BY: PC DATE/TIME: 09/04/97 08:00:00
METHOD: 1311/8270, TCLP Semivolatiles
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed
▲ - Regulatory Limit. Reference Federal Register 55, 11862
(3/29/90), RCRA Toxicity Characteristic Final Rule.

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance
with EPA guidelines for quality assurance.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

Certificate of Analysis No. H9-9709083-01

Phillips Environmental
4000 Monroe Road
Farmington, NM 87401
ATTN: Robert Thompson

09/10/97

PROJECT: BR Various Tasks
SITE:
SAMPLED BY: Philip Environmental
SAMPLE ID: Q336-1

PROJECT NO: 17664
MATRIX: LEACHATE
DATE SAMPLED: 08/28/97 14:30:00
DATE RECEIVED: 09/03/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS	RL [▲]
Benzene	ND	50	ug/L	500
2-Butanone	ND	200	ug/L	200000
Carbon Tetrachloride	ND	50	ug/L	500
Chlorobenzene	ND	50	ug/L	100000
Chloroform	ND	50	ug/L	6000
1,2-Dichloroethane	ND	50	ug/L	500
1,1-Dichloroethene	ND	50	ug/L	700
Tetrachloroethene	ND	50	ug/L	700
Trichloroethene	ND	50	ug/L	500
Vinyl Chloride	ND	100	ug/L	200

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
4-Bromofluorobenzene	50 ug/L	94	86	115
1,2-Dichloroethane-d4	50 ug/L	100	76	114
Toluene-d8	50 ug/L	103	88	110

ANALYZED BY: GT DATE/TIME: 09/04/97 15:19:00
LEACHATE PREP(ZHE) BY: WLR DATE/TIME: 09/04/97
METHOD: 1311/8240, TCLP Volatiles
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed
▲ - Regulatory Limit. Reference Federal Register 55, 11862
(3/29/90), RCRA Toxicity Characteristic Final Rule.

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance
with EPA guidelines for quality assurance.

QUALITY CONTROL

DOCUMENTATION

SPL Labs

RECOVERY REPORT

Client Name: Client SDG: m970904
Sample Matrix: WATER Fraction: VOA
Lab Smp Id: 9709083-01C
Level: LOW Operator: GT
Data Type: MS DATA SampleType: METHSPIKE
SpikeList File: tclp.spk Quant Type: ISTD
Method File: /chem1/m.i/m970904.b/m8260awQ.m
Misc Info: M247W1/M247S01/M247CW1

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
22 Benzene	500	600	120.12	50-150
14 2-Butanone	500	440	87.72	35-150
23 Carbon Tetrachlori	500	390	78.56	50-150
39 Chlorobenzene	500	520	104.26	50-150
18 Chloroform	500	460	92.99	50-150
21 1,2-Dichloroethane	500	480	95.40	50-150
7 1,1-Dichloroethene	500	530	105.29	50-150
37 Tetrachloroethene	500	540	108.40	50-150
26 Trichloroethene	500	540	108.09	50-150
2 Vinyl Chloride	500	550	109.37	50-150

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 47 Bromofluorobenzene	50	49	97.47	86-115
\$ 19 1,2-Dichloroethane	50	52	104.19	76-114
\$ 32 Toluene-d8	50	54	108.01	88-110

SPL Labs

RECOVERY REPORT

Client Name: Client SDG: m970904
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: LCS Operator: GT
Level: LOW SampleType: METHSPIKE
Data Type: MS DATA Quant Type: ISTD
SpikeList File: 8240water.spk
Method File: /chem1/m.i/m970904.b/m8260awQ.m
Misc Info: M247W1//M247CW1

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
7 1,1-Dichloroethene	50	50	100.78	61-145
26 Trichloroethene	50	54	107.85	71-120
22 Benzene	50	58	115.71	76-127
33 Toluene	50	54	107.23	76-125
39 Chlorobenzene	50	52	103.72	75-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 19 1,2-Dichloroethane	50	50	99.91	76-114
\$ 32 Toluene-d8	50	51	102.47	88-110
\$ 47 Bromofluorobenzene	50	46	91.63	86-115



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

SPL Blank QC Report

page 2

Matrix: Aqueous
Sample ID: BLANK
Batch: M970904113701

Reported on: 09/09/97 14:20
Analyzed on: 09/04/97 14:56
Analyst: GT

METHOD 8260 M247B01

Compound	Result	Detection Limit	Units
Vinyl Chloride	ND	10	ug/L
1,1-Dichloroethene	ND	5	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L

Surrogate	Result	QC Criteria	Units
1,2-Dichloroethane-d4	102	76-114	% Recovery
Toluene-d8	107	88-110	% Recovery
Bromofluorobenzene	92	86-115	% Recovery

Samples in Batch 9709083-01

Notes

ND - Not detected.

SPL Labs

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: 9709083-01BMS-TCLPS
Level: LOW
Data Type: MS DATA
SpikeList File: tclp.spk
Method File: /chem/h.i/h970905.b/h8270wQ.m
Misc Info: E247F2/H248S01/H248CC1

Client SDG: h970905
Fraction: SV
Operator: LH
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
17 ortho-Cresol	750	700	92.86	10-120
20 meta,para-Cresol	1500	1500	98.50	10-120
12 1,4-Dichlorobenzen	500	450	89.61	20-124
53 2,4-Dinitrotoluene	500	510	103.00	39-139
63 Hexachlorobenzene	500	300	60.17	0-152
35 Hexachlorobutadien	500	520	103.64	24-116
22 Hexachloroethane	500	450	89.73	40-113
24 Nitrobenzene	500	500	99.62	35-180
64 Pentachlorophenol	750	800	107.41	14-176
2 Pyridine	500	460	91.46	0-150
40 2,4,5-Trichlorophe	750	690	92.08	30-140
39 2,4,6-Trichlorophe	750	810	108.50	37-144

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 23 Nitrobenzene-d5	50	48	95.99	35-114
\$ 41 2-Fluorobiphenyl	50	50	100.44	43-116
\$ 72 Terphenyl-d14	50	53	106.53	33-141
\$ 4 Phenol-d5	75	60	80.63	10-110
\$ 3 2-Fluorophenol	75	60	80.20	21-110
\$ 61 2,4,6-Tribromophen	75	78	103.91	10-123

SPL Houston Labs

RECOVERY REPORT

Client Name:
 Sample Matrix: LIQUID
 Lab Smp Id: LCS
 Level: LOW
 Data Type: MS DATA
 SpikeList File: tclp.spk
 Method File: /chem/h.i/h970905.b/h8270wQ.m
 Misc Info: E247F2/H247B03/H248CC1

Client SDG: h970905
 Fraction: SV
 Operator: LH
 SampleType: MS
 Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
17 ortho-Cresol	75	49	65.20	10-120
20 meta,para-Cresol	150	97	64.88	10-120
12 1,4-Dichlorobenzen	50	34	67.44	20-124
53 2,4-Dinitrotoluene	50	44	87.54	39-139
63 Hexachlorobenzene	50	27	54.69	0-152
35 Hexachlorobutadien	50	39	78.60	24-116
22 Hexachloroethane	50	33	66.98	40-113
24 Nitrobenzene	50	38	77.08	35-180
64 Pentachlorophenol	75	66	87.65	14-176
2 Pyridine	50	18	35.43	0-150
40 2,4,5-Trichlorophe	75	57	75.91	30-140
39 2,4,6-Trichlorophe	75	66	88.69	37-144

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 23 Nitrobenzene-d5	50	38	76.27	35-114
\$ 41 2-Fluorobiphenyl	50	41	82.88	43-116
\$ 72 Terphenyl-d14	50	49	97.24	33-141
\$ 4 Phenol-d5	75	27	36.26	10-110
\$ 3 2-Fluorophenol	75	34	44.77	21-110
\$ 61 2,4,6-Tribromophen	75	67	89.85	10-123



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

SPL Blank QC Report

page 1

Matrix: Aqueous
Sample ID: BLANK
Batch: E970904042253

Reported on: 09/08/97 14:09
Analyzed on: 09/04/97 19:43
Analyst: LH

METHOD 8270 BLANK H247B03

Compound	Result	Detection Limit	Units
ortho-Cresol	ND	5	ug/L
meta,para-Cresol	ND	10	ug/L
1,4-Dichlorobenzene	ND	5	ug/L
2,4-Dinitrotoluene	ND	5	ug/L
Hexachlorobenzene	ND	5	ug/L
Hexachlorobutadiene	ND	5	ug/L
Hexachloroethane	ND	5	ug/L
Nitrobenzene	ND	5	ug/L
Pentachlorophenol	ND	25	ug/L
Pyridine	ND	5	ug/L
2,4,5-Trichlorophenol	ND	10	ug/L
2,4,6-Trichlorophenol	ND	5	ug/L

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	79	35-114	% Recovery
2-Fluorobiphenyl	84	43-116	% Recovery
Terphenyl-d14	100	33-141	% Recovery
Phenol-d5	30	10-110	% Recovery
2-Fluorophenol	42	21-110	% Recovery
2,4,6-Tribromophenol	84	10-123	% Recovery

Samples in Batch 9709083-01

Notes

ND - Not detected.

ICP Spectroscopy Method 6010 Quality Control



Matrix: TCLP Leachate - FILTER Units: mg/L

HOUSTON LABORATORY

8880 INTERCHANGE DRIVE

HOUSTON, TEXAS 77054

Analysis

PHONE (713)660-0901

Date: 090897

Time: 0824

File Name: 090897C6

Laboratory Control Sample

Element	Mth. Blank	True Value	Result	% Recovery	Lower Limit	Upper Limit
Silver						
Arsenic	ND	4.00	3.880	97	3.20	4.80
Barium	ND	2.00	1.889	94	1.60	2.40
Beryllium						
Cadmium	ND	2.00	1.885	94	1.60	2.40
Cobalt						
Chromium	ND	2.00	1.960	98	1.60	2.40
Copper						
Thallium						
Nickel						
Lead	ND	2.00	1.955	98	1.60	2.40
Antimony						
Selenium	ND	4.00	3.992	100	3.20	4.80
Vanadium						
Zinc						

Work Orders in Batch

Work Order Fractions

97-09-083 01A

97-09-097 01A

Matrix Spike - Spike Duplicate Results

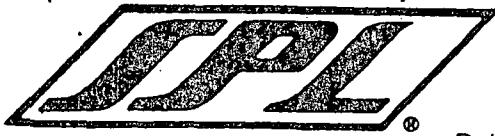
Work Order Spiked: 9709083-01A

Element	Sample Result	Spike Added	Matrix Spike Result	Matrix Spike Recovery	Matrix Spike Duplicate Result	Matrix Spike Duplicate Recovery	QC Limits % Recovery	Spike RPD %	QC Limits %
Silver									
Arsenic	ND	2.0	1.714	86	1.694	85	80 120	1.2	20.0
Barium	0.2237	1.0	0.980	76	0.952	73	80 120	3.8	20.0
Beryllium									
Cadmium	ND	1.0	0.845	85	0.826	83	80 120	2.2	20.0
Cobalt									
Chromium	ND	1.0	0.834	83	0.828	83	80 120	0.8	20.0
Copper									
Thallium									
Nickel									
Lead	ND	1.0	0.855	86	0.845	85	80 120	1.2	20.0
Antimony									
Selenium	ND	2.0	1.728	86	1.758	88	80 120	1.7	20.0
Vanadium									
Zinc									

DIG 25/50

Checked: gm 9/9/97

ICP Spectroscopy Method 6010 Quality Control Report



Matrix: TCLP Leachate - FILTER Units: mg/L

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Date: 090997

Time: 0821 File Name: 090997C5

Analyst: ps

Laboratory Control Sample

Element	Mth. Blank	True Value	Result	% Recovery	Lower Limit	Upper Limit
Silver	ND	2.00	1.972	99	1.60	2.40
Arsenic						
Barium						
Beryllium						
Cadmium						
Cobalt						
Chromium						
Copper						
Thallium						
Nickel						
Lead						
Antimony						
Selenium						
Vanadium						
Zinc						

Work Orders in Batch

Work Order Fractions

97-09-097 01A

97-09-083 01A

Matrix Spike - Spike Duplicate Results

Work Order Spiked: 9709097-01A

Element	Sample Result	Spike Added	Matrix Spike Result	Matrix Spike Recovery	Matrix Spike Duplicate Result	Matrix Spike Duplicate Recovery	QC Limits % Recovery	Spike RPD %	QC Limits %
Silver	ND	1.0	0.964	96	0.942	94	80 120	2.3	20.0
Arsenic									
Barium									
Beryllium									
Cadmium									
Cobalt									
Chromium									
Copper									
Thallium									
Nickel									
Lead									
Antimony									
Selenium									
Vanadium									
Zinc									

DIG 25/50

Checked: 9/10/97



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Leachate

Reported on: 09/10/97

Analyzed on: 09/09/97

Analyst: AG

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, TCLP Leachate
Method 7470 A***

SPL Sample ID Number	Blank Value ug/L	LCS Concentration ug/L	Measured Concentration ug/L	% Recovery	QC Limits Recovery
LCS	ND	2.00	1.90	95.0	80 - 120

-9709257

Samples in batch:

9709083-01A

COMMENTS:

LCS = SPL ID# 94-452-36-23

* = MI

**HOUSTON LABORATORY**

8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

**** SPL QUALITY CONTROL REPORT ****

Matrix: Leachate

Reported on: 09/10/97

Analyzed on: 09/09/97

Analyst: AG

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, TCLP Leachate
Method 7470 A***

SPL Sample ID Number	Method Blank ug/L	Sample Result ug/L	Spike Added ug/L	Matrix Spike		Matrix Spike Duplicate		RPD (%)	QC LIMITS (Advisory)		
				Result ug/L	Recovery %	Result ug/L	Recovery %		RPD Max	% REC	
9709083-01A	ND	ND	2.00	1.36	68.0	1.64	82.0	19	20	75	-125

-9709257

Samples in batch:

9709083-01A

COMMENTS:

LCS = SPL ID# 94-452-36-23

* = MI



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 09/04/97

Analyzed on: 09/04/97

Analyst: BEN

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

Cyanide-Reactive
Method 7.3.3.2 ***

-- DUPLICATE ANALYSIS --

SPL Sample ID	Original Sample Concentration mg/Kg	Duplicate Sample mg/Kg	RPD	RPD Max.
9709118-01B	ND	ND	0	20

-9709130

Samples in batch:

9709070-02A 9709083-01D 9709118-01B

COMMENTS:



QA/QC FORM
FLASH POINT by Pensky-Marten

METHOD:

ASTM D93-85 OR SW-846 1010

DATE:

9-5-97

OF SAMPLES:

2

UNITS:

DEG. F

ANALYST:

T. Benz

SAMPLE I.D.'s IN SET:

9708B27-02F, 9709083-01D

STANDARD

STANDARD	FLASH POINT	FLASH POINT	QA/QC LIMITS	
	KNOWN	FOUND	UPPER	LOWER
para-XYLENE	81 deg. F	80°F	83 deg. F	79 deg. F

REPLICATES

SAMPLE I.D.	RESULT	DUPLICATE	DIFFERENCE	QC LIMITS
	(#1)	(#2)	#1 - #2	
9708B27-02F	>210°F	>210°F	0	± 4°F

REVIEWED BY:

T. Benz

DATE:

09/05/97

APPROVED BY:

DATE:

**HOUSTON LABORATORY**

8880 INTERCHANGE DRIVE

HOUSTON, TEXAS 77054

PHONE (713)660-0901

**** SPL QUALITY CONTROL REPORT ****

Matrix: Aqueous

Reported on: 09/07/97

Analyzed on: 09/04/97

Analyst: EM

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

pH
Method 150.1 *

-- DUPLICATE ANALYSIS --

SPL Sample ID	Original Sample Concentration pH units	Duplicate Sample pH units	RPD	RPD Max.
9709083-01D	8.42	8.42	0	1.0

-9709176

Samples in batch:

9709083-01D 9709110-01D 9709120-01B 9709131-01A
9709131-02A

COMMENTS:



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713)660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 09/04/97

Analyzed on: 09/04/97

Analyst: BEN

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

Sulfide-Reactive
Method 7.3.4.2 ***

-- DUPLICATE ANALYSIS --

SPL Sample ID	Original Sample Concentration mg/Kg	Duplicate Sample mg/Kg	RPD	RPD Max.
9709118-01B	ND	ND	0	15

-9709131

Samples in batch:

9709070-02A 9709083-01D 9709118-01B

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 9/3/97	Time: (330
--------------	------------

SPL Sample ID: 9709083

		Yes	No
1	Chain-of-Custody (COC) form is present.	/	
2	COC is properly completed.	/	
3	If no, Non-Conformance Worksheet has been completed.		
4	Custody seals are present on the shipping container.	/	
5	If yes, custody seals are intact.	/	
6	All samples are tagged or labeled.	/	
7	If no, Non-Conformance Worksheet has been completed.		
8	Sample containers arrived intact	/	
9	Temperature of samples upon arrival:	40	C
10	Method of sample delivery to SPL:	SPL Delivery	
		Client Delivery	
		FedEx Delivery (airbill #)	2042172683
		Other:	
11	Method of sample disposal:	SPL Disposal	/
		HOLD	
		Return to Client	

Name: Jim Lyons	Date: 9/3/97
-----------------	--------------

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger Anderson
Form C-138
Originated 8/8/95

need
chain of
custody
better copies

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>WESTWAY FREIGHT LINES</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>mile post 146 Hwy 64, Rio Arriba County, NM</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>mile post 146 Hwy 64 Rio Arriba County, NM</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.	
All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

CREEK WATER Contaminated with small amounts of Diesel Fuel
AND motor oil.

RECEIVED
NOV - 5 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 120 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: mbe DATE: 11-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Dennis G. Zent TITLE: Geologist DATE: 11/5/97
APPROVED BY: Martyn J. Hardy TITLE: Env Geologist DATE: 11/7/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
El Paso, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

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 checked="" type="checkbox"/>	4. Generator <u>WESTWAY FREIGHT LINES</u> 5. Originating Site <u>mile post 146 Highway 64, Rio Arriba County, NM</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>mile post 146 Highway 64 Rio Arriba County, NM</u>	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <u>B.</u> 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:

CREEK WATER contaminated with small amounts of Diesel fuel
AND motor oil,

RECEIVED
NOV - 5 1997

CON. DIV.
DIST. 3

Estimated Volume 120661 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: mbr DATE: 11-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Feuntun TITLE: Geologist DATE: 11/5/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

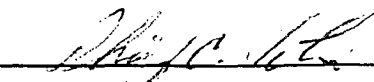
1. Generator Name and Address: Westway Freightlines 7270 Dahlia Commerce City, Co 80022	2. Destination Name: Sunco Disposal
3. Originating Site (name): Mile Post 146 Highway 64, Rio Riba County, New Mexico	
Location of the Waste (Street address &/or ULSTR):	
Attach list of originating sites as appropriate	
4. Source and Description of Waste Creek Water contaminated by a small amount of diesel fuel and motor oil resulting from a tractor trailer highway accident and subsequent spill	

I, Phillip C. Nobis Tierra Environmental Company as Agent representative for:
(Print Name)
West Way Freight Lines 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 only the following documentation is attached (check appropriate items):

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

Name (Original Signature): 
Title: President Tierra Environmental Co, Agent for West Way Freightlines
Date: 11/5/97

ENVIROTECH LABS

Practical Solutions for a Better Tomorrow

November 3, 1997

Mr. Phil Nobis
Tierra Environmental Services, Inc.
P.O. Drawer 15250
Farmington, New Mexico 87499

Project No.: 04074-03

Dear Mr. Nobis,

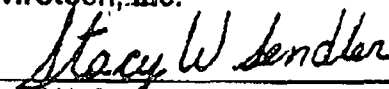
Enclosed are the analytical results for the sample collected from the location designated as "U.S. Highway 64 - MM 145". One sludge sample was collected by Envirotech personnel on 10/20/97, and received by the Envirotech laboratory on 10/20/97 for Hazardous Waste Characterization analysis (Volatile and Semi-volatile Organics, Metals, Reactivity, Corrosivity, and Ignitability).

The sample was documented on Envirotech Chain of Custody No. 5535 and assigned Laboratory No. C336 ("Sludge Pond #1) for tracking purposes.

Results of the analysis indicate that the material from the designated location is not a characteristic hazardous waste as defined by 40 CFR, Section 261, Subpart C for the noted compounds.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615. It is always a pleasure doing business with you.

Respectfully submitted,
Envirotech, Inc.


Stacy W. Sedler
Environmental Scientist/Laboratory Manager

enc.

SWS/sws

04074/04074-03.110/wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Tierra Environmental	Project #:	04074
Sample ID:	Sludge Pond #1	Date Reported:	10-22-97
Lab ID#:	C336	Date Sampled:	10-20-97
Sample Matrix:	Soil	Date Received:	10-20-97
Preservative:	Cool	Date Analyzed:	10-22-97
Condition:	Cool & Intact	Chain of Custody:	5535

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative pH = 5.18

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
-----------	---------------------------

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

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

REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)
-------------	---

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

Comments: U.S. Hwy 64 MM 145 - Sludge Pond #1

Christine M. Walters
Analyst

Stacy W. Sandler
Review

ENVIROTECH LABS**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS**

Client:	Tierra Environmental	Project #:	04074
Sample ID:	Sludge Pond #1	Date Reported:	10-30-97
Laboratory Number:	C336	Date Sampled:	10-20-97
Chain of Custody:	5535	Date Received:	10-20-97
Sample Matrix:	Sludge	Date Extracted:	10-21-97
Preservative:	Cool	Date Analyzed:	10-29-97
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

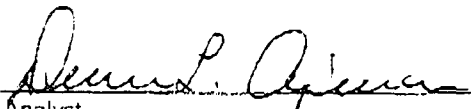
ND - Parameter not detected at the stated detection limit.

