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
Coc, NM 87410

District IV - (505) 827-7131

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Street

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: Non-Exempt:	4. Generator Williams Field Seeving
Verbal Approval Received: Yes No No	5. Originating Site MILABO PRANT
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter Sunco Trucking
3. Address of Facility Operator 345 CR 3500 Azlec, SANJUAN Co	8. State NM
7. Location of Material (Street Address or ULSTR) MILAGRO Plant	^ .
9. <u>Circle One</u> :	
All requests for approval to accept oilfield exempt wastes will be acc Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigne	ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by
	•
TIMINE KINSE 3% AM	nine And 97% Delonized water
	Plant PECINED FEB 1 1 1997
Chromium present is trivalent from stamless sted piping, 527 see 1/27/96 Estimated Volume 40,000 GALS cy Known Volume (to be entered by the op	OIL CON. DIV. DIST. 3
SIGNATURE: Master Management Facility Authorized Agent TYPE OR PRINT NAME: MCHARL THOUGH TEL	MGR DATE: 2-11-97 LEPHONE NO. 505-334-6186
(This space for State Use)	-:
APPROVED BY: Lowy J. Fenty TITLE: Geold APPROVED BY: Suis Bussel TITLE: Geold	

Originating Site: S-12 T-29 R-11 I/4 I/4 County San Juagrate NM

Physical Address if appropriate: 192 County Rd 4900 Bloomfield, NM 87413
Source and description of waste:
Amine Rinse 3% amine and 97% delonized 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 X Exempt
Non-Exempt and that it has been identified as non hazardous by characteristic analysis or by product identification as required.
as non maximum by characteristic analysis of by product identification as required.
The required documentation is hereto attached: Analysis
Check the appropriate line(5):
MSDS Information sheet
RCRA TCLP Analysis
X RCRA Metals Analysis X Corresivity, 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 12/96
the second of th
Signature for the state of the
Printed Name Keigh E. Gooding
Title Sentor Environmental Specialist
Date 2/10/97

nter-Mountain Laboratories, inc.

Willams Field Service

2506 W. Main Street Farmington, New Mexico 67401

Project: Milagro Plant

Sample ID: Train 2 Rinse aboratory ID: 0397W00093

Laboratory ID: 0397W00 Sample Matrix: Water

Cool/Intact

Olient:

Date Reported:

01/28/97

Date Sampled:

01/21/97

Time Sampled:

1:15 PM

Date Received: 01/21/97

		Amarana ana ana ana ana ana ana ana ana	

	Anglytical		
, atawater.	Result	Uratis	Units
		· · · · · · · · · · · · · · · · · · ·	
.ab pH (Corrosivity)	10.6	s.u.	
flash Point (Ignitability)	>140	" F	
Reactivity			·
Total Cyanide	0.02	mg/L	
Sulfide	275	mg/L	
Frace Metals (Total)			
\rsenic	0.010	ma/i	
3arium		mg/L	
	0.04	mg/L	
Dadmium	0.001	mg/L	
Chromium	14.6	mg/L	
.ead	0.016	mg/L	
Mercury	<0.001	mg/L	
Selenium	<0.005	mg/L	
3ilver	<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 125

Reviewed by 88



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.

JAN 28, 1997

Client:

Williams Field Service

Date Reported:

Project

Milagro Plant

01/28/97

Sample ID

Train 2 Rinse

Date Sampled:

01/21/97

Laboratory ID:

0397W00093

Time Sampled:

1:15 PM

Sample Matrix:

Water

Date Received:

01/21/97

Condition:

Cool/intact

	Analytical		Walter State of the State of th
Parameter	Rosult	Units	Unita
Lab pH (Corrosivity)	10.6	s.u.	
Flash Point (Ignitability)	>140	°F	
Rescrivity	7 170	·	
Total Cyanide	0.02	mg/L	
Sulfide	275	mg/L	
		·	
Trace Motais (Total)			
Arsenia	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 25