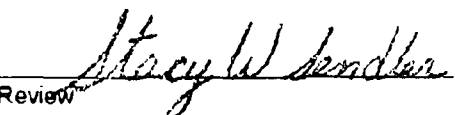
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Trifluorotoluene	98%
	Bromofluorobenzene	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
 Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
 Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
 Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: U.S. Hwy 64 NM 145.


 Analyst


 Review

ENVIROTECH LABS**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****EPA METHOD 8040
PHENOLS**

Client:	Tierra Environmental	Project #:	04074
Sample ID:	Sludge Pond #1	Date Reported:	10-30-97
Laboratory Number:	C336	Date Sampled:	10-20-97
Chain of Custody:	5535	Date Received:	10-20-97
Sample Matrix:	Sludge	Date Extracted:	10-21-97
Preservative:	Cool	Date Analyzed:	10-30-97
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	0.022	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	0.081	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	98%
	2,4,6-Tribromophenol	98%

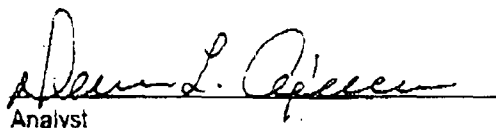
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

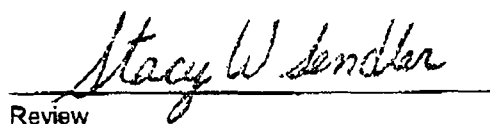
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 19

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: U.S. Hwy 64 NM 145.


Analyst


Review

ENVIROTECH LABS**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW**

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics

Client:	Tierra Environmental	Project #:	04074
Sample ID:	Sludge Pond #1	Date Reported:	10-30-97
Laboratory Number:	C336	Date Sampled:	10-20-97
Chain of Custody:	5535	Date Received:	10-20-97
Sample Matrix:	Sludge	Date Extracted:	10-21-97
Preservative:	Cool	Date Analyzed:	10-30-97
Condition:	Cool and Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	0.075	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	0.045	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	0.058	0.020	0.13
HexachloroBenzene	ND	0.020	0.13


ND - Parameter not detected at the stated detection limit.

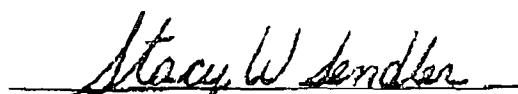
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	98%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
 Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
 Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: U.S. Hwy 64 NM 145.


 Analyst


 Review

ENVIROTECH LABS**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS**

Client:	Tierra Environmental	Project #:	04074
Sample ID:	Sludge Pond #1	Date Reported:	10-31-97
Laboratory Number:	C336	Date Sampled:	10-20-97
Chain of Custody:	5535	Date Received:	10-20-97
Sample Matrix:	Sludge	Date Analyzed:	10-31-97
Preservative:	Cool	Date Extracted:	10-21-97
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	0.003	0.001	5.00
Barium	0.48	0.01	100
Cadmium	ND	0.001	1.00
Chromium	0.009	0.001	5.00
Lead	ND	0.001	5.00
Mercury	ND	0.001	0.200
Selenium	0.001	0.001	1.00
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

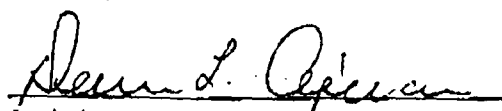
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.


Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, July 1992.

Methods 7080, 7080, 7131, 7191, 7470, 7421, 7740, 7761 Analysis of Metals by GFAA and Cold Vapor Techniques, SW-846, USEPA.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: U.S. Hwy 64 NM 145.


Analyst


Review

[illegible]

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/>	4. Generator <i>WFS</i>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <i>ESPERANZA</i>
2. Management Facility Destination <i>SUNCO</i>	6. Transporter <i>SUNCO</i>
3. Address of Facility Operator <i>CR 3500 #345 AZTEC NM</i>	8. State <i>NM</i>
7. Location of Material (Street Address or ULSTR) <i>US 64 GOVERNADOR N.M.</i>	
9. Circle One: (A.) All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

TIG, DEA AND WATER EXEMPT PLANT FLUIDS

RECEIVED
OCT 21 1997
OIL CON. DIV.
DIST. 3

Estimated Volume *160 bbls* cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: *Michael Talovich* TITLE: *MGR* DATE: *10-20-97*
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: *MICHAEL TALOVICH* TELEPHONE NO. *505-334-6186*

(This space for State Use)

APPROVED BY: *Denny D. Fourn* TITLE: *Geologist* DATE: *10/21/97*
APPROVED BY: *Ernie Busch* TITLE: *Geologist* DATE: *10/22/97*

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: <i>Williams Field Services</i>	2. Destination Name: <i>SUNCO SWD #1</i>
3. Originating Site (name): <i>Esperanza Treating Plant</i> <i>mm 100.5 US 64 Gobernador N.M.</i> <small>Attach list of originating sites as appropriate</small>	
4. Source and Description of Waste <i>TIG-DEA-H2O</i>	

I, JAMES RUYBALID representative for:
(Print Name)
Williams Field Services do hereby certify that,
according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,
1988, regulatory determination, the above described waste is: (Check appropriate classification)

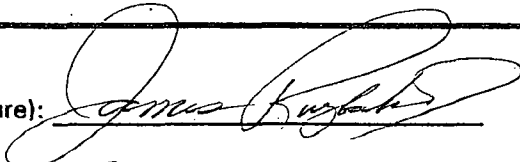
☒ EXEMPT oilfield waste ☐ NON-EXEMPT oilfield waste which is non-hazardous by characteristic
analysis or by product identification

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

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

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

Name (Original Signature):



Title: SR. PLANT OPER.

Date: 10/19/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger H. Hulse

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>COASTAL CHEMICAL</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>YARD</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>COASTAL CHEM. YARD</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASH WATER MIXED WITH UNUSED CHEMICALS

RECEIVED
OCT 16 1997

OIL CON. DIV.
DIST. 3

Note MSDS sheets a couple of these are
OSHA Hazardous

Estimated Volume 240 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talowick TITLE: manager DATE: 10-16-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael Talowick TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Feant TITLE: Geologist DATE: 10/16/97
APPROVED BY: Martyn J. Philby TITLE: Env Geologist DATE: 10/17/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>COASTAL CHEMICAL</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>YARD</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>COASTAL CHEM. YARD</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASH WATER MIXED WITH UNUSED CHEMICALS

RECEIVED
OCT 16 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 240 bbl's cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talon TITLE: manager DATE: 10-16-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael Talon TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Keen TITLE: Geologist DATE: 10/16/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Coastal Chemical Co Inc #10 CR 5911 Farmington NM 87401	2. Destination Name: Sunco Disposal System 345 RD 3500 Aztec NM 87410
3. Originating Site (name): Coastal Chemical Co Inc #10 CR 5911 Farmington NM 87401	
Location of the Waste (Street address &/or ULSTR): Coastal Chemical Co Inc #10 CR 5911 Farmington NM 87401	
Attach list of originating sites as appropriate	
4. Source and Description of Waste Rinse water from pump, Hoses and tanks used to deliver virgin chemicals. All chemicals rinsed out are virgin/unused chemicals. Chemicals may include: Alkanolamine, Glycol (TEG & EG), Antifreeze.	

I, Michael Reams representative for:
(Print Name)
Coastal Chemical Co., 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 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 only the following documentation is attached (check appropriate items):

☒ MSDS Information
☐ RCRA Hazardous Waste Analysis
☐ Chain of Custody

Other (description):

Name (Original Signature): Michael C. Ream

Title: _____ Facility Manager

Date: October 14, 1997



Dow U.S.A.

The Dow Chemical Company
Midland, Michigan 48674

Material Safety Data Sheet

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 55520

Page: 1

Product Name: METHYLDIETHANOLAMINE

Effective Date: 07/12/93 Date Printed: 07/14/93

MSDS:000913

1. INGREDIENTS: (% w/w, unless otherwise noted)

Methyldiethanolamine

CAS# 000105-59-9 99%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: 464-491F, 240-255C

VAP PRESS: <1 mmHg @ 20C

VAP DENSITY: 4

SOL. IN WATER: Complete

SP. GRAVITY: 1.04-1.06

APPEARANCE: Pale straw liquid.

ODOR: Amine odor.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 270F, 132C; 269F, 131C

METHOD USED: COC; Setaflash closed cup

FLAMMABLE LIMITS

LFL: Not determined

UFL: Not determined

EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemical, foam. For large scale fires, alcohol resistant foams or protein foams may function, but much less effectively. Water may be used to flush spills away from fire exposures and to dilute spills to non-flammable mixtures. If possible, contain fire run off water. For large scale fires, direct water stream may cause violent frothing, but fine water spray may help control situation.

(Continued on page 2 , over)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company



Printed on Recycled and Recyclable Paper

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 55520

Page: 2

Product Name: METHYLDIETHANOLAMINE

Effective Date: 07/12/93 Date Printed: 07/14/93

MSDS:000913

3. FIRE AND EXPLOSION HAZARD DATA: (CONTINUED)

FIRE & EXPLOSION HAZARDS: Keep unnecessary people away; isolate hazard area and deny unnecessary entry. Highly toxic fumes are released in fire situation. Fire water run off may be toxic. When using water spray, boil over may occur when the product temperature reaches the boiling point of water (tank type scenarios, not spills).

FIRE-FIGHTING EQUIPMENT: Wear positive-pressure, self-contained breathing apparatus and full protective equipment.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) No relevant data.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Oxidizing material.

HAZARDOUS DECOMPOSITION PRODUCTS: Possible nitrogen oxides and carbon oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS: Wash small amounts with water. Dike to avoid contamination of sewer system with large amounts. Keep out of sewers, storm drains, surface waters and soil.

DISPOSAL METHOD: ++DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER++. For unused or uncontaminated material, the preferred management options are to send to a licensed recycler, reclaimer, or incinerator. The same management options are recommended for used or contaminated material, although additional evaluation is required. (see, for example, 40 CFR Part 261, "Identification and Listing of Hazardous Waste"). Any disposal practice must be in compliance with federal, state, provincial, and local laws and regulations. Check with appropriate agencies for your location. For additional information, see Section 4 (REACTIVITY DATA) and "REGULATORY INFORMATION".

As a service to its customers, Dow can provide lists of

(Continued on page 3)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Product Code: 55520

Page: 3

Product Name: METHYLDIETHANOLAMINE

Effective Date: 07/12/93 Date Printed: 07/14/93

MSDS:000913

5. ENVIRONMENTAL AND DISPOSAL INFORMATION: (CONTINUED)

companies which recycle, reprocess or manage chemicals and companies that recondition used drums. Telephone Dow's Customer Information Center at 800/258-CHEM (2436) for further details.

6. HEALTH HAZARD DATA:

EYE: May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness.

SKIN CONTACT: Prolonged or repeated exposure may cause skin irritation, even a burn. May cause more severe response if confined or skin is abraded.

SKIN ABSORPTION: A single prolonged skin exposure is not likely to result in absorption of harmful amounts. The LD50 for skin absorption in rabbits is >2000 mg/kg.

INGESTION: Single dose oral toxicity is low. The oral LD50 for rats is likely between 2000-3980 mg/kg. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of mouth and throat.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract.

SYSTEMIC & OTHER EFFECTS: No relevant information found.

7. FIRST AID:

EYES: Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

SKIN: Wash off in flowing water or shower. Remove contaminated clothing and wash before reuse.

INGESTION: Do not induce vomiting. Give large amounts of water or milk if available and transport to medical facility.

(Continued on page 4 , over)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 55520

Page: 4

Product Name: METHYLDIETHANOLAMINE

Effective Date: 07/12/93 Date Printed: 07/14/93

MSDS:000913

7. FIRST AID: (CONTINUED)

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: May cause tissue destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE(S): None established.

VENTILATION: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: If respiratory irritation is experienced, use an approved air-purifying respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

EYE PROTECTION: Use chemical goggles. Eye wash fountain should be located in immediate work area.

9. ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion.

MSDS STATUS: Revised sections 3, 5, 9, and Regulatory Information

For information regarding state/provincial and federal regulations see The Regulatory Information Section.

(R) Indicates a trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 55520

Page: R-1

Product Name: METHYLDIETHANOLAMINE

Effective Date: 07/12/93 Date Printed: 07/14/93

MSDS:000913

REGULATORY INFORMATION: (Not meant to be all-inclusive--selected regulations represented.)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

U.S. REGULATIONS

=====

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of

New Jersey
Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CANADIAN REGULATIONS

=====

(Continued on page R-2 , over)

(R) Indicates a Trademark of The Dow Chemical Company

* An Operating Unit of The Dow Chemical Company

Dow Chemical U.S.A.* Midland, MI 48674 Emergency Phone: 517-636-4400

Product Code: 55520

Page: R-2

Product Name: METHYLDIETHANOLAMINE

Effective Date: 07/12/93 Date Printed: 07/14/93

MSDS:000913

REGULATORY INFORMATION (CONTINUED)

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

D2B

CANADIAN TDG INFORMATION: For guidance, the Transportation of Dangerous Goods Classification for this product is:

Not regulated

(R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company
For Further Information.

* An Operating Unit of The Dow Chemical Company

2

TERIAL SAFETY DATA SHEET
TRIETHYLENE GLYCOL

1 HM18 HEALTH
1 HM18 FLAMMABILITY
0 HM18 REACTIVITY
B HM18 PERSONAL PROTECTION

SECTION I - IDENTIFICATION

DISTRIBUTED BY..... COASTAL CHEMICAL COMPANY, INC
P.O. BOX 820
ABBEVILLE, LA 70511-0820
(318) 893-3862
EMERGENCY PHONE NUMBER... (318) 893-3862 OR CHEMTREC (800) 424-9300
EFFECTIVE DATE..... 02/26/90
MANUFACTURER'S NAME..... UNION CARBIDE
DOW CHEMICAL
TEXACO
OXY-PETROCHEMICAL.

TRADE NAME..... TRIETHYLENE GLYCOL
CHEMICAL FAMILY..... POLYETHYLENE GLYCOL
CAS NUMBER..... 112-27-6
CHEMICAL FORMULA..... C₆H₁₄O₄

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	X	TLV (Units)	PROD. CAS #
TRIETHYLENE GLYCOL	99	None Established	112-27-6

SECTION III - PHYSICAL DATA

FREEZING POINT (F)..... -7 Deg. C., 19 Deg. F.
VAPOR PRESSURE (mm Hg)... (1 mm
VAPOR DENSITY (Air=1).... 5.2, air = 1
SOLUBILITY IN H₂O..... Completely soluble in all proportions
APPEARANCE/ODOR..... Clear, colorless, viscous liquid with slight odor.
SPECIFIC GRAVITY (H₂O=1). 1.1 @ 77 Deg. F., 25/25 Deg. C
PH..... N/D

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... 350 Deg. F.
LOWER FLAME LIMIT..... 0.9
HIGHER FLAME LIMIT..... 9.2
EXTINGUISH MEDIA..... Use water fog or spray, Alcohol Foam, Dry Powder, Carbon Dioxide (CO₂).
UNUSUAL FIRE HAZARD..... Containers may explode from internal pressure if confined to fire. Cool with water. Keep unnecessary people away. Approach fire from upwind side. Avoid breathing smoke, fumes, mist or vapors on the downwind side.

MATERIAL SAFETY DATA SHEET
TRIETHYLENE GLYCOL

SECTION V - HEALTH HAZARD DATA

RESHOLD LIMIT VALUE.... Recommended 5 MG/M3 based on oil mist.

ROUTE OF ENTRY.	INHALATION?	SKIN?	INGESTION?
	Irritant	Mild irritant	Irritant

HEALTH HAZARDS..... ACUTE: Vapors or liquid may be irritating to skin, eyes, or mucous membranes. Avoid inhalation or skin/eye contact.

CARCINOGENICITY	NTP?	IARC MONOGRAPHS?	OSHA REGULATED
NO	NO	NO	NO

OVER EXPOSURE EFFECTS.... Skin irritation develops slowly after contact. Eye irritation develops immediately upon contact.

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 swallowed, do not induce vomiting, get immediate medical attention. 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.

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... Product is stable

CONDITIONS TO AVOID..... Heat may cause internal pressure which could rupture container.

INCOMPATIBLE MATERIALS... Oxidizers or Oxidizing Materials.

DECOMPOSITION PRODUCTS... From fire; Smoke, Carbon dioxide, & Carbon Monoxide.

HAZARDOUS POLYMERIZATION. Will not occur

POLYMERIZATION AVOID..... None

SECTION VII - SPILL OR LEAK PROCEDURE

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 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.

MATERIAL SAFETY DATA SHEET
TRIETHYLENE GLYCOL

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..... Not Regulated

DOT SHIPPING NAME..... Triethylene Glycol

REPORTABLE QUANTITY (RQ). None

UN NUMBER..... None

NA #..... None

PACKAGING SIZE..... N/A

SECTION X - REGULATORY

TPA ACUTE..... YES

TPA CHRONIC..... NO

EPA IGNITABILITY..... NO

EPA REACTIVITY..... NO

EPA SUDDEN RELEASE OF PRESSURE..... NO

CERCLA RD VALUE..... None

SARA TPO..... None

SARA RI..... None

SECTION 313..... No

EPA HAZARD WASTE #..... None

CLEAN AIR..... Yes Section 111

CLEAN WATER..... No

FOOTNOTES N/A - not applicable N/D - no data available

(- means less than) - means greater than

App. - approximate Est. - estimated

PREPARED BY:..... Glen White, B.I.B., 817-560-4631

MATERIAL SAFETY DATA SHEET
TRIETHYLENE GLYCOL

THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMER 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.

MATERIAL SAFETY DATA SHEET
TRIETHYLENE GLYCOL REPROCESSED

1 HMIS HEALTH
 1 HMIS FLAMMABILITY
 0 HMIS REACTIVITY
 B HMIS PERSONAL PROTECTION

=====

SECTION I - IDENTIFICATION

=====

DISTRIBUTED BY..... COASTAL CHEMICAL COMPANY, INC
 P.O. BOX 820
 ABBEVILLE, LA 70511-0820
 (318) 893-3862

EMERGENCY PHONE NUMBER... (318) 893-3862 OR CHEMTREC (800) 424-9300

EFFECTIVE DATE..... 02/26/90

MANUFACTURER'S NAME.....

TRADE NAME..... TRIETHYLENE GLYCOL REPROCESSED

CHEMICAL FAMILY..... POLYETHYLENE GLYCOL

CAS NUMBER..... 112-27-6

CHEMICAL FORMULA..... C6H14O4

=====

SECTION II - HAZARDOUS INGREDIENTS

=====

HAZARDOUS COMPONENTS	%	TLV (Units)	PROD. CAS #
TRIETHYLENE GLYCOL	98	None Established	112-27-6

=====

SECTION III - PHYSICAL DATA

=====

FREEZING POINT (F)..... -7 Deg. C., 19 Deg. F.

VAPOR PRESSURE (mm Hg)... (1 mm

VAPOR DENSITY (Air=1).... 5.2, air = 1

SOLUBILITY IN H2O..... Completely soluble in all proportions

APPEARANCE/ODOR..... Light amber color, viscous liquid with slight odor.

SPECIFIC GRAVITY (H2O=1). 1.1 @ 77 Deg. F., 25/25 Deg.C

PH..... N/D

=====

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

=====

FLASH POINT..... 350 Deg. F.

LOWER FLAME LIMIT..... 0.9

HIGHER FLAME LIMIT..... 9.2

EXTINGUISH MEDIA..... Use water fog or spray, Alcohol Foam, Dry Powder, Carbon Dioxide (CO2).

UNUSUAL FIRE HAZARD..... Containers may explode from internal pressure if confined to fire. Cool with water. Keep unnecessary people away. Approach fire from upwind side. Avoid breathing smoke, fumes, mist or vapors on the downwind side.

=====

SECTION V - HEALTH HAZARD DATA

=====

THRESHOLD LIMIT VALUE.... Recommended 5 MG/M3 based on oil mist.

MATERIAL SAFETY DATA SHEET
TRIETHYLENE GLYCOL REPROCESSED

ROUTES OF ENTRY	INHALATION?	SKIN?	INGESTION?
	Irritant	Mild irritant	Irritant

HEALTH HAZARDS..... ACUTE: Vapors or liquid may be irritating to skin, eyes, or mucous membranes. Avoid inhalation or skin/eye contact.

CARCINOGENICITY	NTP?	IARC MONOGRAPHS?	OSHA REGULATED
NO	NO	NO	NO

OVER EXPOSURE EFFECTS.... Skin irritation develops slowly after contact. Eye irritation develops immediately upon contact.

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 swallowed, do not induce vomiting, get immediate medical attention. 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.

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... Product is stable

CONDITIONS TO AVOID..... Heat may cause internal pressure which could rupture container.

INCOMPATIBLE MATERIALS... Oxidizers or Oxidizing Materials.

DECOMPOSITION PRODUCTS... From fire; Smoke, Carbon dioxide, & Carbon Monoxide.

HAZARDOUS POLYMERIZATION. Will not occur

POLYMERIZATION AVOID..... None

SECTION VII - SPILL OR LEAK PROCEDURE

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 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

MATERIAL SAFETY DATA SHEET
TRIETHYLENE GLYCOL REPROCESSED

=====

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..... NON HAZARDOUS

DOT SHIPPING NAME..... CHEMICALS, NOS

REPORTABLE QUANTITY (RQ). None

UN NUMBER..... None

NA #..... None

PACKAGING SIZE..... N/A

=====

SECTION X - REGULATORY

=====

EPA ACUTE..... YES

EPA CHRONIC..... NO

EPA IGNITABILITY..... NO

EPA REACTIVITY..... NO

EPA SUDDEN RELEASE OF
PRESSURE..... NO

CERCLA RQ VALUE..... None

SARA TPO..... None

SARA RQ..... None

SECTION 313..... No

EPA HAZARD WASTE #..... None

CLEANAIR..... Yes Section 111

CLEAN 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:..... Glen White, S.I.S., 817-560-4631

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.



Material Safety Data Sheet

The Dow Chemical Company
Midland, Michigan 48674

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Page: 1

24-Hour Emergency Phone Number: 517-636-4400

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE

Product Code: 29451

Effective Date: 06/30/94 Date Printed: 07/25/95 MSD: 002850

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS#	AMOUNT (%w/w)
Proprietary alkylamine		90 to 100%
Water	CAS# 007732-18-5	Max. 4%

3. HAZARDS IDENTIFICATION

EYE: May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness.

SKIN CONTACT: Short single exposure may cause skin burns.
Prolonged exposure may cause severe skin burns.
DOT classification: corrosive.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INGESTION: Single dose oral toxicity is low. Amounts ingested incidental to industrial handling are not likely to cause injury; however ingestion of larger amounts may cause injury. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of mouth and throat.

INHALATION: At room temperature, exposures to vapors are unlikely due to physical properties; higher temperatures may generate vapor levels sufficient to cause adverse effects.

SYSTEMIC AND OTHER EFFECTS: Repeated excessive exposures may cause liver and kidney effects. Birth defects are unlikely. Exposures having no adverse effects on the mother should have

(Continued on page 2 , over)

(R) Indicates a Trademark of The Dow Chemical Company



MATERIAL SAFETY DATA SHEET

PAGE: 2

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE
Product Code: 29451

Effective Date: 06/30/94

Date Printed: 07/25/95

MSD: 002850

no effect on the fetus.

4. FIRST AID

EYES: Immediate and continuous irrigation with flowing water for at least 30 minutes is imperative. Prompt medical consultation is essential.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Destroy contaminated shoes.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: Corrosive. May cause stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLASH POINT: 160F, 71C
METHOD USED: PMCC

FLAMMABLE LIMITS
LFL: 1.6%
UFL: 19.6%

AUTOIGNITION TEMPERATURE: 350C; 662F

EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemical, foam. For large-scale fires, alcohol resistant foams are preferred if available. General purpose synthetic foams or protein foams may function, but much less effectively. Water may be used to flush spills away from fire exposures and to dilute spills to non-flammable mixtures. If possible, contain fire run-off water.

FIRE AND EXPLOSION HAZARDS: Keep unnecessary people away; isolate

(Continued on page 3)

(R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

PAGE: 3

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE

Product Code: 29451

Effective Date: 06/30/94

Date Printed: 07/25/95

MSD: 002850

hazard area and deny unnecessary entry. Highly toxic fumes are released in fire situations. Fire water run-off may be toxic. See environmental section of this MSDS. When using water spray, boil-over may occur when the product temperature reaches the boiling point of water (tank-type scenarios, not spills). See also 'STORAGE AND HANDLING' section of this MSDS.

FIRE-FIGHTING EQUIPMENT: Wear positive pressure, self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

ACTION TO TAKE FOR SPILLS: Wash with small amounts of water. Dike to avoid contamination of sewer with large amounts, soak up with absorbent material, scoop into drums.

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld or perform similar operations on or near empty containers. Will produce flammable vapors above the flash point.

STORAGE:

Store in a tightly closed container, away from sunlight, in a cool, dry and well ventilated area. Keep away from strong acids and oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINE(S): None established.

VENTILATION: Good general ventilation should be sufficient for most conditions.

RESPIRATORY PROTECTION: If respiratory irritation is experienced, use an approved air-purifying respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Wear a face-shield which allows use of chemical goggles, or wear a full-face respirator, to protect face and eyes when there is any likelihood of splashes. Remove contaminated clothing

(Continued on page 4 , over)

(R) Indicates a Trademark of The Dow Chemical Company

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE**Product Code: 29451****Effective Date: 06/30/94****Date Printed: 07/25/95****MSD: 002850**

immediately, wash skin area with soap and water, and launder clothing before reuse.

EYE PROTECTION: Use chemical goggles. Wear a face-shield which allows use of chemical goggles, or wear a full-face respirator, to protect face and eyes when there is any likelihood of splashes. Eye wash fountain should be located in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	: 306-324F, 152-162C
VAPOR PRESSURE	: <2.5 mmHg @ 20C
VAPOR DENSITY	: 2.6
SOLUBILITY IN WATER	: Complete
SPECIFIC GRAVITY	: 0.93-0.94 @ 20/20C
FREEZING POINT	: -4.5C, 24F
APPEARANCE	: Colorless liquid
ODOR	: Amine

10. STABILITY AND REACTIVITY

STABILITY: (CONDITIONS TO AVOID) Stable, avoid heat, sparks, and open flames.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Acids, strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may produce carbon dioxide, toxic carbon monoxide and oxides of nitrogen. Unidentified organic compounds may be formed during combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

ACUTE SKIN: The dermal LD50 has not been determined.

ACUTE INGESTION: The oral LD50 for rats is between 1000 and 2340 mg/kg.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

(Continued on page 5)

(R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

PAGE: 5

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE

Product Code: 29451

Effective Date: 06/30/94

Date Printed: 07/25/95

MSD: 002850

No data available at MSDS effective date.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: Dispose by incineration in accordance with all local, state, and federal requirements.

14. TRANSPORT INFORMATION

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard
A delayed health hazard
A fire hazard

CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

(Continued on page 6 , over)

(R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

PAGE: 6

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE

Product Code: 29451

Effective Date: 06/30/94

Date Printed: 07/25/95

MSD: 002850

REGULATORY INFORMATION (CONTINUED)

HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS:

CAS #

AMOUNT (%w/w)

Proprietary alkylamine

HMIRA INFORMATION: A claim for exemption from ingredient disclosure has been filed under the Hazardous Materials Information Review Act (Canada). The Hazardous Materials Information Review Commission registry number, and date, assigned to this claim are:

Claim Registry Number: 3499

Filing Date: June 29, 1994

16. OTHER INFORMATION

PRODUCT USE: Gas conditioning solvent.

REVISION INDICATOR: Revised section 15

(R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company
For Further Information.



The Dow Chemical Company
Midland, Michigan 48674

Material Safety Data Sheet

1. CHEMICAL, PRODUCT & COMPANY IDENTIFICATION

Page: 1

24-Hour Emergency Phone Number: 517-636-4400

Product: GAS/SPEC (R) CS-PLUS SOLVENT

Product Code: 13693

Effective Date: 06/30/94 Date Printed: 01/10/95 MSD: 003430

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Methyldiethanolamine
Proprietary Alkylamine
Water

CAS# 000105-59-9 60-70%

CAS# 007732-18-5 2.0% MAX

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

* Causes severe eye and skin burns. Causes severe burns of the mouth *
* and throat. May be harmful if swallowed. May cause respiratory *
* tract irritation. Combustible liquid and vapor. *

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: Due to the pH of the material, it is assumed that exposure may cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness.

SKIN: Short single exposure may cause severe skin burns. Classified as corrosive according to DOT. A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts. The dermal LD50 has not been determined.

INGESTION: Single dose oral toxicity considered to be low. The oral LD50 for rats is >1000 mg/kg. Small amounts swallowed incidental to normal handling are not likely to cause injury; swallowing amounts larger than that may cause injury. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion

(Continued on page 2 , over)

(R) Indicates a Trademark of The Dow Chemical Company



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

PAGE: 2

Product: GAS/SPEC (R) CS-PLUS SOLVENT
Product Code: 13693

Effective Date: 06/30/94

Date Printed: 01/10/95

MSD: 003430

may cause burns of mouth and throat. Observations in animals include liver and kidney effects.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:
No relevant information found.

TERATOLOGY (BIRTH DEFECTS): Contains component(s) which did not cause birth defects or any other fetal effects in lab animals.

CANCER INFORMATION:
No relevant information found.

REPRODUCTIVE EFFECTS:
No relevant information found.

4. FIRST AID

EYES: Wash eyes immediately and continuously until assistance arrives for transport to medical facility; wash enroute, if possible. If medical assistance is not immediately available, wash for 30 minutes and seek medical attention immediately.

SKIN: Immediate continued and thorough washing in flowing water for 30 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential.

INGESTION: Do not induce vomiting. Give large amounts of water or milk if available and transport to medical facility.

INHALATION: Remove to fresh air if effects occur. Consult physician.

NOTE TO PHYSICIAN: If burn is present, treat as any thermal burn, after decontamination. Eye irrigation may be necessary for an extended period of time to remove as much caustic as possible. Duration of irrigation and treatment is at the discretion of medical personnel. May cause tissue destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagoscopy control. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

(Continued on page 3)

(R) Indicates a Trademark of The Dow Chemical Company

Product: GAS/SPEC (R) CS-PLUS SOLVENT

Product Code: 13693

Effective Date: 06/30/94

Date Printed: 01/10/95

MSD: 003430

FLASH POINT: 192F, 88.9C
METHOD USED: PMCC

FLAMMABLE LIMITS

LFL: Not established

UFL: Not established

EXTINGUISHING MEDIA: Water fog, carbon dioxide, dry chemical, foam. For large scale fires, alcohol resistant foams are preferred if available. General purpose synthetic foams or protein foams may function, but much less effectively. Water may be used to flush spills away from fire exposures and to dilute spills to non-flammable mixtures. If possible, contain fire run off water.

FIRE AND EXPLOSION HAZARDS: Keep unnecessary people away; isolate hazard area and deny unnecessary entry. Highly toxic fumes are released in fire situations. Fire water run off may be toxic. See environmental section of this MSDS. When using water spray, boil over may occur when the product temperature reaches the boiling point of water (tank type scenarios, not spills). See also "storage and handling" section of this MSDS.

FIRE-FIGHTING EQUIPMENT: Wear positive pressure, self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

ACTION TO TAKE FOR SPILLS: Wash with small amounts of water. Dike to avoid contamination of sewer with large amounts, soak up with absorbent material, scoop into drums. Keep out of sewers, storm drains, surface waters and soil.

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld or perform similar operations on or near empty containers. Will produce flammable vapors above the flash

(Continued on page 4, over)

(R) Indicates a Trademark of The Dow Chemical Company

Product: GAS/SPEC (R) CS-PLUS SOLVENT
Product Code: 13693

Effective Date: 06/30/94

Date Printed: 01/10/95

MSD: 003430

point.

STORAGE:

Store in a tightly closed container, away from sunlight, in a cool, dry and well ventilated area. Keep away from strong acids and oxidizing materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINE(S): None established.

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: If respiratory irritation is experienced, use an approved air-purifying respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

EYE PROTECTION: Use chemical goggles. Wear a face shield which allows use of chemical goggles, or wear a full-face respirator, to protect face and eyes when there is any likelihood of splashes. Eye wash fountain should be located in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	: 183C, 361F
VAPOR PRESSURE	: 0.5 mmHg @ 25C
VAPOR DENSITY	: 3.5
SOLUBILITY IN WATER	: Complete
SPECIFIC GRAVITY	: 1.01 @ 25/25C
FREEZING POINT	: -23.1C
APPEARANCE	: Pale straw liquid
ODOR	: Amine odor

10. STABILITY AND REACTIVITY

STABILITY: (CONDITIONS TO AVOID) Stable, avoid heat, sparks, and open flames.

(Continued on page 5)

(R) Indicates a Trademark of The Dow Chemical Company

Product: GAS/SPEC (R) CS-PLUS SOLVENT

Product Code: 13693

Effective Date: 06/30/94

Date Printed: 01/10/95

MSD: 003430

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Acids, strong oxidizers, halogenated hydrocarbons.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may produce carbon dioxide, toxic carbon monoxide and nitrogen oxides. Unidentified organic compounds may be formed during combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

MUTAGENICITY

No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

No data available at MSDS effective date.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: Do not dump into any sewers, on the ground, or into any body of water. For unused or uncontaminated material, the preferred waste management options are to send to a licensed recycler, reclaimer, or incinerator. The same waste management options are recommended for used or contaminated material, although additional evaluation is required (in the U.S. see for example, 40 CFR, Part 261, "Identification and Listing of Hazardous Waste").

Any disposal practice must be in compliance with federal, state/provincial, and local laws and regulations. State/provincial and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this MSDS incomplete or otherwise inappropriate. As a service to its customers, Dow can provide lists of companies which recycle, reprocess or manage chemicals. In the U.S. telephone Dow's Customer Information Center at 800/258-2436 for further details.

14. TRANSPORT INFORMATION

(Continued on page 6 , over)

(R) Indicates a Trademark of The Dow Chemical Company

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

PAGE: 6

Product: GAS/SPEC (R) CS-PLUS SOLVENT

Product Code: 13693

Effective Date: 06/30/94

Date Printed: 01/10/95

MSD: 003430

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard
A fire hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are cited on

(Continued on page 7)

(R) Indicates a Trademark of The Dow Chemical Company

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

PAGE: 7

Product: GAS/SPEC (R) CS-PLUS SOLVENT

Product Code: 13693

Effective Date: 06/30/94

Date Printed: 01/10/95

MSD: 003430

REGULATORY INFORMATION (CONTINUED)

certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
PROPRIETARY INGREDIENT	PROPRIETARY	PAI

PAI=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

B3 - combustible liquid with a flash point between 37.8C and 93.3C
 E - corrosive to metal or skin
 Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

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

HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS:	CAS #	AMOUNT (%w/w)
Methyldiethanolamine	CAS# 000105-59-9	60-70%
Proprietary Alkylamine		

HMIRA INFORMATION: A claim for exemption from ingredient disclosure has been filed under the Hazardous Materials Information Review Act (Canada). The Hazardous Materials Information Review Commission registry number, and date, assigned to this claim are:

(Continued on page 8 , over)

(R) Indicates a Trademark of The Dow Chemical Company

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

PAGE: 8

Product: GAS/SPEC (R) CS-PLUS SOLVENT

Product Code: 13693

Effective Date: 06/30/94

Date Printed: 01/10/95

MSD: 003430

REGULATORY INFORMATION (CONTINUED)

Claim Number: 3500

Filing Date: June 29, 1994

16. OTHER INFORMATION

MSDS STATUS: Revised section 15

PRODUCT USE: Gas conditioning solvent.

(R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company
For Further Information.

MATERIAL SAFETY DATA SHEET

ETHYLENE GLYCOL

1 HMIS HEALTH
1 HMIS FLAMMABILITY
0 HMIS REACTIVITY
B HMIS PERSONAL PROTECTION

SECTION I - IDENTIFICATION

DISTRIBUTED BY..... COASTAL CHEMICAL COMPANY, INC.
(318) 893-3862
EMERGENCY PHONE NUMBER... (318) 893-3862 OR CHEMTREC (800) 424-9300
EFFECTIVE DATE..... 2/06/1996
MANUFACTURER'S NAME..... UNION CARBIDE
DOW CHEMICAL
TEXACO
OXY-PETROCHEMICAL

TRADE NAME..... ETHYLENE GLYCOL
CHEMICAL FAMILY..... GLYCOL
CAS NUMBER..... 107-21-1
CHEMICAL FORMULA..... HOCH₂CH₂OH

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	%	TLV (Units)	PROD. CAS #
ETHYLENE GLYCOL	100%	ACGIH CEILING 50ppm	107-21-1

SECTION III - PHYSICAL DATA

FREEZING POINT (F)..... 9 DEG F
VAPOR PRESSURE (mm Hg)... 0.12 MMHG @ 25 C
VAPOR DENSITY (Air=1)... 2.14
SOLUBILITY IN H₂O..... COMPLETELY MISCIBLE
APPEARANCE/ODOR..... COLORLESS LIQUID; PRACTICALLY ODORLESS
SPECIFIC GRAVITY (H₂O=1). 1.1155 @ 20/20 C
PH..... N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... 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.

MATERIAL SAFETY DATA SHEET

ETHYLENE GLYCOL

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE.... 50 PPM BASED ON ETHYLENE GLYCOL

ROUTES OF ENTRY	INHALATION?	SKIN?	INGESTION?
	IRRITANT, POSSIBLY	Not expected to	Ingestion of very
	NARCOTIC	cause significant	large amounts
		health hazard	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 -	NTP?	IARC MONOGRAPHS?	OSHA-REGULATED
NO	NO	NO	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... Oxidizers or Oxidizing Materials. Alkaline Materials.

DECOMPOSITION PRODUCTS... From fire; Smoke, Carbon dioxide, & Carbon Monoxide

HAZARDOUS POLYMERIZATION. Will not occur

POLYMERIZATION AVOID..... None

MATERIAL SAFETY DATA SHEET

ETHYLENE GLYCOL

SECTION VII - SPILL OR LEAK PROCEDURE

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..... Drum - Ethylene Glycol
Bulk - Other regulated substances, liquid, n.o.s. (ethylene glycol)

REPORTABLE QUANTITY (RQ). 5,000 pounds

UN NUMBER..... None

NA #..... Drums - None; Bulk - NA3082

PACKAGING SIZE..... N/A

SECTION X - REGULATORY

MATERIAL SAFETY DATA SHEET

ETHYLENE GLYCOL

EPA ACUTE..... YES
EPA CHRONIC..... YES
EPA IGNITABILITY..... NO
EPA REACTIVITY..... NO
EPA SUDDEN RELEASE OF
PRESSURE..... NO

CERCLA RQ VALUE..... 5,000 pounds

SARA TPQ..... None

SARA RQ..... None

SECTION 313..... YES, ETHYLENE GLYCOL 107-21-1 100%

EPA HAZARD WASTE #..... None

CLEANAIR..... Yes, Section 111 and 1990 Amendments

CLEAN 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:..... Joe Hudman, Coastal Chemical Co., Inc. 713-477-6675

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.

MATERIAL SAFETY DATA SHEET

COASTALGUARD 100 ANTIFREEZE/COOLANT

1 HMIS HEA
1 HMIS FLA
0 HMIS REA
B HMIS PER

100%

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 100 ANTIFREEZE/COOLANT
CHEMICAL FAMILY..... INHIBITED ETHYLENE GLYCOL SOLUTION
CAS NUMBER..... Blended Product
CHEMICAL FORMULA..... Blended Product

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	%	TLV (Units)
ETHYLENE GLYCOL	95 %	ACGIH CEILING 50ppm

SECTION III - PHYSICAL DATA

FREEZING POINT (F)..... APPROX. 22 DEG F
VAPOR PRESSURE (mm Hg)... 0.12 MMHG @ 25 C
VAPOR DENSITY (Air=1).... 2.14
SOLUBILITY IN H2O..... COMPLETELY MISCIBLE
APPEARANCE/ODOR..... YELLOW/GREEN LIQUID; PRACTICALLY ODOR
SPECIFIC GRAVITY (H2O=1). 1.11 typical
PH..... 10.5 - 11.0

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... APPROX. 247 DEG F
LOWER FLAME LIMIT..... N/D
HIGHER FLAME LIMIT..... N/D
EXTINGUISH MEDIA..... Water fog or spray, Foam, Dry Powder, (CO2).
UNUSUAL FIRE HAZARD..... NONE KNOWN Approach fire from upwind breathing smoke ,fumes, mist or vapor downwind side.

SECTION V - HEALTH HAZARD DATA

MATERIAL SAFETY DATA SHEET

COASTALGUARD 100 ANTIFREEZE/COOLANT

THRESHOLD LIMIT VALUE.... 50 PPM BASED ON ETHYLENE GLYCOL

ROUTES OF ENTRY	INHALATION?	SKIN?	INGESTION?
	IRRITANT, POSSIBLY NARCOTIC	Not expected to cause significant health hazard	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	NTP?	IARC MONOGRAPHS?	OSHA REGULATED
NO	NO	NO	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 100 ANTIFREEZE/COOLANT

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 - COASTALGUARD 100
Bulk - Other regulated substances, liquid, n.o.s. (ethylene glycol)

REPORTABLE QUANTITY (RQ). 5000 pounds

UN NUMBER..... None

NA #..... Drums - None; Bulk - NA3082

PACKAGING SIZE..... N/A

SECTION X - REGULATORY

EPA ACUTE..... YES

EPA CHRONIC..... YES

EPA IGNITABILITY..... NO

EPA REACTIVITY..... NO

MATERIAL SAFETY DATA SHEET

COASTALGUARD 100 ANTIFREEZE/COOLANT

EPA SUDDEN RELEASE OF

PRESSURE..... NO

CERCLA RQ VALUE..... 5000 pound for ethylene glycol

SARA TPQ..... None

SARA RQ..... None

SECTION 313..... YES, ETHYLENE GLYCOL 107-21-1 95% (1/1/87)

EPA HAZARD WASTE #..... None

CLEANAIR..... Yes, Section 111 Volatile Organic Compounds & Section
112 Statutory Air Pollutants (1990 Amendments)

CLEAN 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.



Material Safety Data Sheet

The Dow Chemical Company
Midland, Michigan 48674

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Page: 1

24-Hour Emergency Phone Number: 517-636-4400

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSD: 000904

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Diethanolamine
Water

CAS# 000111-42-2
CAS# 007732-18-5

85%
15%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

* Colorless liquid. Slight ammonia odor. Causes eye burns. *
* *
* *

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause severe irritation with corneal injury.

SKIN: Prolonged or repeated exposure may cause skin irritation, even a burn. May cause more severe response if skin is abraded (scratched or cut). A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Not classified as corrosive according to DOT.

INGESTION: Single dose oral toxicity is low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. Observations in animals include liver and kidney effects following single oral doses. Ingestion may cause gastrointestinal irritation or ulceration.

(Continued on page 2 , over)

(R) Indicates a Trademark of The Dow Chemical Company



Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21196

Effective Date: 01/01/96

Date Printed: 04/27/96

MSD: 000904

INHALATION: At room temperature, exposures to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause irritation and other effects.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Results from repeated exposure tests on diethanolamine in laboratory animals include anemia (rats) and effects on kidney (rats and mice) and liver (mice). Heart and nervous system effects were also observed in these animals given exaggerated doses. Changes in other organs, causes of which are nonspecific, were judged secondary to the poor health of the animals due to the extremely high doses of diethanolamine given.