Reviewed by 83



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 Proprietary Amine Derivative CAS# 000105-59-9

69-70% 30%

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

OBOR: Amine odor

FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 160F. 71C

METHOD USED: PACC

FLAMMABLE LIMITS

Not established LFL: Not established UFL:

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

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

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)

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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 esophagoscopic 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

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

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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 numberous 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 REGULATOINS

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

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

EMERGENCY RESPONSE AND TRANSPORTATION EQUIPMENT DATA SHEET PAGE 2 OF 3

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:

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

يه دنه خ

SPECIFIC GRAVITY: 1.05-1.07 @ (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

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EMERGENCY RESPONSE AND TRANSPORTATION EQUIPMENT DATA SHEET PAGE 3 OF 3

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

D. Box 1930 - bbs, NM 88241-1980 strict II - (505) 748-1283 | S. First esia, NM 88210 trict III - (505) 334-6178 | Rio Brazos Road ec, NM 87410

urica IV - (505) 827-7131

Energy M

als and Natural Resources Do Dil Conservation Division 2040 South Pacheco Street Santa Fe; New Mexico 87505

tment

Submit Original Plus I Copy to appropriate District Office

JIII -138

Originated 8/8/95

Santa Fe; New Mexico 87505
to appropriate
(505) 827-7131
District Office

REQUEST FOR APPROVAL TO ACCEPT	SOLID WASTE
1. RCRA Exempt: Non-Exempt:	4. Generator Burling ton Resources
Verbal Approval Received: Yes 🔲 No 🛛	5. Originating Site VAL VERDE PLANT
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO TRUCKING
3. Address of Facility Operator CR 3500 # 345 Az+CC , NM	8. State NM
7. Location of Material (Street Address or ULSTR) Building 101A, CR 4937A Bloomfield, NM	
S. <u>Circle One</u> :	
A. All requests for approval to accept oilfield exempt wastes will be accepted. Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved.	ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by
All transporters must certify the wastes delivered are only those consigned	JUL 7 1997
BRIEF DESCRIPTION OF MATERIAL: 645 Plant wash water DECEIVED	Environmental Bureau Oil Conservation Division PEGETVED JUN 2 6 1997
OIL COM. DIV.	THE GOIN'S DIAN'S
Estimated Volume GOO bbls cy Known Volume (to be entered by the op	erator at the end of the haul) ————————————————————————————————————
SIGNATURE: Marie Dalovil TITLE: MBR	DATE: 6-26-97
TYPE OR PRINT NAME: MICHAEL TALOUICH TEL	EPHONE NO. 505-319-6186
(This space for State Use)	
APPROVED BY: Serry 9. For TITLE: GEO!	
APPROVED BY: Martyne J. Hily TITLE: Environn	rental Geologist DATE: 7/8/97

العك Box I bi, NM 86241-1980 rict II - (505) 748-1283 S. First 113, NM 88210 rict III - (505) 334-6178 1 Rio Brazos Road c. NM 87410

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

Form C-13 Originated 8/8/ partment

> Submit Otigir Plus I Cu to appropria District Offic

rict Ty (505) 827-7131	
REQUEST FOR APPROVAL TO ACCEPT	SOLID WASTE '
1. RCRA Exempt: Non-Exempt:	4. Generator Burlinio ton Resources
Verbal Approval Received: Yes No 🔯	5. Orlginating Site VALUERDE Plant
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO TRUCKING
3. Address of Facility Operator CR 3500 #345 Aztcc , NM	8. Stale NM
7. Location of Material (Street Address or ULSTR) Building 101A, CR 4137A Bloomfield . NM	-
9. Circle One:	
A. All requests for approval to accept oilfield exempt wastes will be accepted an exempt of careful accept one certificate per job. All requests for approval to accept non-exempt wastes must be accepted and the Generator's certification listing or testing will be approved.	ompanied by necessary chemical analysis to an of origin. No waste classified hazardous by
All transporters must certify the wastes delivered are only those consigne	d for transport. JUL 7 1997
BRIEF DESCRIPTION OF MATERIAL: GAS PLANT WASh WATER	Environmental Bureau Oil Conservation Division)
OIL COM. DIV.	JUN 2 6 1997 U DIET. 3
Estimated Volume GOO bbls cy Known Volume (to be entered by the op	perator at the end of the haul) ————————————————————————————————————
SIGNATURE: Management Facility Authorized Agent TITLE: MBR	DATE: 6-26-97
TYPE OR PRINT NAME: MICHAEL TALOUICH TE	LEPHONE NO. 505-334-6/86
(This space for State Use)	
APPROVED BY: Dieny 92 Fount TITLE: GOO!	ocist DATE: 7/3/97
APPROVED BY: Martyur & Hich TITLE: Environ	