TERATOLOGY (BIRTH DEFECTS): Contains component(s) which did not cause birth defects; other fetal effects occurred only at doses toxic to the mother.

4. FIRST AID

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

SKIN: Wash off in flowing water or shower.

INGESTION: Do not induce vomiting. Give large amounts of water or milk if available and transport to medical facility.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: If burn is present, treat as any thermal burn, after decontamination. May cause tissue destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagoscopic control. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: * None

METHOD USED: Setaflash

AUTOIGNITION TEMPERATURE:

* No flash point observed up to the boiling point. Flash point of

(Continued on page 3)

(R) Indicates a Trademark of The Dow Chemical Company

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSD: 000904

diethanolamine is 325F, 163C by Setaflash.

FLAMMABILITY LIMITS

LFL: Not determined.

UFL: Not determined.

HAZARDOUS COMBUSTION PRODUCTS:

EXTINGUISHING MEDIA: Water fog, alcohol foam, CO2, dry chemical.

FIRE FIGHTING INSTRUCTIONS: Not available.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear self-contained, positive-pressure breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Clear non-emergency personnel from the area.

PROTECT THE ENVIRONMENT: Do not allow into sewers, on the ground, or into any body of water.

CLEANUP: Use a noncombustible absorbent such as sand and shovel into suitable containers. Do not use sawdust, wood chips or other cellulosic materials to absorb the spill.

7. HANDLING AND STORAGE

HANDLING: Prevent eye and skin contact. Avoid breathing vapors. Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the auto-ignition temperature possibly resulting in spontaneous combustion.

STORAGE: Do not store in common area with halogenated materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

PERSONAL PROTECTIVE EQUIPMENT

(Continued on page 4 over)

(R) Indicates a Trademark of The Dow Chemical Company

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSD: 000904

EYE/FACE PROTECTION: Use chemical goggles.

SKIN PROTECTION: When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation. If hands are cut or scratched, use gloves impervious to this material even for brief exposures.

RESPIRATORY PROTECTION: For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

EXPOSURE GUIDELINE(S): Diethanolamine: ACGIH TLV is 2 mg/m³, skin; OSHA PEL is 3 ppm. PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless liquid.

ODOR: Slight ammoniacal odor.

VAPOR PRESSURE: Low.

VAPOR DENSITY: Not determined.

BOILING POINT: 244F, 118C

SOLUBILITY IN WATER: Completely miscible.

SPECIFIC GRAVITY: 1.08 @ 25/4C

FREEZING POINT: 28F, -2C

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal storage conditions.

CONDITIONS TO AVOID: This product should not be heated above 60C in the presence of aluminum due to excessive corrosion and potential chemical reaction releasing flammable hydrogen gas.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizers, strong acids. Product may potentially react with various halogenated organic solvents, resulting in temperature and/or pressure increases.

HAZARDOUS DECOMPOSITION PRODUCTS: Possible nitrogen oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

(Continued on page 5)

(R) Indicates a Trademark of The Dow Chemical Company

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSD: 000904

SKIN: The LD50 for skin absorption in rabbits is greater than 8,200 mg/kg (for diethanolamine).

INGESTION: The oral LD50 for rats is greater than 680 mg/kg (for diethanolamine).

MUTAGENICITY: In vitro mutagenicity studies were negative. (for diethanolamine).

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: Based largely or completely on data for major component(s). Bioconcentration potential is low (BCF less than 100 or Log Kow less than 3). Log octanol/water partition coefficient (log Kow) is -1.43. Henry's Law Constant (H) is 5.35×10^{-14} atm m³/mol.

DEGRADATION & TRANSFORMATION: Based largely or completely on data for major component(s). Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD greater than 40%). 5-Day biochemical oxygen demand (BOD5) is 0.22 p/p. 10-Day biochemical oxygen demand (BOD10) is 0.74 p/p. 20-Day biochemical oxygen demand (BOD20) is 1.20 p/p. Theoretical oxygen demand (ThOD) is calculated to be 2.13 p/p. Inhibitory concentration (IC50) in OECD "Activated Sludge, Respiration Inhibition Test" (Guideline #209) is > 1000 mg/L. Material is ultimately biodegradable. Reaches more than 70% mineralization in OECD test for inherent biodegradability: Zahn-Wellens; 94% DOC removal in 14 days.

ECOTOXICOLOGY: Based largely or completely on data for major component(s). Material is slightly toxic to aquatic organisms on an acute basis (LC50 between 10 and 100 mg/L in most sensitive species). Acute LC50 for fathead minnow (*Pimephales promelas*) is 1460-1664 mg/L. Acute LC50 for bluegill (*Lepomis macrochirus*) is 1850-2100 mg/L. Acute LC50 for water flea (*Daphnia magna*) is 55-306 mg/L. Acute LC50 for the cladoceran *Ceriodaphnia dubia* is 30-160 mg/L. Acute LC50 for goldfish (*Carassius auratus*) is 800 to > 5000 mg/L at pH 9.7 and pH 7.0, respectively. Acute LC50 for mosquito fish (*Gambusia affinis*) is 1400-1800 mg/L.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

(Continued on page 6 , over)

(R) Indicates a Trademark of The Dow Chemical Company

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSD: 000904

DISPOSAL: Any disposal practice must be in compliance with all federal, state/provincial, and local laws and regulations. State/provincial and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Regulations may also vary in different locations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material. None of these waste management options should be considered 'arranging for disposal'.

Do not allow into any sewers, on the ground, or into any body of water.

The preferred waste management option is to send to a properly properly licensed or permitted incinerator.

As a service to its customers, Dow can provide lists of companies which recycle, reprocess, or manage chemicals. In the U.S., telephone Dow's Customer Information Center at 517-832-1556 or 800-258-2436 (U.S.) for further details.

14. TRANSPORT INFORMATION

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

DEPARTMENT OF TRANSPORTATION (D.O.T.):

For DOT regulatory information, if required, consult transportation regulations, product shipping papers or contact your Dow representative.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply

(Continued on page 7)

(R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

PAGE: 7

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSD: 000904

with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
DIETHANOLAMINE	000111-42-2	86 %

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard
A delayed health hazard

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
DIETHANOLAMINE	000111-42-2	NJ3 PA1 PA3

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

(Continued on page 8 , over)

(R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

PAGE: 8

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSD: 000904

REGULATORY INFORMATION (CONTINUED)

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND):

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

Category:

Chemical Name	CAS#	RQ	% in Product
Diethanolamine	000111-42-2	100 lb	85%

CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

D2B - eye or skin irritant

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

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

HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS:	CAS #	AMOUNT (%w/w)
Diethanolamine	CAS# 000111-42-2	85%

16. OTHER INFORMATION

REVISION INDICATOR: Revised section 14.

(R) Indicates a Trademark of The Dow Chemical Company
The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult The Dow Chemical Company For Further Information.

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
N.M. 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger Anderson

Form C-138
Originated 8/8/93

Submit Original
Plus 1 Copy
to appropriate
District Office

RECEIVED

SEP 15 1997

Environmental Bureau
Oil Conservation Division

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator WFS
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site Plant Ponds
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO
3. Address of Facility Operator CR 3500 #345 AZTEC, NM	8. State NM
7. Location of Material (Street Address or ULSTR) Milagro Plant	
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:

WASTEWATER FROM EVAP PONDS CONTAINS storm water with
amounts of amine + glycol

Have Ordered original copies of analysis.

RECEIVED
OCT - 6 1997

OIL CON. DIV
DIST. 3

Estimated Volume 200,000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 10-6-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Dwight G. Kent TITLE: Geologist DATE: 10/10/97

APPROVED BY: Martyn G. Kirby TITLE: Env Geologist DATE: 10/15/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Roswell, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

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 WFS
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site Plant Ponds
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO
3. Address of Facility Operator CR 3500 #345 AZTEC, NM	8. State NM
7. Location of Material (Street Address or ULSTR) Milagro Plant	
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:

WASTEWATER FROM EVAP PONDS CONTAINS storm water with
Amounts of Amine + glycol

Need good copies of analysis for
final approval.

RECEIVED
OCT - 6 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 200,000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 10-6-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Dennis G. Funt TITLE: Geologist DATE: 10/10/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Williams Field Services Company 895 Chipeta Way Salt Lake City, UT 84158	2. Destination Name: Sunco Disposal
3. Originating Site (name): Milagro Plant	Location of the Waste (Street address &/or ULSTR): 192 County Road 4900 Bloomfield, NM 87413
Attach list of originating sites as appropriate	
4. Source and Description of Waste Wastewater from evaporation ponds at natural gas treatment plant.	

I, Ingrid Deklan representative for:
(Print Name)
Williams Field Services 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 only the following documentation is attached (check appropriate items):

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

Name (Original Signature):

Title:

Date:

Ingrid Deklan
Environmental Specialist
10/8/97

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562, PITTSBURG, KS 66762/(316)232-1970

RECEIVED
OCT 14 1997

LABORATORY REPORT:

REFERENCE #:

9710022

SENT WILLIAMS FIELD SERVICES
TO: 295 CHIPETA WAY, 2G1
SALT LAKE CITY, UT 84158
INGRID DEKLAU

OIL CON. DIV.
DIST. 3

DATE REPORTED: 10/03/97
DATE COLLECTED: 09/30/97
DATE RECEIVED: 10/01/97
P.O. #:

PROJECT: MILAGRO EVAP PONDS

Sample ID: NORTH POND

Sample Matrix: WATER

Sample Date Collected: 09/30/97

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
SILVER, TOTAL	SW 846 6010	<0.10	MG/L	0.10	10/02/97	MS
ARSENIC, TOTAL	SW 846 7060	<0.05	MG/L	0.05	10/02/97	AC
BARIUM, TOTAL	SW 846 6010	0.100	MG/L	0.05	10/03/97	AC
CADMIUM, TOTAL	SW 846 6010	<0.05	MG/L	0.05	10/01/97	MS
CHROMIUM, TOTAL	SW 846 6010	21.0	MG/L	0.10	10/01/97	MS
MERCURY, TOTAL	SW 846 7470	<0.0002	MG/L	0.0002	10/02/97	MS2
LEAD, TOTAL	SW 846 6010	0.51	MG/L	0.10	10/01/97	MS
SELENIUM, TOTAL	SW 846 7740	<0.05	MG/L	0.05	10/01/97	AC
SEMIVOLATILES	SW 846 8270					
ACENAPHTHENE		ND	UG/L	100	10/02/97	DN
ACENAPHTHYLENE		ND	UG/L	100	10/02/97	DN
ANTHRACENE		ND	UG/L	100	10/02/97	DN
BENZIDINE		ND	UG/L	500	10/02/97	DN
BENZO(A)ANTHRACENE		ND	UG/L	100	10/02/97	DN
BENZO(B)FLUORANTHENE		ND	UG/L	100	10/02/97	DN
BENZO(K)FLUORANTHENE		ND	UG/L	100	10/02/97	DN
BENZOIC ACID		ND	UG/L	500	10/02/97	DN
BENZO(G,H,I)PERYLENE		ND	UG/L	100	10/02/97	DN
BENZO(A)PYRENE		ND	UG/L	100	10/02/97	DN
BENZYL ALCOHOL		ND	UG/L	200	10/02/97	DN
BIS(2-CHLOROETHOXY)METHANE		ND	UG/L	100	10/02/97	DN
BIS(2-CHLOROETHYL)ETHER		ND	UG/L	100	10/02/97	DN
BIS(2-CHLOROISOPROPYL)ETHER		ND	UG/L	100	10/02/97	DN
BIS(2-ETHYLHEXYL)PHTHALATE		ND	UG/L	100	10/02/97	DN
4-BROMOPHENYL PHENYL ETHER		ND	UG/L	100	10/02/97	DN
BUTYL BENZYL PHTHALATE		ND	UG/L	100	10/02/97	DN
4-CHLOROANILINE		ND	UG/L	200	10/02/97	DN
4-CHLORO-3-METHYLPHENOL		ND	UG/L	200	10/02/97	DN
2-CHLORONAPHTHALENE		ND	UG/L	100	10/02/97	DN
2-CHLOROPHENOL		ND	UG/L	100	10/02/97	DN
4-CHLOROPHENYL PHENYL ETHER		ND	UG/L	100	10/02/97	DN
CHRYSENE		ND	UG/L	100	10/02/97	DN
DIBENZ(A,H)ANTHRACENE		ND	UG/L	100	10/02/97	DN
DIBENZOFURAN		ND	UG/L	100	10/02/97	DN
1,2-DICHLOROBENZENE		ND	UG/L	100	10/02/97	DN

REFERENCE #: 9710022

PAGE: 1

Sample ID: NORTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
1,3-DICHLOROBENZENE		ND	UG/L	100	10/02/97	DN
1,4-DICHLOROBENZENE		ND	UG/L	100	10/02/97	DN
3,3'-DICHLOROBENZIDINE		ND	UG/L	200	10/02/97	DN
2,4-DICHLOROPHENOL		ND	UG/L	100	10/02/97	DN
DIETHYL PHTHALATE		ND	UG/L	100	10/02/97	DN
2,4-DIMETHYLPHENOL		ND	UG/L	100	10/02/97	DN
DIMETHYLPHATHALATE		ND	UG/L	100	10/02/97	DN
ISOPHORONE		ND	UG/L	100	10/02/97	DN
DI-N-BUTYLPHTHALATE		ND	UG/L	100	10/02/97	DN
4,6-DINITRO-2-METHYLPHENOL		ND	UG/L	500	10/02/97	DN
2,4-DINITROPHENOL		ND	UG/L	500	10/02/97	DN
2,4-DINITROTOLUENE		ND	UG/L	100	10/02/97	DN
2,6-DINITROTOLUENE		ND	UG/L	100	10/02/97	DN
DI-N-OCTYLPHTHALATE		ND	UG/L	100	10/02/97	DN
1,2-DIPHENYL HYDRAZINE		ND	UG/L	100	10/02/97	DN
FLUORANTHENE		ND	UG/L	100	10/02/97	DN
FLUORENE		ND	UG/L	100	10/02/97	DN
HEXACHLOROBENZENE		ND	UG/L	100	10/02/97	DN
HEXACHLOROBUTADIENE		ND	UG/L	100	10/02/97	DN
HEXACHLOROCYCLOPENTADIENE		ND	UG/L	100	10/02/97	DN
HEXACHLOROETHANE		ND	UG/L	100	10/02/97	DN
INDENO(1,2,3-CD)PYRENE		ND	UG/L	100	10/02/97	DN
2-METHYLNAPHTHALENE		ND	UG/L	100	10/02/97	DN
2-METHYLPHENOL		ND	UG/L	100	10/02/97	DN
4-METHYLPHENOL		ND	UG/L	100	10/02/97	DN
NAPHTHALENE		ND	UG/L	100	10/02/97	DN
2-NITROANILINE		ND	UG/L	500	10/02/97	DN
3-NITROANILINE		ND	UG/L	500	10/02/97	DN
4-NITROANILINE		ND	UG/L	500	10/02/97	DN
NITROBENZENE		ND	UG/L	100	10/02/97	DN
2-NITROPHENOL		ND	UG/L	500	10/02/97	DN
4-NITROPHENOL		ND	UG/L	500	10/02/97	DN
N-NITROSO-DI-N-PROPYLAMINE		ND	UG/L	100	10/02/97	DN
N-NITROSODIPHENYLAMINE(1)		ND	UG/L	100	10/02/97	DN
N-NITROSODIMETHYLAMINE		ND	UG/L	100	10/02/97	DN
PENTACHLOROPHENOL		ND	UG/L	500	10/02/97	DN
PHENATHRENE		ND	UG/L	100	10/02/97	DN
PHENOL		ND	UG/L	100	10/02/97	DN
PYRENE		ND	UG/L	100	10/02/97	DN
1,2,4-TRICHLOROBENZENE		ND	UG/L	100	10/02/97	DN
2,4,5-TRICHLOROPHENOL		ND	UG/L	100	10/02/97	DN
2,4,6-TRICHLOROPHENOL		ND	UG/L	100	10/02/97	DN
2-FLUOROBIPHENYL (SUR)		44.7	150	10		
NITROBENZENE-D8 (SUR)		37.9	150	10		
2-FLUOROPHENOL (SUR)		24.0	150	10		
2,4,6-TRIBROMOPHENOL (SUR)		23.7	150	10		
TERPHENYL-D14 (SUR)		63.3	150	10		
PHENOL-D5 (SUR)		12.0	150	10		

Sample ID: NORTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
VOLATILE ORGANICS	SW 846 8260					
BENZENE		ND	UG/L	3.0	10/01/97	EG
BROMOBENZENE		ND	UG/L	3.0	10/01/97	EG
BROMOCHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
BROMODICHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
BROMOFORM		ND	UG/L	3.0	10/01/97	EG
BROMOMETHANE		ND	UG/L	3.0	10/01/97	EG
n-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
sec-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
tert-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
CARBON TETRACHLORIDE		ND	UG/L	3.0	10/01/97	EG
CHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
CHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
CHLOROFORM		ND	UG/L	3.0	10/01/97	EG
CHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
2-CHLOROTOLUENE		ND	UG/L	3.0	10/01/97	EG
4-CHLOROTOLUENE		ND	UG/L	3.0	10/01/97	EG
DIBROMOCHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DIBROMO-3-CHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,2-DIBROMOETHANE		ND	UG/L	3.0	10/01/97	EG
DIBROMOETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,3-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,4-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
DICHLORODIFLUOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
cis-1,2-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
trans-1,2-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,3-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
2,2-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROPROPENE		ND	UG/L	3.0	10/01/97	EG
ETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
HEXACHLOROBUTADIENE		ND	UG/L	3.0	10/01/97	EG
ISOPROPYLBENZENE		ND	UG/L	3.0	10/01/97	EG
p-ISOPROPYLTOLUENE		ND	UG/L	3.0	10/01/97	EG
METHYLENE CHLORIDE		ND	UG/L	3.0	10/01/97	EG
NAPHTHALENE		ND	UG/L	3.0	10/01/97	EG
n-PROPYLBENZENE		ND	UG/L	3.0	10/01/97	EG
STYRENE		ND	UG/L	3.0	10/01/97	EG
1,1,1,2-TETRACHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1,2,2-TETRACHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
TETRACHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
TOLUENE		ND	UG/L	3.0	10/01/97	EG
1,2,3-TRICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,2,4-TRICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG

Sample ID: NORTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
1,1,1-TRICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1,2-TRICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
TRICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
TRICHLOROFLUOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,2,3-TRICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,2,4-TRIMETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
1,3,5-TRIMETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
VINYL CHLORIDE		ND	UG/L	3.0	10/01/97	EG
TOTAL XYLENES		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROETHANE-d4 (SUR)		105	125	75		
TOLUENE-d8 (SUR)		98	125	75		
4-BROMOFLUOROBENZENE (SUR)		89	125	75		

Sample ID: SOUTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
SILVER, TOTAL	SW 846 6010	<0.10	MG/L	0.10	10/02/97	MS
ARSENIC, TOTAL	SW 846 7060	<0.05	MG/L	0.05	10/02/97	AC
BARIUM, TOTAL	SW 846 6010	0.080	MG/L	0.05	10/03/97	AC
CADMIUM, TOTAL	SW 846 6010	<0.05	MG/L	0.05	10/01/97	MS
CHROMIUM, TOTAL	SW 846 6010	32.1	MG/L	0.10	10/01/97	MS
MERCURY, TOTAL	SW 846 7470	<0.0002	MG/L	0.0002	10/02/97	MS2
LEAD, TOTAL	SW 846 6010	0.95	MG/L	0.10	10/01/97	MS
SELENIUM, TOTAL	SW 846 7740	<0.05	MG/L	0.05	10/01/97	AC
SEMIVOLATILES	SW 846 8270					
ACENAPTHENE		ND	UG/L	1000	10/02/97	DN
ACENAPHTHYLENE		ND	UG/L	1000	10/02/97	DN
ANTHRACENE		ND	UG/L	1000	10/02/97	DN
BENZIDINE		ND	UG/L	5000	10/02/97	DN
BENZO(A)ANTHRACENE		ND	UG/L	1000	10/02/97	DN
BENZO(B)FLUORANTHENE		ND	UG/L	1000	10/02/97	DN
BENZO(K)FLUORANTHENE		ND	UG/L	1000	10/02/97	DN
BENZOIC ACID		ND	UG/L	5000	10/02/97	DN
BENZO(G,H,I)PERYLENE		ND	UG/L	1000	10/02/97	DN
BENZO(A)PYRENE		ND	UG/L	1000	10/02/97	DN
BENZYL ALCOHOL		ND	UG/L	2000	10/02/97	DN
BIS(2-CHLOROETHOXY)METHANE		ND	UG/L	1000	10/02/97	DN
BIS(2-CHLOROETHYL)ETHER		ND	UG/L	1000	10/02/97	DN
BIS(2-CHLOROISOPROPYL)ETHER		ND	UG/L	1000	10/02/97	DN
BIS(2-ETHYLHEXYL)PHTHALATE		ND	UG/L	1000	10/02/97	DN
4-BROMOPHENYL PHENYL ETHER		ND	UG/L	1000	10/02/97	DN
BUTYL BENZYL PHTHALATE		ND	UG/L	1000	10/02/97	DN
4-CHLOROANILINE		ND	UG/L	2000	10/02/97	DN
4-CHLORO-3-METHYLPHENOL		ND	UG/L	2000	10/02/97	DN
2-CHLORONAPHTHALENE		ND	UG/L	1000	10/02/97	DN

Sample ID: SOUTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
2-CHLOROPHENOL		ND	UG/L	1000	10/02/97	DN
4-CHLOROPHENYL PHENYL ETHER		ND	UG/L	1000	10/02/97	DN
CHRYSENE		ND	UG/L	1000	10/02/97	DN
DIBENZ (A, H) ANTHRACENE		ND	UG/L	1000	10/02/97	DN
DIBENZOFURAN		ND	UG/L	1000	10/02/97	DN
1,2-DICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
1,3-DICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
1,4-DICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
3,3'-DICHLOROBENZIDINE		ND	UG/L	2000	10/02/97	DN
2,4-DICHLOROPHENOL		ND	UG/L	1000	10/02/97	DN
DIETHYL PHTHALATE		ND	UG/L	1000	10/02/97	DN
2,4-DIMETHYLPHENOL		ND	UG/L	1000	10/02/97	DN
DIMETHYLPHATHALATE		ND	UG/L	1000	10/02/97	DN
ISOPHORONE		ND	UG/L	1000	10/02/97	DN
DI-N-BUTYLPHTHALATE		ND	UG/L	1000	10/02/97	DN
4,6-DINITRO-2-METHYLPHENOL		ND	UG/L	5000	10/02/97	DN
2,4-DINITROPHENOL		ND	UG/L	5000	10/02/97	DN
2,4-DINITROTOLUENE		ND	UG/L	1000	10/02/97	DN
2,6-DINITROTOLUENE		ND	UG/L	1000	10/02/97	DN
DI-N-OCTYLPHTHALATE		ND	UG/L	1000	10/02/97	DN
1,2-DIPHENYL HYDRAZINE		ND	UG/L	1000	10/02/97	DN
FLUORANTHENE		ND	UG/L	1000	10/02/97	DN
FLUORENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROBUTADIENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROCYCLOPENTADIENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROETHANE		ND	UG/L	1000	10/02/97	DN
INDENO (1, 2, 3-CD) PYRENE		ND	UG/L	1000	10/02/97	DN
2-METHYLNAPHTHALENE		ND	UG/L	1000	10/02/97	DN
2-METHYLPHENOL		ND	UG/L	1000	10/02/97	DN
4-METHYLPHENOL		ND	UG/L	1000	10/02/97	DN
NAPHTHALENE		ND	UG/L	1000	10/02/97	DN
2-NITROANILINE		ND	UG/L	5000	10/02/97	DN
3-NITROANILINE		ND	UG/L	5000	10/02/97	DN
4-NITROANILINE		ND	UG/L	5000	10/02/97	DN
NITROBENZENE		ND	UG/L	1000	10/02/97	DN
2-NITROPHENOL		ND	UG/L	5000	10/02/97	DN
4-NITROPHENOL		ND	UG/L	5000	10/02/97	DN
N-NITROSO-DI-N-PROPYLAMINE		ND	UG/L	1000	10/02/97	DN
N-NITROSODIPHENYLAMINE (1)		ND	UG/L	1000	10/02/97	DN
N-NITROSODIMETHYLAMINE		ND	UG/L	1000	10/02/97	DN
PENTACHLOROPHENOL		ND	UG/L	5000	10/02/97	DN
PHENATHRENE		ND	UG/L	1000	10/02/97	DN
PHENOL		ND	UG/L	1000	10/02/97	DN
PYRENE		ND	UG/L	1000	10/02/97	DN
1,2,4-TRICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
2,4,5-TRICHLOROPHENOL		ND	UG/L	1000	10/02/97	DN
2,4,6-TRICHLOROPHENOL		ND	UG/L	1000	10/02/97	DN

Sample ID: SOUTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
2-FLUOROBIPHENYL (SUR)		42.7	150	10		
NITROBENZENE-D8 (SUR)		42.6	150	10		
2-FLUOROPHENOL (SUR)		2.80 Q	150	10		
2,4,6--TRIBROMOPHENOL (SUR)		23.7	150	10		
TERPHENYL-D14 (SUR)		58.7	150	10		
PHENOL-D5 (SUR)		0 Q	150	10		
VOLATILE ORGANICS	SW 846 8260					
BENZENE		ND	UG/L	3.0	10/01/97	EG
BROMOBENZENE		ND	UG/L	3.0	10/01/97	EG
BROMOCHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
BROMODICHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
BROMOFORM		ND	UG/L	3.0	10/01/97	EG
BROMOMETHANE		ND	UG/L	3.0	10/01/97	EG
n-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
sec-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
tert-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
CARBON TETRACHLORIDE		ND	UG/L	3.0	10/01/97	EG
CHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
CHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
CHLOROFORM		ND	UG/L	3.0	10/01/97	EG
CHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
2-CHLOROTOLUENE		ND	UG/L	3.0	10/01/97	EG
4-CHLOROTOLUENE		ND	UG/L	3.0	10/01/97	EG
DIBROMOCHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DIBROMO-3-CHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,2-DIBROMOETHANE		ND	UG/L	3.0	10/01/97	EG
DIBROMOETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,3-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,4-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
DICHLORODIFLUOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
cis-1,2-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
trans-1,2-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,3-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
2,2-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROPROPENE		ND	UG/L	3.0	10/01/97	EG
ETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
HEXACHLOROBUTADIENE		ND	UG/L	3.0	10/01/97	EG
ISOPROPYLBENZENE		ND	UG/L	3.0	10/01/97	EG
p-ISOPROPYLTOLUENE		ND	UG/L	3.0	10/01/97	EG
METHYLENE CHLORIDE		ND	UG/L	3.0	10/01/97	EG
NAPHTHALENE		ND	UG/L	3.0	10/01/97	EG
n-PROPYLBENZENE		ND	UG/L	3.0	10/01/97	EG
STYRENE		ND	UG/L	3.0	10/01/97	EG

Sample ID: SOUTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
1,1,1,2-TETRACHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1,2,2-TETRACHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
TETRACHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
TOLUENE		ND	UG/L	3.0	10/01/97	EG
1,2,3-TRICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,2,4-TRICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,1,1-TRICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1,2-TRICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
TRICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
TRICHLOROFLUOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,2,3-TRICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,2,4-TRIMETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
1,3,5-TRIMETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
VINYL CHLORIDE		ND	UG/L	3.0	10/01/97	EG
TOTAL XYLENES		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROETHANE-d4 (SUR)		99	125	75		
TOLUENE-d8 (SUR)		97	125	75		
4-BROMOFLUOROBENZENE (SUR)		82	125	75		

Sample ID: WEST POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
SILVER, TOTAL	SW 846 6010	<0.10	MG/L	0.10	10/02/97	MS
ARSENIC, TOTAL	SW 846 7060	<0.05	MG/L	0.05	10/02/97	AC
BARIUM, TOTAL	SW 846 6010	0.030	MG/L	0.05	10/03/97	AC
CADMIUM, TOTAL	SW 846 6010	<0.05	MG/L	0.05	10/01/97	MS
CHROMIUM, TOTAL	SW 846 6010	75.5	MG/L	0.10	10/01/97	MS
MERCURY, TOTAL	SW 846 7470	<0.0002	MG/L	0.0002	10/02/97	MS2
LEAD, TOTAL	SW 846 6010	<0.10	MG/L	0.10	10/01/97	MS
SELENIUM, TOTAL	SW 846 7740	<0.005	MG/L	0.05	10/01/97	AC
SEMIVOLATILES	SW 846 8270					
ACENAPTHENE		ND	UG/L	1000	10/02/97	DN
ACENAPHTHYLENE		ND	UG/L	1000	10/02/97	DN
ANTHRACENE		ND	UG/L	1000	10/02/97	DN
BENZIDINE		ND	UG/L	5000	10/02/97	DN
BENZO(A)ANTHRACENE		ND	UG/L	1000	10/02/97	DN
BENZO(B)FLUORANTHENE		ND	UG/L	1000	10/02/97	DN
BENZO(K)FLUORANTHENE		ND	UG/L	1000	10/02/97	DN
BENZOIC ACID		ND	UG/L	5000	10/02/97	DN
BENZO(G,H,I)PERYLENE		ND	UG/L	1000	10/02/97	DN
BENZO(A)PYRENE		ND	UG/L	1000	10/02/97	DN
BENZYL ALCOHOL		ND	UG/L	2000	10/02/97	DN
BIS(2-CHLOROETHOXY)METHANE		ND	UG/L	1000	10/02/97	DN
BIS(2-CHLOROETHYL)ETHER		ND	UG/L	1000	10/02/97	DN
BIS(2-CHLOROISOPROPYL)ETHER		ND	UG/L	1000	10/02/97	DN

Sample ID: WEST POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
BIS(2-ETHYLHEXYL) PHTHALATE		ND	UG/L	1000	10/02/97	DN
4-BROMOPHENYL PHENYL ETHER		ND	UG/L	1000	10/02/97	DN
BUTYL BENZYL PHTHALATE		ND	UG/L	1000	10/02/97	DN
4-CHLOROANILINE		ND	UG/L	2000	10/02/97	DN
4-CHLORO-3-METHYLPHENOL		ND	UG/L	2000	10/02/97	DN
2-CHLORONAPHTHALENE		ND	UG/L	1000	10/02/97	DN
2-CHLOROPHENOL		ND	UG/L	1000	10/02/97	DN
4-CHLOROPHENYL PHENYL ETHER		ND	UG/L	1000	10/02/97	DN
CHRYSENE		ND	UG/L	1000	10/02/97	DN
DIBENZ(A,H) ANTHRACENE		ND	UG/L	1000	10/02/97	DN
DIBENZOFURAN		ND	UG/L	1000	10/02/97	DN
1,2-DICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
1,3-DICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
1,4-DICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
3,3'-DICHLOROBENZIDINE		ND	UG/L	2000	10/02/97	DN
2,4-DICHLOROPHENOL		ND	UG/L	1000	10/02/97	DN
DIETHYL PHTHALATE		ND	UG/L	1000	10/02/97	DN
2,4-DIMETHYLPHENOL		ND	UG/L	1000	10/02/97	DN
DIMETHYLPHATHALATE		ND	UG/L	1000	10/02/97	DN
ISOPHORONE		ND	UG/L	1000	10/02/97	DN
DI-N-BUTYLPHTHALATE		ND	UG/L	1000	10/02/97	DN
4,6-DINITRO-2-METHYLPHENOL		ND	UG/L	5000	10/02/97	DN
2,4-DINITROPHENOL		ND	UG/L	5000	10/02/97	DN
2,4-DINITROTOLUENE		ND	UG/L	1000	10/02/97	DN
2,6-DINITROTOLUENE		ND	UG/L	1000	10/02/97	DN
DI-N-OCTYLPHTHALATE		ND	UG/L	1000	10/02/97	DN
1,2-DIPHENYL HYDRAZINE		ND	UG/L	1000	10/02/97	DN
FLUORANTHENE		ND	UG/L	1000	10/02/97	DN
FLUORENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROBUTADIENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROCYCLOPENTADIENE		ND	UG/L	1000	10/02/97	DN
HEXACHLOROETHANE		ND	UG/L	1000	10/02/97	DN
INDENO(1,2,3-CD) PYRENE		ND	UG/L	1000	10/02/97	DN
2-METHYLNAPHTHALENE		ND	UG/L	1000	10/02/97	DN
2-METHYLPHENOL		ND	UG/L	1000	10/02/97	DN
4-METHYLPHENOL		ND	UG/L	1000	10/02/97	DN
NAPHTHALENE		ND	UG/L	1000	10/02/97	DN
2-NITROANILINE		ND	UG/L	5000	10/02/97	DN
3-NITROANILINE		ND	UG/L	5000	10/02/97	DN
4-NITROANILINE		ND	UG/L	5000	10/02/97	DN
NITROBENZENE		ND	UG/L	1000	10/02/97	DN
2-NITROPHENOL		ND	UG/L	5000	10/02/97	DN
4-NITROPHENOL		ND	UG/L	5000	10/02/97	DN
N-NITROSO-DI-N-PROPYLAMINE		ND	UG/L	1000	10/02/97	DN
N-NITROSODIPHENYLAMINE(1)		ND	UG/L	1000	10/02/97	DN
N-NITROSODIMETHYLAMINE		ND	UG/L	1000	10/02/97	DN
PENTACHLOROPHENOL		ND	UG/L	5000	10/02/97	DN

Sample ID: WEST POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
PHENATHRENE		ND	UG/L	1000	10/02/97	DN
PHENOL		ND	UG/L	1000	10/02/97	DN
PYRENE		ND	UG/L	1000	10/02/97	DN
1,2,4-TRICHLOROBENZENE		ND	UG/L	1000	10/02/97	DN
2,4,5-TRICHLOROPHENOL		ND	UG/L	1000	10/02/97	DN
2,4,6-TRICHLOROPHENOL		ND	UG/L	1000	10/02/97	DN
2-FLUOROBIPHENYL (SUR)		47.5	150	10		
NITROBENZENE-D8 (SUR)		50.8	150	10		
2-FLUOROPHENOL (SUR)		0 Q	150	10		
2,4,6-TRIBROMOPHENOL (SUR)		25.4	150	10		
TERPHENYL-D14 (SUR)		61.7	150	10		
PHENOL-D5 (SUR)		1.10 Q	150	10		
VOLATILE ORGANICS	SW 846 8260					
BENZENE		ND	UG/L	3.0	10/01/97	EG
BROMOBENZENE		ND	UG/L	3.0	10/01/97	EG
BROMOCHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
BROMODICHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
BROMOFORM		ND	UG/L	3.0	10/01/97	EG
BROMOMETHANE		ND	UG/L	3.0	10/01/97	EG
n-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
sec-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
tert-BUTYLBENZENE		ND	UG/L	3.0	10/01/97	EG
CARBON TETRACHLORIDE		ND	UG/L	3.0	10/01/97	EG
CHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
CHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
CHLOROFORM		ND	UG/L	3.0	10/01/97	EG
CHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
2-CHLOROTOLUENE		ND	UG/L	3.0	10/01/97	EG
4-CHLOROTOLUENE		ND	UG/L	3.0	10/01/97	EG
DIBROMOCHLOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DIBROMO-3-CHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,2-DIBROMOETHANE		ND	UG/L	3.0	10/01/97	EG
DIBROMOETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,3-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,4-DICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
DICHLORODIFLUOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
cis-1,2-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
trans-1,2-DICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,3-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
2,2-DICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,1-DICHLOROPROPENE		ND	UG/L	3.0	10/01/97	EG
ETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
HEXACHLOROBUTADIENE		ND	UG/L	3.0	10/01/97	EG

Sample ID: WEST POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	DL	ANALYZED	BY
ISOPROPYLBENZENE		ND	UG/L	3.0	10/01/97	EG
p-ISOPROPYLTOLUENE		ND	UG/L	3.0	10/01/97	EG
METHYLENE CHLORIDE		ND	UG/L	3.0	10/01/97	EG
NAPHTHALENE		ND	UG/L	3.0	10/01/97	EG
n-PROPYLBENZENE		ND	UG/L	3.0	10/01/97	EG
STYRENE		ND	UG/L	3.0	10/01/97	EG
1,1,1,2-TETRACHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1,2,2-TETRACHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
TETRACHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
TOLUENE		ND	UG/L	3.0	10/01/97	EG
1,2,3-TRICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,2,4-TRICHLOROBENZENE		ND	UG/L	3.0	10/01/97	EG
1,1,1-TRICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
1,1,2-TRICHLOROETHANE		ND	UG/L	3.0	10/01/97	EG
TRICHLOROETHENE		ND	UG/L	3.0	10/01/97	EG
TRICHLOROFLUOROMETHANE		ND	UG/L	3.0	10/01/97	EG
1,2,3-TRICHLOROPROPANE		ND	UG/L	3.0	10/01/97	EG
1,2,4-TRIMETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
1,3,5-TRIMETHYLBENZENE		ND	UG/L	3.0	10/01/97	EG
VINYL CHLORIDE		ND	UG/L	3.0	10/01/97	EG
TOTAL XYLENES		ND	UG/L	3.0	10/01/97	EG
1,2-DICHLOROETHANE-d4 (SUR)		101	125	75		
TOLUENE-d8 (SUR)		96	125	75		
4-BROMOFLUOROBENZENE (SUR)		83	125	75		

ND=NONE DETECTED
DL=DETECTION LIMIT
SU=STANDARD UNITS
B=DETECTED IN METHOD BLANK

APPROVED BY: _____


TERRY KOESTER
LABORATORY DIRECTOR

Q.W.A. ... ABORA' OR ES, NC.

Established 1976

2911 Rotary Terrace • Pittsburg, Kansas 66762

TO ORDER: FAX 1-316-232-7730 OR PHONE 1-316-232-1970

① Company Name: WILLIAMS FIELD SERVICES Attention: INGRID DEKLAW			④ Phone #: 801-584-6543			⑬ TURNAROUND TIME REQUESTED (Additional Charges May Apply) <input type="checkbox"/> Standard <input type="checkbox"/> 72 Hours <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> SameDay * Note - Please contact lab for availability of priority service.																															
Address: 295 CHIPETA WAY SALT LAKE CITY, UT City, State, Zip Code: 84158			④ Fax #: 801-584-7760			⑫ ANALYSIS REQUEST (Write Tests Here)																															
② Project Name or Number MILAGRO EVAP PONDS			⑤ Purchase Order #:			<div style="float: right; text-align: center;"> REMARKS (If special detection limits are required please note below.) </div>																															
Sampling Personnel Signature(s) <i>Windy Preston</i>			Sampling Personnel (print name) WINDY PRESTON																																		
⑥ Sample I.D.	Date ⑦	Time ⑦	⑧ Comp.	⑧ Grab	⑨ # of Containers	⑩ Method Preserved					⑪ Sample Matrix																										
						H2SO4	HN03	NAOH	HCL	Ice	None	Water	Soil	Air	Sludge													Other									
NORTH POND 9/30				✓	2				✓	✓		✓						X																			
SOUTH POND 9/30				✓	2				✓	✓		✓						X																			
WEST POND 9/30				✓	2				✓	✓		✓						X																			
NORTH POND 9/30/97					1					✓								X																			
SOUTH POND 9/30/97					1					✓								X																			
WEST POND 9/30/97					1					✓								X																			
⑭ Relinquished By: <i>Windy Preston</i> Date: 10-1-97 Time: 2:27 PM Received By: <i>Ann Longenecker</i> Date: 10-1-97 Time: 1:00 PM Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____ Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____			⑮ Send Report to: Company: WILLIAMS FIELD SERVICES Attn: INGRID DEKLAW Address: 295 CHIPETA WAY City/State: SALT LAKE CITY/UT Phone: 801-584-6543 Fax: 801-584-7760												⑯ Send Invoice to: (if different form report address) Company: _____ Attn: _____ Address: _____ City/State: _____ Phone: _____ Fax: _____																						
*FAILURE TO COMPLETE THIS FORM MAY DELAY LABORATORY RESULTS.																																					

Q.W.A.L. LABORATORIES, INC.

Established 1976

2911 Rotary Terrace • Pittsburg, Kansas 66762

TO ORDER: FAX 1-316-232-7730 OR PHONE 1-316-232-1970

[illegible]

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/>	4. Generator <u>Williams Field Serv</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>Plant</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>ESPERANZA PLANT</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

TIG, DEA, RAIN WATER

RECEIVED
SEP 25 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 160661s cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 9-24-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny B. Fount TITLE: Geologist DATE: 9/25/97

APPROVED BY: Genio Buech TITLE: Geologist DATE: 9/25/97

RECEIVED
SEP 25 1997

OIL CON. DIV.
DIST. 3

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: <i>Williams Field Services</i> <i>Gobernador N.M.</i>	2. Destination Name: <i>SUNCO SWD #1</i>
3. Originating Site (name): <i>Esperanza Treating Plant</i>	
Location of the Waste (Street address &/or ULSTR): Attach list of originating sites as appropriate	
4. Source and Description of Waste <i>TIG, DEA, Rain Water</i>	

I, *DANNY F. ORZCO* representative for:
(Print Name)
Williams Field Services do hereby certify that,
according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,
1988, regulatory determination, the above described waste is: (Check appropriate classification)

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

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

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

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

Name (Original Signature):

Title:

Date:

Danny F. Orzco
Operator
9/22/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> <i>Denny Foust 9/17/97</i>	4. Generator <i>Williams Field Service</i>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <i>ESPERANZA Plant</i>
2. Management Facility Destination <i>SUNCO</i>	6. Transporter <i>SUNCO</i>
3. Address of Facility Operator <i>CR 3500 #345, AZtec NM</i>	8. State <i>NM</i>
7. Location of Material (Street Address or ULSTR)	
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:

DEIONIZED WATER, AMINE WATER

RECEIVED
SEP 18 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 1606615 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: *Michael Talovich* TITLE: *MGR* DATE: *9-17-97*
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: *MICHAEL TALOVICH* TELEPHONE NO. *505-334-6186*

(This space for State Use)

APPROVED BY: *Denny Foust* TITLE: *Geologist* DATE: *9/17/97*
APPROVED BY: *Eric Brada* TITLE: *Geologist* DATE: *9/23/97*

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: <i>Williams Field Services Esperanza Treating Plant Gobernador N.M.</i>	2. Destination Name: <i>SUNCO SWD. #1</i>
3. Originating Site (name): <i>Esperanza Treating Plant</i>	
Location of the Waste (Street address &/or ULSTR): <i>Waste Water Tank</i>	
Attach list of originating sites as appropriate	
4. Source and Description of Waste <i>TIG, DEA, Water</i>	

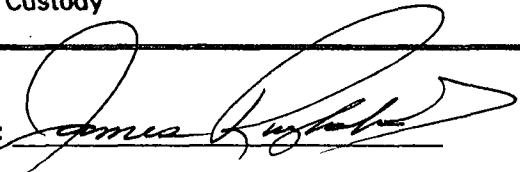
I, JAMES ~~Robineux~~ ROBINEUX representative for:
(Print Name)
Williams Field Services do hereby certify that,
according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,
1988, regulatory determination, the above described waste is: (Check appropriate classification)

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

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

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

- | | |
|--|---|
| <input type="checkbox"/> MSDS Information | <input type="checkbox"/> Other (description): |
| <input type="checkbox"/> RCRA Hazardous Waste Analysis | |
| <input type="checkbox"/> Chain of Custody | |

Name (Original Signature): 

Title: SR. PLANT OPER. SPEC.