Strict I - (505) 393-6161
D. Box 1980
bbs, NM 88241-1980
strict II - (505) 748-1283
1 S. First
esia, NM 88210
trict III - (505) 334-6178
Rio Brazos Road
ec, NM 87410

APPROVED BY:

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

urict IV - (505) 827-7131	
REQUEST FOR APPROVAL TO ACCEPT	SOLID WASTE
1. RCRA Exempt: Non-Exempt:	4. Generator Burling ton Resources
Verbal Approval Received: Yes 🔲 No 🔀	5. Originating Site VAL VERDE PLANT
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO TRUCKING
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7. Location of Material (Street Address or ULSTR) Bloomfield, NM	
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	o for transport.
BRIEF DESCRIPTION OF MATERIAL: GAS PLANT WASh WATER	•
Estimated Volume 600 bb/s cy Known Volume (to be entered by the o	DECEIVED JUN 2 6 1997 OIL GON, DIV. DIST. 3
Waste Management FecilityAuthorized Acent	DATE: 6-26-97
TYPE OR PRINT NAME: MICHACL TALOVICH TE	LEPHONE NO. 505-317-6186
(This space for State Use)	• (

TITLE: Ged log 157

DATE:

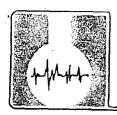
CERTIFICATE OF WASTE STATUS

I	Craig A. Bock	representative
for	Burlington Resources	
	eby certify that according to the Resource Conservation and R ste described below is	ecovery Act that
	Exempt	
identi requii	X Non-Exempt and that it field as non-hazardous by characteristic analysis or by producted.	
Origina	ating Site: Sec. 14 Twn. 29N Rng. 11W 1/4 County San Juan State New N	1/4
•	tal Address (If Appropriate): Building 101A, CR 4937A field, NM 87413	
Source	e and Description of Waste: Spent wash water from cleani	ng plate and
frame	exchangers and amine reboilers at the Val Verde Plant.	
		· · · · · · · · · · · · · · · · · · ·
Check	the appropriate line(s): MSDS Information Sheet	
<u>X</u>	RCRA TCLP Analysis	
X	RCRA Metals Analysis	
$\frac{X}{X}$	Corrosivity, Ignitability, Reactivity	
	Exempt	
I furthe	er certify that there has been no change in the waste stream at	the facility generating the
since	3/5/97	
Signat	eure:	
Printe	d 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 Well6. 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 _X Non-Exempt / Non-Hazardous Hazardous
	Approval for Disposal Date 6/25/97
BR Representative	Transportation Company:
	Date(s) Transported:
·	BR Representative on Site: Date: Signature
Disposal Facility	Date (s) Received:
Notice: Complete and return to Burlington	Total Volume Received:
Environmental and Safety Dept.	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 #