Date: 9/17/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/>	4. Generator <u>Bowen Tools</u>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>Bowen yard</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>#345 CR 3500, AZTEC</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>#14 CR 5860</u>	
9. Circle One: (A) All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASH WATER FROM SUMP

CITY WATER USED WITH POWER WASHER TO CLEAN DOWN HOLE
OILFIELD TOOLS ONLY.

OIL CON. DIV.
DIST. 3

DISCUSSED IN PHONE CONVERSATION WITH R. ANDERSON OF OCD
AND D. FOUST AND M. TALOVICH (SUNCO) 10AM 9-5-96

Estimated Volume 1000 GALS cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 8-28-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6188

(This space for State Use)

APPROVED BY: Denny G. Zent TITLE: Geologist DATE: 8/29/97
APPROVED BY: Ernie Busch TITLE: Geologist DATE: 8/29/97

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Bowen Tools Division #14 CR 5860 Farmington, NM	2. Destination Name: Sunco Disposal
3. Originating Site (name): Shop Sump (TANK)	Location of the Waste (Street address &/or ULSTR): Bowen Yard
Attach list of originating sites as appropriate	
4. Source and Description of Waste City water used to clean tools - no other material is washed with this water or any other waste is put in Sump. water goes thru separator first. This water is only used to Clean oilfield tools	

I, Gary Halliburton representative for:
(Print Name)
Bowen Tools - Division do hereby certify that,
according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

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

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

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

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

Name (Original Signature): 

Title: District Manager

Date: 8/28/97

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/>	4. Generator <u>WFS</u>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Lybrook Plant</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345-AZtec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>HCR 17 Lybrook NM</u>	
9. <u>Circle One</u> : (A) All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Pipeline Drip Storage Tank water

RECEIVED
AUG 20 1997
OIL CON. DIV.
DIST. 3

Estimated Volume 50 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: Manager DATE: 8-20-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Henry G. Fent TITLE: Geologist DATE: 8/21/97
APPROVED BY: Ernie Busch TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Williams Field Services / Lybrook Plant HCR 17, Box 360 Cuba N.M. 87013	2. Destination Name: Sunco
3. Originating Site (name): Dogie Compressor Station	Location of the Waste (Street address &/or ULSTR): 90K Vapor Recovery blow down Pit
Attach list of originating sites as appropriate	
4. Source and Description of Waste Pipe line Drip Gasoline storage Tank clean out sludge/water. Water Disposal only	

I, Rick D. Flippen representative for:
Williams Field Services (Print Name) do hereby certify that,
 according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July,
 1988, regulatory determination, the above described waste is: (Check appropriate classification)

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

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

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

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

Name (Original Signature): Rick D. Flippen
 Title: PSM Coordinator / Head
 Date: 8/19/97

Office I - (505) 393-6161
Box 1980
Bbs, NM 88241-1980
Office II - (505) 748-1283
J. S. First
Mesia, NM 88210
Office III - (505) 334-6178
Rio Brazos Road
ec, NM 87410
Office IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger Anderson
Form C-138
Originated 8/8/95
Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>FARMINGTON Chemical Distributors</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>YARD</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>YARD</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASTE WATER FROM SODIUM Bisulfite plant

RECEIVED
AUG - 5 1997

Environmental Bureau
Oil Conservation Division

RECEIVED
AUG - 7 1997
OIL CON. DIV.
DIST. 3

OIL CON. DIV.
DIST. 3

Estimated Volume 80 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MANAGER DATE: 8-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Zunt TITLE: Geologist DATE: 8/4/97
APPROVED BY: Matthew J. Kish TITLE: Env Geologist DATE: 8/5/97

Printed in Aztec 8/5/97

strict I - (505) 393-6161
D. Box 1980
bbs, NM 88241-1980
strict II - (505) 748-1283
1 S. First
esia, NM 88210
strict III - (505) 334-6178
Rio Brazos Road
cc, NM 87410
strict IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>FARMINGTON Chemical Distributors</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>YARD</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>YARD</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

WASTE WATER FROM Sodium Bisulfite plant

RECEIVED
AUG - 4 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 80 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MANAGER DATE: 8-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Zent TITLE: Geologist DATE: 8/4/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: Farmington Chemical Dist. L.H.C.	2. Destination Name: Sunco Disposal plant.
3. Originating Site (name): Farmington Chemical Dist. Attach list of originating sites as appropriate	Location of the Waste (Street address &/or ULSTR): 3911 Monroe Rd. Farmington N.M. 87401
4. Source and Description of Waste Waste water + solids for Sodium Bisulfite plant.	

I, Debbie Byrd representative for:
(Print Name)
Farmington Chemical Distributors 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 only the following documentation is attached (check appropriate items):

☐ MSDS Information

☐ Other (description):

☒ RCRA Hazardous Waste Analysis

☐ Chain of Custody

Name (Original Signature): Debbie Byrd

Title: Manager

Date: 7/31/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

July 25, 1997

Mr. Phil Nobis
Tierra Environmental Services, Inc.
P.O. Drawer 15250
Farmington, New Mexico 87499

Project No.: 04074-03

Dear Mr. Nobis,

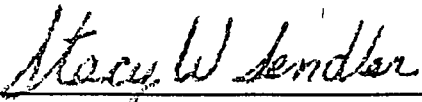
Enclosed are the analytical results for the sample collected from the location designated as "Farmington/Browning - 97026-1". One soil sample was collected by Tierra Environmental Services personnel on July 17, 1997, and received by the Envirotech laboratory on July 17, 1997 for Hazardous Waste Characterization analysis (TCLP Volatiles, Semi-volatiles, Trace Metals analysis, and Reactivity, Corrosivity, and Ignitability characterization).

The sample was documented on Envirotech Chain of Custody No. 5314 and assigned Laboratory No. B675 for tracking purposes. The sample was extracted on 07/21/97 and analyzed on 07/21/97 - 07/25/97 using USEPA or equivalent methods.

Results of the analysis indicate that the material from the designated location is not a characteristic hazardous waste as defined by 40 CFR, Section 261, Subpart C for the noted compounds or characteristics.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615, and it is always a pleasure doing business with you.

Respectfully submitted,
Envirotech, Inc.



Stacy W. Sandler
Environmental Scientist/Laboratory Manager

enc.

SWS/sws/04074-03.lb6/wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Tierra Environmental	Project #:	04074-03
Sample ID:	97026-I	Date Reported:	07-22-97
Lab ID#:	B675	Date Sampled:	07-17-97
Sample Matrix:	Soil	Date Received:	07-17-97
Preservative:	Cool	Date Analyzed:	07-21-97
Condition:	Cool & Intact	Chain of Custody:	5314

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative pH = 6.51

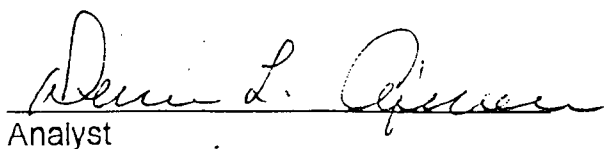
REACTIVITY: Negative

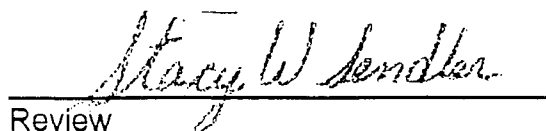
RCRA Hazardous Waste Criteria

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

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

Comments: Farmington / Browning.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Tierra Environmental	Project #:	04074-03
Sample ID:	97026-I	Date Reported:	07-24-97
Laboratory Number:	B675	Date Sampled:	07-17-97
Chain of Custody:	5314	Date Received:	07-17-97
Sample Matrix:	Soil	Date Extracted:	07-21-97
Preservative:	Cool	Date Analyzed:	07-23-97
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

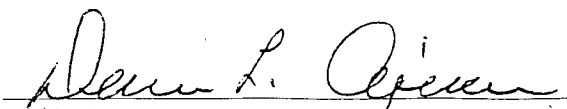
ND - Parameter not detected at the stated detection limit.

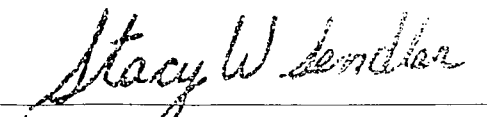
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Trifluorotoluene	98%
	Bromofluorobenzene	101%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Farmington / Browning.


Analyst


Review

Client:	Tierra Environmental	Project #:	04074-03
Sample ID:	97026-I	Date Reported:	07-25-97
Laboratory Number:	B675	Date Sampled:	07-17-97
Chain of Custody:	5314	Date Received:	07-17-97
Sample Matrix:	Soil	Date Extracted:	07-21-97
Preservative:	Cool	Date Analyzed:	07-24-97
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	100%
	2,4,6-Tribromophenol	96%

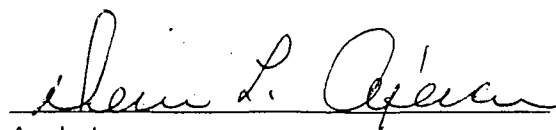
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

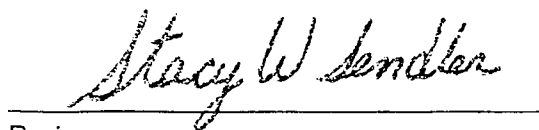
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 19

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Farmington / Browning.


Analyst


Review

Client:	Tierra Environmental	Project #:	04074-03
Sample ID:	97026-I	Date Reported:	07-24-97
Laboratory Number:	B675	Date Sampled:	07-17-97
Chain of Custody:	5314	Date Received:	07-17-97
Sample Matrix:	Soil	Date Extracted:	07-21-97
Preservative:	Cool	Date Analyzed:	07-24-97
Condition:	Cool and Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

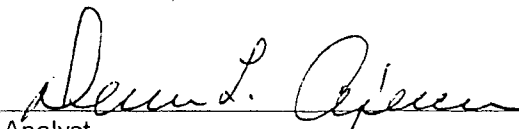
ND - Parameter not detected at the stated detection limit.

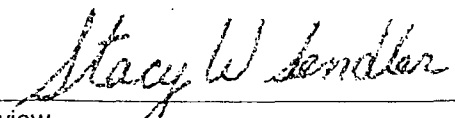
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Farmington / Browning.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Tierra Environmental	Project #:	04074-03
Sample ID:	97026-I	Date Reported:	07-25-97
Laboratory Number:	B675	Date Sampled:	07-17-97
Chain of Custody:	5314	Date Received:	07-17-97
Sample Matrix:	Soil	Date Analyzed:	07-25-97
Preservative:	Cool	Date Extracted:	07-21-97
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.001	5.00
Barium	2.91	0.01	100
Cadmium	ND	0.001	1.00
Chromium	0.085	0.001	5.00
Lead	0.443	0.001	5.00
Mercury	ND	0.001	0.200
Selenium	ND	0.001	1.00
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

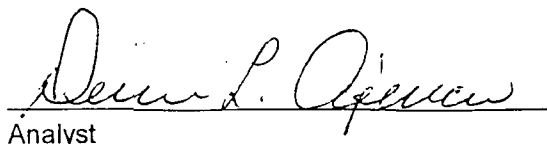
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.

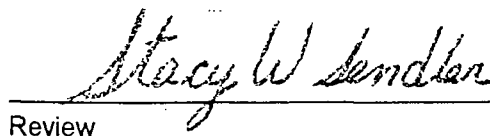
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, July 1992.

Methods 7060, 7080, 7131, 7191, 7470, 7421, 7740, 7761 Analysis of Metals by GFAA and Cold Vapor Techniques, SW-846, USEPA.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Farmington / Browning.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

Practical Solutions for a Better Tomorrow

EPA METHODS 8010/8020 AROMATIC / HALOGENATED VOLATILE ORGANICS Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	07-24-97
Laboratory Number:	07-23-TCV.BLANK	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-23-97
Condition:	N/A	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

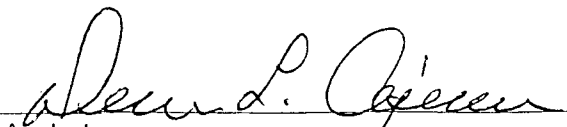
ND - Parameter not detected at the stated detection limit.

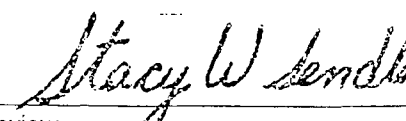
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Trifluorotoluene	100%
	Bromofluorobenzene	101%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for samples B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	07-24-97
Laboratory Number:	07-21-TCV.MB	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-23-97
Condition:	N/A	Date Extracted:	07-21-97
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

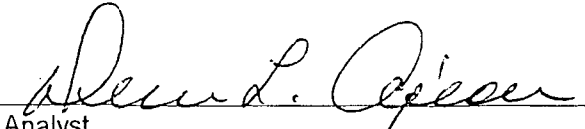
ND - Parameter not detected at the stated detection limit.

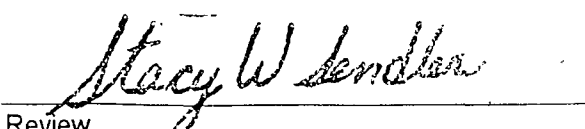
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Trifluorotoluene	99%
	Bromofluorobenzene	102%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for samples B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

**EPA METHODS 8010/8020
AROMATIC / HALOGENATED
VOLATILE ORGANICS
QUALITY ASSURANCE REPORT**

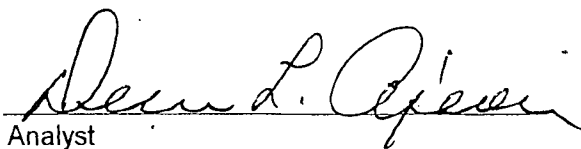
Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	07-24-97
Laboratory Number:	B676	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	07-23-97
Condition:	N/A	Date Extracted:	07-21-97

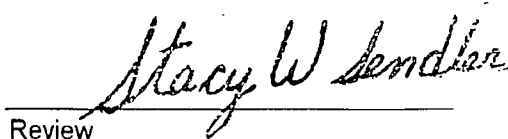
Parameter	Sample Result (mg/L)	Duplicate Sample Result (mg/L)	Detection Limits (mg/L)	Percent Difference
Vinyl Chloride	ND	ND	0.0001	0.0%
1,1-Dichloroethene	ND	ND	0.0001	0.0%
2-Butanone (MEK)	ND	ND	0.0001	0.0%
Chloroform	ND	ND	0.0001	0.0%
Carbon Tetrachloride	ND	ND	0.0001	0.0%
Benzene	ND	ND	0.0001	0.0%
1,2-Dichloroethane	ND	ND	0.0001	0.0%
Trichloroethene	ND	ND	0.0003	0.0%
Tetrachloroethene	ND	ND	0.0005	0.0%
Chlorobenzene	ND	ND	0.0003	0.0%
1,4-Dichlorobenzene	ND	ND	0.0002	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: QA/QC for samples B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHODS 8010/8020 AROMATIC / HALOGENATED VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client: QA/QC
Sample ID: Matrix Spike
Laboratory Number: B676
Sample Matrix: Soil
Analysis Requested: TCLP
Condition: N/A

Project #: N/A
Date Reported: 07-24-97
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 07-23-97
Date Extracted: 07-21-97

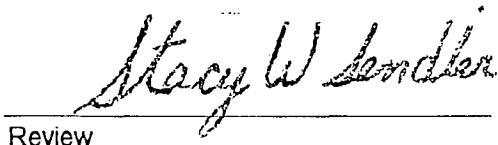
Parameter	Sample Result (mg/L)	Spike Added (mg/L)	Spiked Sample Result (mg/L)	Det. Limit (mg/L)	Percent Recovery	SW-846 % Rec. Accept. Range
Vinyl Chloride	ND	0.050	0.0452	0.0001	90%	28-163
1,1-Dichloroethene	ND	0.050	0.0466	0.0001	93%	43-143
2-Butanone (MEK)	ND	0.050	0.0498	0.0001	100%	47-132
Chloroform	ND	0.050	0.0477	0.0001	95%	49-133
Carbon Tetrachloride	ND	0.050	0.0491	0.0001	98%	43-143
Benzene	ND	0.050	0.0489	0.0001	98%	39-150
1,2-Dichloroethane	ND	0.050	0.0482	0.0001	96%	51-147
Trichloroethene	ND	0.050	0.0485	0.0003	97%	35-146
Tetrachloroethene	ND	0.050	0.0489	0.0005	98%	26-162
Chlorobenzene	ND	0.050	0.0483	0.0003	97%	38-150
1,4-Dichlorobenzene	ND	0.050	0.0484	0.0002	97%	42-143

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994.
Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Comments: QA/QC for samples B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040

PHENOLS

Quality Assurance Report

Laboratory Blank

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	07-25-97
Laboratory Number:	07-24-TCA.BLANK	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-24-97
Condition:	N/A	Analysis Requested:	TCLP

Analytical Results	Concentration	Detection	Regulatory
Parameter	(mg/L)	Limit	Limit
		(mg/L)	(mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorophenol	100 %
	2,4,6-tribromophenol	100 %

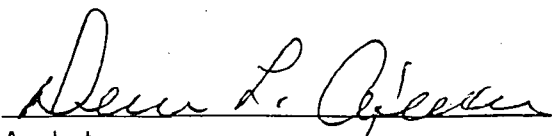
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

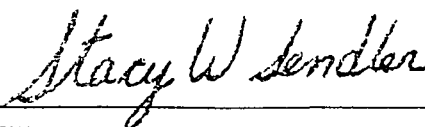
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 19

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: QA/QC for samples B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040 PHENOLS Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	07-25-97
Laboratory Number:	07-21-TCA.MB	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	Cool	Date Extracted:	07-21-97
Condition:	Cool & Intact	Date Analyzed:	07-24-97
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	99%

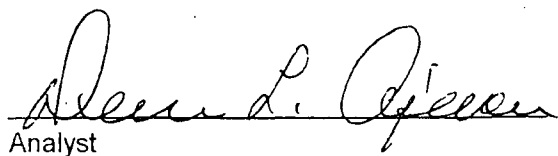
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

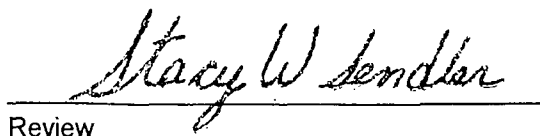
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 19

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: QA/QC for samples B675, B676, B686 and B690.


Analyst


Review

EPA METHOD 8040 PHENOLS Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	07-25-97
Laboratory Number:	B676	Date Sampled:	N/A
Sample Matrix:	Liquid	Date Received:	N/A
Preservative:	Cool	Date Extracted:	07-21-97
Condition:	Cool & Intact	Date Analyzed:	07-24-97
		Analysis Requested:	TCLP

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Detection Limit (mg/L)	Percent Difference
o-Cresol	ND	ND	0.020	0.0%
p,m-Cresol	ND	ND	0.040	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	0.0%
Pentachlorophenol	ND	ND	0.020	0.0%

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Maximum Difference
	8040 Compounds	30.0%

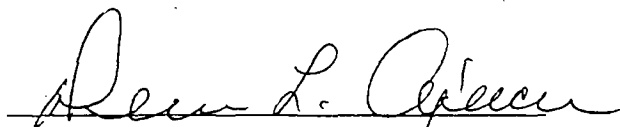
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

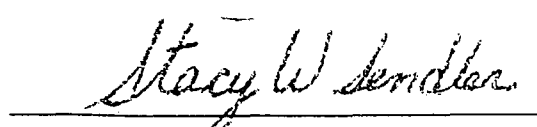
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: QA/QC for samples B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090 Nitroaromatics and Cyclic Ketones TCLP Base/Neutral Organics Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	Laboratory Blank	Date Reported:	07-24-97
Laboratory Number:	07-24-TBN.BLANK	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Extracted:	N/A
Condition:	N/A	Date Analyzed:	07-24-97
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13


ND - Parameter not detected at the stated detection limit.

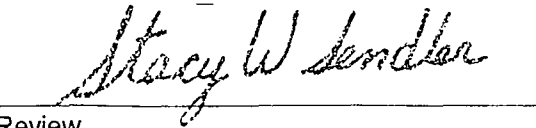
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	96%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8090
Nitroaromatics and Cyclic Ketones
TCLP Base/Neutral Organics
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	Method Blank	Date Reported:	07-24-97
Laboratory Number:	07-21-TBN.MB	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	Cool	Date Extracted:	07-21-97
Condition:	Cool and Intact	Date Analyzed:	07-24-97
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	ND	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

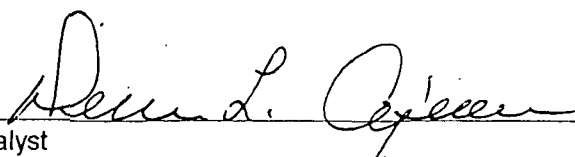
ND - Parameter not detected at the stated detection limit.

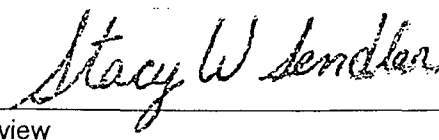
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	2-fluorobiphenyl	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: QA/QC for sample B675, B676, B686 and B690.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Duplicate	Date Reported:	07-25-97
Laboratory Number:	B676	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	07-25-97
Condition:	N/A	Date Extracted:	07-21-97

Parameter	Sample Result (mg/L)	Duplicate Result (mg/L)	Percent Difference
Arsenic	ND	ND	0.0%
Barium	3.03	3.04	0.3%
Cadmium	0.003	0.003	0.0%
Chromium	ND	ND	0.0%
Lead	0.007	0.007	0.0%
Mercury	ND	ND	0.0%
Selenium	ND	ND	0.0%
Silver	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria:	Parameter	Maximum Difference
----------------------------	-----------	--------------------

Trace Metals

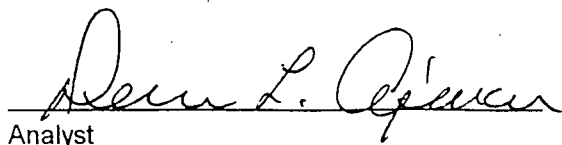
30 %

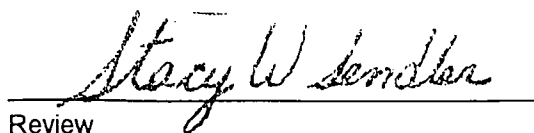
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, July 1992.

Methods 7060, 7080, 7131, 7191, 7470, 7421, 7740, 7761 Analysis of Metals by GFAA and Cold Vapor Techniques, SW-846, USEPA.

Comments: QA/QC for samples B675, B676, B680, B690 and B697.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	QA/QC	Project #:	N/A
Sample ID:	Matrix Spike	Date Reported:	07-25-97
Laboratory Number:	B676	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP	Date Analyzed:	07-25-97
Condition:	N/A	Date Extracted:	07-21-97

Parameter	Spike Added (mg/L)	Sample Result (mg/L)	Spiked Sample Result (mg/L)	Percent Recovery
Arsenic	0.100	ND	0.100	100%
Barium	1.00	3.03	4.04	100%
Cadmium	0.050	0.003	0.053	100%
Chromium	0.050	ND	0.050	100%
Lead	0.100	0.007	0.107	100%
Mercury	0.025	ND	0.025	100%
Selenium	0.100	ND	0.099	99%
Silver	0.050	ND	0.049	98%

ND - Parameter not detected at the stated detection limit.

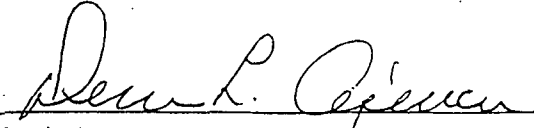
QA/QC Acceptance Criteria:	Parameter	Acceptance Range %
	TCLP Metals	80 - 120 %

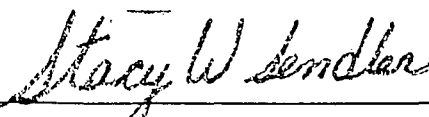
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, July 1992.

Methods 7060, 7080, 7131, 7191, 7470, 7421, 7740, 7761 Analysis of Metals by GFAA and Cold Vapor Techniques, SW-846, USEPA.

Comments: QA/QC for samples B675, B676, B680, B690 and B697.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name

Project Location

ANALYSIS/PARAMETERS

Sampler: (Signature)

Chain of Custody Tape No.

Remarks

Sample No./
IdentificationSample
DateSample
Time

Lab Number

Sample
MatrixNo. of
ContainersTCLAP/lo
H&P

Acidity

Reactivity

Stability

97026-

-17-9 100

5

SOIL

1

X

X

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

7-17-97 151

7-17-97

15:1

Relinquished by: (Signature)

Received by: (Signature)

Relinquished by: (Signature)

Received by: (Signature)

ENVIROTECH INC.

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

(505) 632-0615

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Artesia, NM 87410
District IV - (505) 827-7131

New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95
Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Bonneville</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	5. Originating Site <u>Fullerton Fed #9</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO Trucking</u>
3. Address of Facility Operator <u>CR 3500 #345 Aztec, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>S-13, T-27N, R11W</u> <u>1/4 SW, 1/4 SW</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

370 KCL WATER left over from FRAC job

Oil Conservation Division
Environmental Bureau

AUG - 5 1997

RECEIVED

RECEIVED
AUG - 7 1997

OIL CON. DIV.
DIST. 3

RECEIVED
AUG - 4 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 220 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MANAGER DATE: 8-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)
APPROVED BY: Denny G. Jant TITLE: GEOLOGIST DATE: 8/4/97
APPROVED BY: Martyna J. Kelly TITLE: Env Geologist DATE: 8/5/97

Printed Aztec 8/15/97

District I - (505) 393-6161
P. O. Box 1950
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

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 checked="" type="checkbox"/>	4. Generator <u>Bonneville</u> 5. Originating Site <u>Fulleston Fed #9</u>
2. Management Facility Destination <u>SUNCO</u>	6. Transporter <u>SUNCO TRUCKING</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>S-13, T-27N, R11W 1/4 SW, 1/4 SW</u>	
9. <u>Circle One</u> : A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

370 KCL water left over from FRAC job

RECEIVED
AUG - 4 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 220 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: MANAGER DATE: 8-4-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____

11 ET

CERTIFICATE OF WASTE STATUS

I Alan Merrill representative

for Bonnerille Fuels Corporation

1660 Lincoln, Suite 1800, Denver, CO

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is Exempt

X Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

Originating Site: S- 13 T- 27N R- 11W 1/4 SW 1/4 SW County San Juan State NM

Physical Address if appropriate: Fullerton Fed. #9

Source and description of waste: 3% KCL water left over
from frac

Check the appropriate line(s):

- ☒ MSDS Information sheet
- ☐ RCRA TCLP Analysis
- ☐ RCRA Metals Analysis
- ☐ Corrosivity, Ignitability, Reactivity
- ☐ Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since _____

Signature Alan L. Merrill

Printed Name Alan L. Merrill

Title Operations Engineer

Date 7/26/97

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

05/01 PCS MOAB OPERATIONS 4 5253275451 NO. 565 922

MATERIAL SAFETY DATA SHEET

POTASH
CAUTION - MAY CAUSE SKIN AND
EYE IRRITATION

MOAB SALT, Inc.
P.O. Box 1208
Moab, Utah (801) 259-771

TEXASGULF Inc.
3101 Glenwood Avenue
P.O. Box 30321
Raleigh, N.C. 27622-0321 (919) 881-2700

TRANSPORTATION EMERGENCIES: CALL (800) 424-9300 (CHEMTREC)
HEALTH EMERGENICES: CONTACT YOUR LOCAL POISON CENTER

PRODUCT INFORMATION

CHEMICAL NAME AND SYNONYMS
POTASSIUM CHLORIDE

TRADE NAME AND SYNONYMS
POTASH, POTASSIUM MURIATE,
MURIATE OF POTASH

CHEMICAL FAMILY
INORGANIC SALT

FORMULA
KC1

CAS NUMBER
7447-40-7

Listed in: _____ OSHA SUBPART Z _____ ACGIH TLV LISTS; _____ NTP LIST;
_____ IARC MONOGRAPH; _____ X _____ NONE OF THE ABOVE

TYPICAL COMPOSITION
POTASSIUM CHLORIDE
SODIUM CHLORIDE

%
96.8
2.8 (CAS #7647-14-5)

PHYSICAL DATA

BOILING POINT (°F) Sublines @ 2732
VAPOR PRESSURE (mm Hg.) N/A
VAPOR DENSITY (AIR-1) N/A
SOLUBILITY IN WATER 25% @ 68°F
APPEARANCE AND ODOR White crystals or granules, odorless
pH 7 at 1%

MELTING POINT (°F) 1423
SPECIFIC GRAVITY (H2O-1) 1.98
PERCENT VOLATILE N/A
EVAPORATION RATE N/A
OTHER

FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT (METHOD USED)	NOT COMBUSTIBLE	FLAMMABLE LIMITS	LEL N/A
EXTINGUISHING MEDIA	N/A		UEL N/A
SPECIAL FIRE FIGHTING PROCEDURES	NONE		
UNUSUAL FIRE AND EXPLOSION HAZARDS	NONE		

HEALTH INFORMATION

THRESHOLD LIMIT VALUE: NONE ESTABLISHED. OSHA total nuisance dust limit of 15 mg/m³ and a respirable fraction of 5 mg/m³. The ACGIH nuisance dust TLV of 10 mg/m³ for the 8 hour time weighted average applies.

5453275451 NO. 565 203
EFFECTS OF OVEREXPOSURE EYE-Irritant, SKIN-Slightly irritating. INHALATION-Irritates trachea and upper breathing passages. INGESTION-Large doses and cause G.I. irritation, purging, weakness and circulatory disturbances. Low toxicity. (Toxicity LD50 Rat=3020 mg/kg).

EMERGENCY AND FIRST AID PROCEDURES

EYE-Flush thoroughly with water. Seek medical attention if irritation persists.

SKIN-Wash thoroughly with soap and water.

INHALATION-Remove to fresh air. If discomfort continues, seek medical attention.

INGESTION-If person is conscious, give large amounts of water to drink and induce vomiting. Seek medical attention.

REACTIVITY DATA

STABILITY

☐
☒

UNSTABLE
STABLE

CONDITIONS TO AVOID

NONE

INCOMPATIBILITY (Materials to Avoid) Strong acids-can cause release of toxic chloride gasses.

HAZARDOUS DECOMPOSITION PRODUCTS None

HAZARDOUS

POLYMERIZATION

☐
☒

May Occur
Will Not Occur

CONDITIONS TO AVOID

NONE

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Prevent large quantities from contact with water ways or vegetation.

WASTE DISPOSAL METHOD If uncontaminated, recover and reuse product. Consult State or Federal environmental regulatory agencies for acceptable disposal procedures and location.

PERSONAL PROTECTION INFORMATION

EYE-Tight fitting goggles should be worn in dusty areas.

SKIN-if irritation occurs, long sleeves and impervious gloves should be worn.

RESPIRATORY-A NIOSH-approved dust respirator should be used when exposure exceeds the OSHA standard of 15 mg/m³.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING NONE

OTHER PRECAUTIONS Potash is mildly corrosive to steel when wet

Although the information contained herein is offered in good faith, SUCH INFORMATION IS EXPRESSLY GIVEN WITHOUT ANY WARRANTY (EXPRESS OR IMPLIED) OR ANY GUARANTEE OF ITS ACCURACY OR SUFFICIENCY and is taken at the user's sole risk. User is solely responsible for determining the suitability of use in each particular situation. Moab Salt specifically DISCLAIMS ANY LIABILITY WHATSOEVER FOR THE USE OF SUCH INFORMATION, including without limitation any recommendations which user may construe and attempt to apply which may infringe or violate valid patents, licenses and/or copyright.

II - (505) 393-6161
Box 1980
NM 88247-1980
III - (505) 748-1283
NM 88210
IV - (505) 334-6178
Rio Brazos Road
NM 87410
V - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Roger Anderson
Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

AUG - 4 1997

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Williams field</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>COMPRESSOR STATIONS</u>
Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
Address of Facility Operator <u>CR 3500, AZTEC, NM</u>	8. State <u>NM</u>
Location of Material (Street Address or ULSTR) <u>Williams Compressor STATIONS</u>	
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:

Rain water mixed with wash water

RECEIVED
AUG - 7 1997

OIL CON. DIV.
DIST. 3

RECEIVED
JUL 31 1997

OIL CON. DIV.
DIST. 3

All fluid is
STORED IN TANKS
AT THE 29-6 #4

Estimated Volume 2400.5615 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 7-30-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Fount TITLE: Geologist DATE: 7/31/97
APPROVED BY: R. A. Anderson TITLE: Bureau Chief DATE: 8/5/97

District I - (505) 393-6161
P.O. Box 1980
Santa Fe, NM 87410
District II - (505) 748-1283
P.O. Box 1980
Santa Fe, NM 87410
District III - (505) 334-6178
P.O. Box 1980
Santa Fe, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/5/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator <u>Williams Field</u>
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <u>COMPRESSOR STATIONS</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500, AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>Williams Compressor STATIONS</u>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input checked="" type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Rain water mixed with wash water

RECEIVED
JUL 31 1997
OIL CON. DIV.
DIST. 3

All fluid is
STORED IN TANKS
AT the 29-6 #4

Estimated Volume 2400.66/s cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: Disposal MGR DATE: 7-30-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny Z. Zent TITLE: Geologist DATE: 7/31/97
APPROVED BY: _____ TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address: WILLIAMS FIELD SERVICE P.O. BOX 215 BLOOMFIELD, NM 87413	2. Destination Name: SUNCO												
<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%; text-align: left;">3. Originating Site (name):</th> <th style="width: 60%; text-align: left;">Location of the Waste (Street address &/or ULSTR):</th> </tr> <tr> <td>29-6#2 30-5 32-8#1 Carracas</td> <td>Hart Manzanares PLA-9 Trunk A</td> </tr> <tr> <td>29-6#3 30-8 32-8#2 Cedar</td> <td>Horse Middle Pipkin Trunk B</td> </tr> <tr> <td>29-6#4 31-6 32-8#3 Coyote</td> <td>Kernaghan Moore Pritchard Trunk C</td> </tr> <tr> <td>29-7 32-7 32-9 Decker</td> <td>Kernaghan B8 N-30 Pump Trunk F</td> </tr> <tr> <td></td> <td>LaCosa Navajo Sims Trunk L</td> </tr> </table>		3. Originating Site (name):	Location of the Waste (Street address &/or ULSTR):	29-6#2 30-5 32-8#1 Carracas	Hart Manzanares PLA-9 Trunk A	29-6#3 30-8 32-8#2 Cedar	Horse Middle Pipkin Trunk B	29-6#4 31-6 32-8#3 Coyote	Kernaghan Moore Pritchard Trunk C	29-7 32-7 32-9 Decker	Kernaghan B8 N-30 Pump Trunk F		LaCosa Navajo Sims Trunk L
3. Originating Site (name):	Location of the Waste (Street address &/or ULSTR):												
29-6#2 30-5 32-8#1 Carracas	Hart Manzanares PLA-9 Trunk A												
29-6#3 30-8 32-8#2 Cedar	Horse Middle Pipkin Trunk B												
29-6#4 31-6 32-8#3 Coyote	Kernaghan Moore Pritchard Trunk C												
29-7 32-7 32-9 Decker	Kernaghan B8 N-30 Pump Trunk F												
	LaCosa Navajo Sims Trunk L												
4. Source and Description of Waste <div style="border: 1px solid black; padding: 10px; min-height: 100px;"> RAIN WATER & WASH WATER FOR THE MONTH OF: _____ </div>													

I, BUSTER GASTON (Print Name) _____ representative for:
PRODUCTION OPERATORS, 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 only the following documentation is attached (check appropriate items):

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

Name (Original Signature): Buster Gaston
 Title: Operations Coordinator
 Date: 7-30-97

**TOXICITY CHARACTERISTIC LEACHING PROCEDURE
TRACE METAL CONCENTRATION**

Client: **Production Operators**
Project: None Given
Sample ID: 29-6 #4
Laboratory ID: 0397G01172
Sample Matrix: Water

Date Reported: 07/15/97
Date Sampled: 06/20/97
Date Received: 06/20/97
Date Analyzed: 6/30-7/7/97

Parameter	Result	Detection Limit	Regulatory Level	Units
Arsenic.....	<0.005	0.005	5	mg/L
Barium.....	0.97	0.01	100	mg/L
Cadmium.....	<0.004	0.004	1	mg/L
Chromium.....	<0.01	0.01	5	mg/L
Lead.....	<0.05	0.05	5	mg/L
Mercury.....	<0.001	0.001	0.2	mg/L
Selenium.....	<0.005	0.005	1	mg/L
Silver.....	<0.01	0.01	5	mg/L

ND- Analyte not detected at stated detection level.

References: Method 1311: Toxicity Characteristic Leaching Procedure,
SW-846, Rev. 0, July 1992.

Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total
Metals, SW-846, Rev. 1, July 1992.

Comments:

Reported By: 

Reviewed: 

Quality Control / Quality Assurance**Spike Analysis / Blank Analysis****TOXICITY CHARACTERISTIC LEACHING PROCEDURE**

Client: **Production Operators**
Project: **None Given**
Sample Matrix: **Water**

Date Reported: **07/15/97**
Date Analyzed: **6/30-7/797**
Date Received: **06/20/97**

Spike Analysis

Parameter	Spike Result (mg/L)	Sample Result (mg/L)	Spike Added (mg/L)	Percent Recovery
Arsenic	0.02	<0.005	0.03	84%
Barium	0.44	<0.10	0.50	88%
Cadmium	0.430	<0.004	0.500	86%
Chromium	0.45	<0.01	0.50	90%
Lead	0.42	<0.05	0.50	84%
Mercury	0.026	<0.001	0.025	104%
Selenium	0.024	<0.005	0.025	96%
Silver	*	*	*	*

Method Blank Analysis

Parameter	Result	Detection Limit	Units
Arsenic	ND	0.005	mg/L
Barium	ND	0.01	mg/L
Cadmium	ND	0.004	mg/L
Chromium	ND	0.01	mg/L
Lead	ND	0.005	mg/L
Mercury	ND	0.001	mg/L
Selenium	ND	0.005	mg/L
Silver	ND	0.01	mg/L

References:

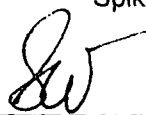
Method 1311: Toxicity Characteristic Leaching Procedure,
SW-846, Rev. 0, July 1992.

Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total
Metals, SW-846, Rev. 1, July 1992.

Comments:

*Spike data unavailable.

Reported by



Reviewed by



Quality Control / Quality Assurance**Known Analysis****TOXICITY CHARACTERISTIC LEACHING PROCEDURE**

Client: **Production Operators**
Project: **None Given**
Sample Matrix: **Water**

Date Reported: **07/15/97**
Date Analyzed: **6/30-7/7/97**
Date Received: **06/20/97**

Known Analysis

Parameter	Found Result	Known Result	Percent Recovery	Units
Arsenic	0.010	0.010	100%	mg/L
Barium	0.94	1.00	94%	mg/L
Cadmium	1.000	1.000	100%	mg/L
Chromium	1.01	1.00	101%	mg/L
Lead	1.02	1.00	102%	mg/L
Mercury	0.008	0.008	95%	mg/L
Selenium	0.011	0.010	110%	mg/L
Silver	1.02	1.00	102%	mg/L

References: Method 1311: Toxicity Characteristic Leaching Procedure,
SW-846, Rev. 0, July 1992.

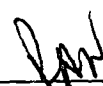
Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total
Metals, SW-846, Rev. 1, July 1992.

Comments:

Reported by



Reviewed by



Quality Control / Quality Assurance**Known Analysis****TOXICITY CHARACTERISTIC LEACHING PROCEDURE**

Client: **Production Operators**
Project: **None Given**
Sample Matrix: **Water**

Date Reported: **07/15/97**
Date Analyzed: **6/30-7/7/97**
Date Received: **06/20/97**

Known Analysis

Parameter	Found Result	Known Result	Percent Recovery	Units
Arsenic	0.010	0.010	100%	mg/L
Barium	0.94	1.00	94%	mg/L
Cadmium	1.000	1.000	100%	mg/L
Chromium	1.01	1.00	101%	mg/L
Lead	1.02	1.00	102%	mg/L
Mercury	0.008	0.008	95%	mg/L
Selenium	0.011	0.010	110%	mg/L
Silver	1.02	1.00	102%	mg/L

References:

Method 1311: Toxicity Characteristic Leaching Procedure,
SW-846, Rev. 0, July 1992.


Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total
Metals, SW-846, Rev. 1, July 1992.

Comments:

Reported by



Reviewed by



TOXICITY CHARACTERISTIC LEACHING PROCEDURE
HSL VOLATILE COMPOUNDS1160 Research Drive
Bozeman, Montana 59718

Client: PRODUCTION OPERATORS

Sample ID: 29-6 #4

Project ID: None Given

Lab ID: B973260

0397G01172

Matrix: Water

Date Reported: 07/02/97

Date Sampled: 06/20/97

Date Received: 06/24/97

Date Extracted: 06/26/97

Date Analyzed: 06/26/97

Parameter	Result	PQL	Regulatory Level	Units
1,1-Dichloroethene	ND	0.02	0.7	mg/L
1,2-Dichloroethane	ND	0.02	0.5	mg/L
2-Butanone (MEK)	0.3	0.1	200	mg/L
Benzene	0.94	0.02	0.5	mg/L
Carbon Tetrachloride	ND	0.02	0.5	mg/L
Chlorobenzene	ND	0.02	100	mg/L
Chloroform	ND	0.02	6.0	mg/L
Tetrachloroethene (PCE)	ND	0.02	0.7	mg/L
Trichloroethene (TCE)	ND	0.02	0.5	mg/L
Vinyl Chloride	ND	0.02	0.2	mg/L
QUALITY CONTROL - Surrogate Recovery		%	QC Limits	
1,2-Dichloroethane-d4	96		80 - 120	
Bromofluorobenzene	97		86 - 115	
Toluene-d8	97		88 - 110	

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260A Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, Final Update II, United States Environmental Protection Agency, September 1994.

Method 1311, Toxicity Characteristic Leaching Procedure, Test Methods for Evaluating Solid Wastes, SW-846, United States EPA, September 1994.