WORK ID

: 9703041

TO: PO BOX 3376

87499

CLIENT CODE

: MOI-VAL VERDE

FARMINGTON, NM

DATE RECEIVED: 03/06/97

: CONT01

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

Sumpre 12: (11-12: 11-1	·						
TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID	
TCLP SV/METHOD 1311/8270B	· · · · · · · · · · · · · · · · · · ·			,	i		
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	
TĆLP SVOA XT/1311/3520	03/07/97	N̄/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 TCLP (ICP) DIG/1311/3005 TCLP EXTRACTION/TCLP 1311 TCLP METALS/1311/SW8466010	1.00 03/09/97 03/06/97	% (Percent) N/A N/A				
Arsenic, As Barium, Ba Cadmium, Cd Chromium, Cr Lead, Pb Mercury, Hg Selenium. Se Silver, Ag TCLP(CVAA)Hg XT/SW846 7471	ND ND ND ND ND ND ND ND ND 03/10/97	mg/L mg/L mg/L mg/L mg/L mg/L mg/L Mg/L	0.40 0.50 0.0050 0.020 0.050 0.0020 0.050 0.040	1.0 1.0 1.0 1.0 1.0 1.0 1.0	03/10/97 03/10/97 03/10/97 03/10/97 03/10/97 03/11/97 03/10/97 03/10/97	M97180,97178 M97180,97178 M97180,97178 M97180,97178 M97180,97178 M97180,97178 M97180,97178 M97180,97178

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 ZHE/VOA/METHOD 1311/8240B	03/06/97	N/A				
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
- *** 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

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
A. Was the cooler intact?	
B. Freight bill received?	
D. Cooler labelled properly?	
C. Cooler Temperature (acceptable range 1 - 8 °C)	11.2 .C
SAMPLE CONTAINERS	i
۶	YES NO N/A
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 <u>and</u> correct?	1
E. Are volumes marked on bottles?	
F. Is there sufficient volume request analyses?	
SAMPLE/CHAIN-OF-CUSTODY INFORMATION	
	YES NO N/A
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?	<u></u>
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?	-
· ·	
And to a livery land	i
NON-CONFOMRANCE SPECIFICS COOLOR TOMP SLIGHTLY MIGH	<u>(· </u>
If any non-conformances, were identified:	
	leed w/ analysis
Non-conformance resolution: Sean Adams	<u> </u>
	31/07
AAL Employee:	Date: 364+
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Date: 3/7/97
Program Management/QC Signature K - Tubb B	Date. 2/1/19
\smile	
Temperature Terms:	,
TERM DEFINITION	
	•

Cooler was emptied before a temp could be taken, however, samples were on ice.

Samples brought in after hours. No temp taken, however, samples were on ice and immediately put into

Client brought samples in their own cooler on ice.

walk-in refrigerator.

"Cold-A"
"Cold-B"

"On ice"

ASSAIGAL CI	nain of Custody Record	7300 JEFFERSON, N.E. ALBUQUERQUE, NEW MEXICO 87109 (505) 345-8964	
LABORATORIES	Lab Job no.: 304 Date 3/5/97	3332 WEDGEWOOD 1910 N. BIG SPRING EL PASO, TEXAS 79925 MIDLAND, TEXAS 79705 (915) 593-6000 (915) \$70-1116	
Client CONTRACT TANIBUL MENTAL	SERVICES, INC ONTRACT ENVIRONMENTAL Project Manager/Contact SHAWN ANAMS		
Address Po Rox 3376	Telephone No. (505) 325 - 1198	CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320 Analysis Required	
City/State/Zip FARmington UM 87499	Liverity .		
Project Name / Number moi val Veno Samplers: (Signature) Jam Alans		A A A A A A A A A A A A A A A A A A A	
Contract / Purchase Order / Quote		(4) 1/2/2///	
FRACTION Sample Number Location Date Time	Sample Type / Size of Container Preservation Type / Size of Container Temp. Chemical	1442/44 / Due-3112	
IA VALV-100 3K197 12:0	The state of the s	Tank Sample	
18 VAW-101 11 11	11 2 1/2 x 7" Plastic no 1 +		
VALV-102 11 11	"4x6"Amber no 1	* ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
	11 4 x 6" Amber no 1	X	
115 VALV-104 11 11	11 2x5/4"Plastic 201		
(E) VALU- 105 11 11	11 334x 6" Plastic no 1	X ''	
S VAW- 106 A/B 11 11	11 VOA 5 no 2		
(VAW-107 A/B 11 11	" UDAS no 2	Х 13	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
ignature 1 Aum 1 Aum 3/5/97 Signature		Date 3 4 Signature	
SHAWN ANTH	Signature Printed	Printed A A	
OMPANY CONTRACT FAV SUS	FRCI-FY Company FRCI-FY	Time	
eason Analyses 2'00 Reason_	Reason		
lethod of Shipment	"RUSH" 5-DAY	After analysis, samples are to be:	
Comments	16TT DUE BY 3/13/97	Disposed of (additional fee) Karana Stored (30 days max)	
pecial Instructions:		Stored (30 days flex) Stored over 30 days (additional fee)	
Jual	not social Phase tool	Returned to customer	
<u>. 1</u>	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.

incerel

Shawn A. Adams

Contract Environmental Services, Inc.

Contract $\mathbf{E}_{ ext{nvironmental}}$ $\mathbf{S}_{ ext{ervices}}$, $\mathbf{I}_{ ext{nc.}}$

SHAWN ADAMS Owner

Post Office Box 3376

Farmington, New Mexico 87499 Mobile 860-3107

(505) 325-1198

E-Mail 102565.1606@compuserve.com

1 - (505 393-6161 1980 -USENM 68241-1980 rice11 - (505) 748-1283 S. First Sia. NM 89210 rice111 - (505) 334-6178 Rio Brazos Road C. NM 87410

dct IV · (505) 827-7131

Energy N

New Mexico
rals and Natural Resources 1
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

(505) 827-7131

artment

Submit Origin Plus 1 Co to appropria District Offi

Form C-13

Originated 8/8/5

REQUEST FOR APPROVAL TO ACCEPT	SOLID WASTE
1. RCRA Exempt: Non-Exempt: 🗹	4. Generalor CONOCO Plant
Verbal Approval Received: Yes No No	5. Originating Site CONOCO Plant
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO
3. Address of Facility Operator CR 3550 #345, Aztec. Nm	8. State WM
7. Location of Material (Street Address or ULSTA) Bloom field, NM	· .
9. Circle One:	
A. All requests for approval to accept oilfield exempt wastes will be accept Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigner.	ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by
BRIEF DESCRIPTION OF MATERIAL:	
RECEIVED JUN 1 9 1997 Environmental Bureau Oll Conservation Division Estimated Volume 400 bbls cy Known Volume (to be entered by the op	DECEIVED JUN 1 2 1997 OIL GON. DIV. DIVIL 33 DETAIL 33 retator at the end of the haut) ————————————————————————————————————
SIGNATURE: Mulle Con TITLE: Mole TYPE OF PRINT NAME: MICHAEL THOURY TE	DATE: 6-12-97 LEPHONE NO. 505-3346186
(This space for State Use) APPROVED BY: Denny B. Funt TITLE: G-EO [APPROVED BY: Martyn g Mily TITLE: Environment	og (5) DATE: 6/16/9) until Geologist DATE: 6/19/97

strict I - (505) 393-6161

D. Box 1980

bbs, NM 8\$241-1980

strict II - (505) 748-1283

S. First
csia, NM 88210

trict III - (505) 334-6178

Rio Brazos Road

cc, NM 87410

trict IY - (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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

Form C-138 Originated 8/8/95

> Submit Original Plus 1 Copy to appropriate District Office

1.	RCRA Exempt: Non-Exempt: 🇹	4. Generator CONOCÓ PLANT
	Verbal Approval Received: Yes No No	5. Originating Site CONOCO PLANT
2.	Management Facility Destination SUNCO DISPOSAL	6. Transporter 3000
3.	Address of Facility Operator CR 3550 #345, Aztec. N.m.	8. State WM
7.	Location of Material (Street Address or ULSTR) Bloom field, NM	
9.	Circle One:	

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.