Analyst E.O.Reviewed PRD

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
HSL SEMI-VOLATILE COMPOUNDS1160 Research Drive
Bozeman, Montana 59718

Client: PRODUCTION OPERATORS

Sample ID: 29-6 #4

Project ID: None Given

Lab ID: B973260

0397G01172

Matrix: Water

Date Reported: 07/21/97

Date Sampled: 06/20/97

Date Received: 06/24/97

Date Extracted: 06/27/97

Date Analyzed: 07/01/97

Parameter	Result	PQL	Regulatory Level	Units
1,4-Dichlorobenzene	ND	0.01	7.5	mg/L
2,4,5-Trichlorophenol	ND	0.02	400	mg/L
2,4,6-Trichlorophenol	ND	0.02	2.0	mg/L
2,4-Dinitrotoluene	ND	0.01	0.13	mg/L
Hexachloro-1,3-butadiene	ND	0.02	0.5	mg/L
Hexachlorobenzene	ND	0.02	0.13	mg/L
Hexachloroethane	ND	0.02	3.0	mg/L
m,p-Cresol	ND	0.01	200	mg/L
Nitrobenzene	ND	0.01	2.0	mg/L
o-Cresol	ND	0.01	200	mg/L
Pentachlorophenol	ND	0.05	100	mg/L
Pyridine	ND	0.02	5.0	mg/L
QUALITY CONTROL - Surrogate Recovery		%	QC Limits	
2,4,6-Tribromophenol	97		10 - 123	
2-Fluorobiphenyl	118 ##		43 - 116	
2-Fluorophenol	17 ##		21 - 100	
Nitrobenzene-d5	94		35 - 114	
Phenol-d6	28		10 - 94	
Terphenyl-d14	83		33 - 121	

ND - Not Detected at Practical Quantitation Level (PQL)

- Surrogate Recovery not within control limits due to matrix/dilution effect.

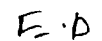
Reference: Method 8270B, Gas Chromatography/Mass Spectrometry for Semivolatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, United States EPA, September 1994.

Method 1311, Toxicity Characteristic Leaching Procedure, Test Methods for Evaluating Solid Wastes, SW-846, United States EPA, September 1994.

Analyst



Reviewed



QUALITY ASSURANCE / QUALITY CONTROL

**LAB QA/QC
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
METHOD BLANK**

Date Analyzed: 06/27/97
Lab ID: MBW97178A
Matrix: Water
Date Extracted 06/27/97

Parameter	Result	PQL	Units
1,1-Dichloroethene	ND	0.02	mg/L
1,2-Dichloroethane	ND	0.02	mg/L
2-Butanone (MEK)	ND	0.1	mg/L
Benzene	ND	0.02	mg/L
Carbon Tetrachloride	ND	0.02	mg/L
Chlorobenzene	ND	0.02	mg/L
Chloroform	ND	0.02	mg/L
Tetrachloroethene (PCE)	ND	0.02	mg/L
Trichloroethene (TCE)	ND	0.02	mg/L
Vinyl Chloride	ND	0.02	mg/L

QUALITY CONTROL - Surrogate Recovery %

1,2-Dichloroethane-d4	98
Bromofluorobenzene	96
Toluene-d8	95

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst F.D.

Reviewed RRD

**LAB QA/QC
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
METHOD BLANK**

Date Analyzed: 06/26/97
Lab ID: MBW97177A
Matrix: Water
Date Extracted 06/26/97

Parameter	Result	PQL	Units
1,1-Dichloroethene	ND	0.02	mg/L
1,2-Dichloroethane	ND	0.02	mg/L
2-Butanone (MEK)	ND	0.1	mg/L
Benzene	ND	0.02	mg/L
Carbon Tetrachloride	ND	0.02	mg/L
Chlorobenzene	ND	0.02	mg/L
Chloroform	ND	0.02	mg/L
Tetrachloroethene (PCE)	ND	0.02	mg/L
Trichloroethene (TCE)	ND	0.02	mg/L
Vinyl Chloride	ND	0.02	mg/L

QUALITY CONTROL - Surrogate Recovery %

1,2-Dichloroethane-d4	95
Bromofluorobenzene	101
Toluene-d8	100

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst E.D.

Reviewed RRD

**LAB QA/QC
TOXICITY CHARACTERISTIC LEACHING PROCEDURE
MATRIX SPIKE SUMMARY**

Date Analyzed: 06/26/97
Laboratory ID: B97-3289
Sample Matrix: GRIT DUST
Date Extracted: 6/25/97

Parameter	Spike Added mg/L	Sample Concentration mg/L	Matrix Spike Concentration mg/L	Matrix Spike Recovery (%)
Vinyl Chloride	0.05	0	0.047	94
1,1-Dichloroethene	0.05	0	0.048	96
1,2-Dichloroethane	0.05	0	0.050	100
Chloroform	0.05	0	0.049	98
Carbon Tetrachloride	0.05	0	0.045	90
Trichloroethene	0.05	0	0.049	98
Benzene	0.05	0	0.048	96
Tetrachloroethene	0.05	0	0.051	102
Chlorobenzene	0.05	0	0.047	94
Methyl Ethyl Ketone	0.1	0	0.100	100

QUALITY CONTROL:

Surrogate Recovery	%
1,2-Dichloroethane-d4	99
Toluene-d8	99
Bromofluorobenzene	99

References:

Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, Final Update II, United States Environmental Protection Agency, September 1994.

Method 1311, Toxicity Characteristic Leaching Procedure, Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1994.

E.P.
Analyst

RRD
Reviewed

**LAB QA/QC
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS
MATRIX SPIKE SUMMARY**

Date Analyzed: 07/01/97
Laboratory ID: TBS97-178
Sample Matrix: Water
Date Extracted: 06/27/97

Parameter	Spike Added (mg/L)	Sample Concentration (mg/L)	Matrix Spike Concentration (mg/L)	Matrix Spike Recovery (%)
1,4-Dichlorobenzene	0.1	0	0.080	80
2,4,5-Trichlorophenol	0.1	0	0.093	93
2,4,6-Trichlorophenol	0.1	0	0.094	94
2,4-Dinitrotoluene	0.1	0	0.092	92
Hexachlorobenzene	0.1	0	0.094	94
Hexachlorobutadiene	0.1	0	0.083	83
Hexachloroethane	0.1	0	0.080	80
m,p-Cresol	0.2	0	0.164	82
Nitrobenzene	0.1	0	0.089	89
o-Cresol	0.1	0	0.081	81
Pentachlorophenol	0.1	0	0.088	88
Pyridine	0.1	0	0.100	100

QUALITY CONTROL:

Surrogate Recoveries	%
2,4,6-Tribromophenol	98
2-Fluorobiphenyl	83
2-Fluorophenol	84
Nitrobenzene-d5	89
Phenol-d6	70
Terphenyl-d14	77

References:

Method 8270B, Semivolatile Organics - GC/MS, Test Methods for Evaluating Solid Waste, USEPA, SW-846, Vol. IB, September 1994.


Analyst
Reviewed

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/01/97
Lab ID: MBW97178
Matrix: Water
Date Extracted: 06/27/97

Parameter	Result	PQL	Units
1,2,4-Trichlorobenzene	ND	0.01	mg/L
1,2-Dichlorobenzene	ND	0.01	mg/L
1,3-Dichlorobenzene	ND	0.01	mg/L
1,4-Dichlorobenzene	ND	0.01	mg/L
2,4,5-Trichlorophenol	ND	0.02	mg/L
2,4,6-Trichlorophenol	ND	0.01	mg/L
2,4-Dichlorophenol	ND	0.01	mg/L
2,4-Dimethylphenol	ND	0.01	mg/L
2,4-Dinitrophenol	ND	0.05	mg/L
2,4-Dinitrotoluene	ND	0.01	mg/L
2,6-Dinitrotoluene	ND	0.01	mg/L
2-Chloronaphthalene	ND	0.01	mg/L
2-Chlorophenol	ND	0.01	mg/L
2-Methylnaphthalene	ND	0.01	mg/L
2-Methylphenol	ND	0.01	mg/L
2-Nitroaniline	ND	0.05	mg/L
2-Nitrophenol	ND	0.01	mg/L
3,3'-Dichlorobenzidine	ND	0.01	mg/L
3-Methylphenol/4-Methylphenol	ND	0.01	mg/L
3-Nitroaniline	ND	0.05	mg/L
4,6-Dinitro-2-methylphenol	ND	0.05	mg/L
4-Bromophenyl-phenylether	ND	0.01	mg/L
4-Chloro-3-methylphenol	ND	0.02	mg/L
4-Chloroaniline	ND	0.02	mg/L
4-Chlorophenyl-phenylether	ND	0.01	mg/L
4-Nitroaniline	ND	0.02	mg/L
4-Nitrophenol	ND	0.05	mg/L
Acenaphthene	ND	0.01	mg/L
Acenaphthylene	ND	0.01	mg/L
Anthracene	ND	0.01	mg/L
Benzo(a)anthracene	ND	0.01	mg/L
Benzo(a)pyrene	ND	0.01	mg/L
Benzo(b)fluoranthene	ND	0.01	mg/L

Continued

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/01/97
Lab ID: MBW97178
Matrix: Water
Date Extracted: 06/27/97

Parameter	Result	PQL	Units
Continued			
Benzo(g,h,i)perylene	ND	0.01	mg/L
Benzo(k)fluoranthene	ND	0.01	mg/L
Benzoic Acid	ND	0.05	mg/L
Benzyl Alcohol	ND	0.01	mg/L
bis(2-Chloroethoxy)methane	ND	0.01	mg/L
bis(2-Chloroethyl)ether	ND	0.01	mg/L
bis(2-Chloroisopropyl)ether	ND	0.01	mg/L
bis(2-Ethylhexyl)phthalate	ND	0.01	mg/L
Butylbenzylphthalate	ND	0.01	mg/L
Chrysene	ND	0.01	mg/L
Di-n-Butylphthalate	ND	0.01	mg/L
Di-n-Octylphthalate	ND	0.01	mg/L
Dibenz(a,h)anthracene	ND	0.01	mg/L
Dibenzofuran	ND	0.01	mg/L
Diethylphthalate	ND	0.01	mg/L
Dimethylphthalate	ND	0.01	mg/L
Fluoranthene	ND	0.01	mg/L
Fluorene	ND	0.01	mg/L
Hexachlorobenzene	ND	0.01	mg/L
Hexachlorobutadiene	ND	0.02	mg/L
Hexachlorocyclopentadiene	ND	0.01	mg/L
Hexachloroethane	ND	0.02	mg/L
Indeno(1,2,3-cd)pyrene	ND	0.01	mg/L
Isophorone	ND	0.01	mg/L
N-Nitrosodi-n-propylamine	ND	0.01	mg/L
N-Nitrosodiphenylamine	ND	0.01	mg/L
Naphthalene	ND	0.01	mg/L
Nitrobenzene	ND	0.01	mg/L
Pentachlorophenol	ND	0.05	mg/L
Phenanthrene	ND	0.01	mg/L
Phenol	ND	0.01	mg/L
Pyrene	ND	0.01	mg/L

Continued

**LAB QA/QC
EPA METHOD 8270
METHOD BLANK**

Date Analyzed: 07/01/97
Lab ID: MBW97178
Matrix: Water
Date Extracted: 06/27/97

Parameter	Result	PQL	Units
-----------	--------	-----	-------

Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
2,4,6-Tribromophenol	90	10 - 123
2-Fluorobiphenyl	75	43 - 116
2-Fluorophenol	78	21 - 110
Nitrobenzene-d5	83	35 - 114
Phenol-d6	63	10 - 110
Terphenyl-d14	76	33 - 141

ND - Not Detected at Practical Quantitation Level (PQL)

Analyst



Reviewed

F.D.

LAB QA/QC

TCLP SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY

Date Analyzed: 07/01/97
Laboratory ID: B97-3260
Sample Matrix: Water
Date Extracted: 06/27/97

ORIGINAL SAMPLE PARAMETERS

Parameter	Spike Added (mg/L)	Sample Conc. (mg/L)	MS Conc. (mg/L)	MS Recovery (%)
1,4-Dichlorobenzene	0.100	0.000	0.079	79
2,4,5-Trichlorophenol	0.100	0.000	0.029	29
2,4,6-Trichlorophenol	0.100	0.000	0.033	33
2,4-Dinitrotoluene	0.100	0.000	0.048	48
Hexachlorobenzene	0.100	0.000	0.090	90
Hexachlorobutadiene	0.100	0.000	0.085	85
Hexachloroethane	0.100	0.000	0.079	79
m,p-Cresol	0.200	0.000	0.210	105
o-Cresol	0.200	0.000	0.106	53
Nitrobenzene	0.100	0.000	0.102	102
Pentachlorophenol	0.100	0.000	0.000	0
Pyridine	0.100	0.000	0.086	86

DUPLICATE SAMPLE PARAMETERS

Parameter	Spike Added (mg/L)	MSD Conc. (mg/L)	MSD Recovery (%)	RPD (%)
1,4-Dichlorobenzene	0.100	0.082	82	4
2,4,5-Trichlorophenol	0.100	0.054	54	60
2,4,6-Trichlorophenol	0.100	0.049	49	39
2,4-Dinitrotoluene	0.100	0.068	68	34
Hexachlorobenzene	0.100	0.093	93	3
Hexachlorobutadiene	0.100	0.086	86	1
Hexachloroethane	0.100	0.079	79	0
m,p-Cresol	0.200	0.213	107	1
o-Cresol	0.200	0.106	53	0
Nitrobenzene	0.100	0.106	106	4
Pentachlorophenol	0.100	0.008	8	200
Pyridine	0.100	0.092	92	7

Analyst

Reviewed

District I - (505) 393-6161
P.O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
Rio Brazos Road
Alamogordo, NM 87410
District IV - (505) 827-7131

New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	4. Generator <u>Williams Field Service</u> 5. Originating Site <u>EL CEDRO PLANT</u>
2. Management Facility Destination <u>SUNCO DISPOSAL</u>	6. Transporter <u>SUNCO</u>
3. Address of Facility Operator <u>CR 3500 #345 AZTEC, NM</u>	8. State <u>NM</u>
7. Location of Material (Street Address or ULSTR) <u>EL CEDRO</u>	
9. Circle One: <input checked="" type="radio"/> 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 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:

AMINE PLANT FLUID

RECEIVED
JUL 25 1997

OIL CON. DIV.
DIST. 3

Estimated Volume 100661s + cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Michael Talovich TITLE: DISPOSAL MGR DATE: 7-25-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Michael Talovich TELEPHONE NO. 505-334-6186

(This space for State Use)

APPROVED BY: Denny G. Faint TITLE: Geologist DATE: 7/28/97
APPROVED BY: Johnny Robinson TITLE: _____ DATE: _____

CERTIFICATE OF WASTE STATUS

I FRANK FORT representative

for WILLIAMS FIELD SERVICES

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is ☒ Exempt
☐ Non-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.

EL CEDRO
Originating Site: S-____ T-____ R-____ 1/4____ 1/4____ County Rio Arriba State NM

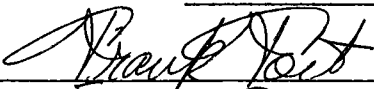
Physical Address if appropriate: _____

Source and description of waste: amine, TEG, makeup water
Scale, dirt.

Check the appropriate line(s):

- ☐ MSDS Information sheet
☐ RCRA TCLP Analysis
☐ RCRA Metals Analysis
☐ Corrosivity, Ignitability, Reactivity
☒ Exempt

I further certify that there has been no change in the waste stream at the facility
generating the waste since _____

Signature 
Printed Name FRANK FORT
Title SUPERINTENDENT
Date July 25, 1997

Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM

istrict I - (505) 393-6161
Box 1980
bbs, NM 88241-1980
istrict II - (505) 748-1283
S. First
esia, NM 88210
istrict III - (505) 334-6178
Rio Brazos Road
c, NM 87410
istrict IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/>	4. Generator EL PASO FIELD SERVICE
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site BALLARD COMP. STATION
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO TRUCKING
3. Address of Facility Operator 345 CR 3500 AZTEC SAN JUAN CO	8. State NM
7. Location of Material (Street Address or ULSTR) BALLARD COMP. STATION	
9. Circle One: <input checked="" type="radio"/> 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 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:

WATER + ~~WASTE~~ FROM INLET
GAS SCRUBBER

RECEIVED
JUL 25 1997

OIL CON. DIV
DIST. 3

Estimated Volume 80 BBL cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: [Signature] TITLE: DISPOSAL MGR DATE: 7-25-97
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505 334 6186

(This space for State Use)

APPROVED BY: [Signature] TITLE: Geologist DATE: 7/25/97
APPROVED BY: [Signature] TITLE: Field Rep I DATE: 7-25-97

CERTIFICATE OF WASTE STATUS

I Sandra D. Miller representativefor El Paso Field Service Co.614 Reilly Ave., Farmington, NM 87401

do hereby certify that according to the Resource Conservation and Recovery Act

that the above described waste is X ExemptNon-Exempt and that it has been identified
as non hazardous by characteristic analysis or by product identification as required.Originating Site: S- 26 T- 26N R- 9W 1/4 NE 1/4 SE County San Juan State NMPhysical Address if appropriate: 30 miles Southeast of Bloomfield, NMSource and description of waste: Sludge from inlet gas scrubber at BallardCompressor Station which is located 22.5 mi. S. of Bloomfield, NM on Hwy 44,
Then 7 mi. E. on CR 7425.

Check the appropriate line(s):

X MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityX ExemptI further certify that there has been no change in the waste stream at the facility
generating the waste since 1957Signature Sandra D MillerPrinted Name Sandra MillerTitle SuperintendentDate 7/14/97Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. NM



AaLadin Southwest
Farmington, NM 87401

MATERIAL SAFETY DATA SHEET

Emergency Phone (800) 535-5053

pH@1:142 = 10.14
pH@1:50 = 11.2
pH@1:5 = 12.25

I - IDENTIFICATION

PRODUCT NAME	DYNAMITE
PRODUCT TYPE	Liquid alkaline detergent
DATE PREPARED	6/1/92

II - PRECAUTIONARY INFORMATION

Severely irritating to eyes, skin and mucous membranes. If swallowed, can cause severe irritation of the mouth, throat, esophagus and stomach. Inhalation can cause irritation of the upper respiratory tract and lungs depending on exposure.

III - HAZARDOUS COMPONENT DATA

COMPONENT (S) CHEMICAL NAME	CAS REGISTRY NO.	ACGIH TLV	
Sodium Metasilicate	6834-92-0	2 mg/m ³	
Nonylphenoxypolyethoxyethanol	9016-45-9	N/A	
Tetrasodium ethylenediaminetetraacetate	0064-02-8	N/A	

IV - PHYSICAL DATA

APPEARANCE AND ODOR	SPECIFIC GRAVITY
Red liquid with mild odor	1.079
BOILING POINT	VAPOR DENSITY IN AIR (AIR=1)
Similar to Water	Similar to Water
VAPOR PRESSURE	% VOLATILE, BY VOLUME
Similar to Water	None
EVAPORATION RATE	SOLUBILITY IN WATER
Similar to Water	Complete

V - REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID
Stable	Mixture with acid or incompatible materials can cause splattering and release of heat.
INCOMPATIBILITY (MATERIALS TO AVOID)	
Acids, chlorine dioxide, phosphorus, potassium persulfate, and tetrahydrofuran.	
HAZARDOUS DECOMPOSITION PRODUCTS	
Will not decompose.	
HAZARDOUS POLYMERIZATION	
Will not occur	

VI - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	None
EXTINGUISHING MEDIA	N/A
UNUSUAL FIRE AND EXPLOSION HAZARDS	None

VII - TOXICITY

EXPOSURE LIMITS	Sodium metasilicate	ACGIH 2 mg/m ³ Ceiling	OSHA None
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	No known medical conditions aggravated by exposure		
ACUTE TOXICITY	<p><u>Skin:</u> May cause irritation.</p> <p><u>Eyes:</u> Liquid in the eye can cause severe irritation.</p> <p><u>Ingestion:</u> Ingestion can cause severe irritation and pain in mouth, throat, esophagus and stomach.</p> <p><u>Inhalation:</u> Inhalation of solution mist can cause mild irritation.</p>		

VIII - FIRST AID

Skin: Remove contaminated clothing immediately and wash skin thoroughly for a minimum of 15 minutes with large quantities of water (preferably a safety shower). **Get medical attention immediately.**

Eyes: Wash eyes immediately with large amounts of water (preferably eye wash fountain), lifting the upper and lower eyelids and rotating eyeball. Continue washing for a minimum of 15 minutes. **Get medical attention immediately.**

Ingestion: If the person is conscious, give large quantities of water to dilute product. Do **NOT** induce vomiting. **Get medical attention immediately.**

Inhalation: Move person to fresh air. If breathing stops, administer artificial respiration. **Get medical attention immediately.**

IX - CHRONIC TOXICITY

This product does not contain any materials listed on the IARC, OSHA, or NPT carcinogen lists.

X - PERSONAL PROTECTION AND CONTROLS

RESPIRATORY PROTECTION

For levels which exceed or are likely to exceed 150 mg/m^3 use approved high-efficiency particulate filter with full facepiece or self-contained breathing apparatus. Follow any applicable respirator use standards and regulations.

VENTILATION

As necessary to maintain concentration in air below 150 mg/m^3 at all times.

SKIN PROTECTION

Wear neoprene, PVC, or rubber gloves.

EYE PROTECTION

Wear safety glasses or splashproof chemical goggles.

HYGIENE

Avoid contact with skin. Do not eat, drink, or smoke in work area. Wash hands prior to eating, drinking, or using restroom. Any protective clothing which becomes contaminated should be thoroughly cleaned before reuse.

OTHER CONTROL MEASURES

Safety shower and eye wash should be located in work area.

XI - STORAGE AND HANDLING PRECAUTIONS

KEEP FROM FREEZING

Store in closed, properly labeled containers.

DO NOT remove or deface labels.

Use of this product should be limited to properly trained individuals.

XII - SPILL, LEAK AND DISPOSAL PRACTICES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Product should be contained and recovered into containers.
Cleanup personnel should follow all safety precautions during cleanup.

WASTE DISPOSAL METHOD

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

XIII - SUPPLIER INFORMATION

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the emergency planning and community right-to know act of 1988 and or 40 CFR part 372.

CAS NUMBER

CHEMICAL NAME

XIV - SHIPPING INFORMATION

The proper DOT shipping name of this product is:
None Required

The above information is believed to be accurate with respect to the formula used to manufacture this product. As data, standards and regulations change, and conditions of use and handling are beyond our control **NO WARRANTY** express or implied is made as to the completeness or continuing accuracy of this information.