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the

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

BRIEF DESCRIPTION OF MATERIAL:

Generator; one certificate per job.

WASH WATER FROM AMINE System

DECEIVED JUN 1 2 1997 OIL GON. DIV.

	DIST. 3
Estimated Volume 400 bbls cy Known Volume (to be entered by the ope	rator at the end of the haul) ————————————————————————————————————
SIGNATURE: Mullel Long TITLE: MGC Waste Management Fecility Authorized Agent	*
TYPE OR PRINT NAME: MICHAEL THOURS TELE	EPHONE NO. 505-3346186
(This space for State Use)	
APPROVED BY: Demy S. Fourt TITLE: Geolo	09/st DATE: 6/16/97
APPROVED BY: TITLE:	DATE:

CERTIFICATE OF WASTE STATUS

I Louis E Ferrari	
for Langes Ire.	
do hereby certify that according to the Resource Cons	servation and Recovery Act
that the above described waste isExempt as non hazardous by characteristic analysis or by prod	and that it has been identified luct identification as required.
Originating Site: S- <u>/4</u> T- <u>29</u> R- <u>//w</u> 1/4 1/	
Physical Address if appropriate: #6/ CR 4900 Blo	
Source and description of waste: wash water t	from Amire system.
	·
·	·
Check the appropriate line(s):	
MSDS Information sheetRCRA TCLP Analysis	
RCRA Metals Analysis Corrosivity, Ignitability, Reactivity	
Exempt	
I futher certify that there has been no change in the wagenerating the waste since <u>June 96</u>	aste stream at the facility
Signature Jours E. Ferraci	
Printed Name Louis E. Ferraci Title Maint. Forenan	·
Title Maint. Foreman Date 6-12-97	•

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

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

Chris J. Schepcoff Project Manager

July 24, 1996 ·



EXECUTIVE SUMMARY - Detection Highlights

I6G120107

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD
SAN JUAN AMINE WASHER WATER 07/08/9	6 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	ma/L	MCAWW 160.3



ANALYTICAL METHODS SUMMARY

I6G120107

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

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



METHOD / ANALYST SUMMARY

I6G120107

ANALYTICAL		
METHOD	ANALYST	ID #
MCAWW 150.1	Jay Harris	060505
MCAWW 160.3	Jay Harris	060505
SW846 1010	Jay Harris	060505
SW846 6010A	Scott Butler	01:0399
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:		
	ds for Chemical Analysis of Water and Wast 0/4-79-020, March 1983 and subsequent revi	
SW846 "Test N	Methods for Evaluating Solid Waste, Physics" Third Edition, November 1986 and its w	cal/Chemical



QC DATA ASSOCIATION SUMMARY

Sample Preparation and Analysis Control Numbers

			′ Pgm	Leach	QC Batch	MS Run
Lot#-Sample#	<u>Matrix</u>	Method	Code	Batch#	Number	Number
						 .
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
					i	•
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 a	analytical	results o	E the	samples	listed	below	are	presented	on	the	following	pages.
-------	------------	-----------	-------	---------	--------	-------	-----	-----------	----	-----	-----------	--------

WO # LOT-SAMPLE # SAMPLE IDENTIFICATION DATE/TIME SAMPLE

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:

		REPORTING	}	Q.		
PARAMETER	RESULT	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		
			•			

	PERCENT	RECOVERY			
SURROGATE	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	METHOI)	PREPARATION- ANALYSIS DATE	PREP BATCH #
Flashpoint	>150	>150 DIL Factor:	deg F	SW846		07/17/96	6200111
рН (liquid)	4.1	0.10 DIL Factor: MS Run #:		MCAWW	150.1	07/12/96	6197132
Total Solids (Residue)	75000	10 DIL Factor: MS Run #:	1	MCAWW	160.3	07/15/96	6198195
Reactive Cyanide	ND	200 DIL Factor: MS Run #:		SW846	7.3.3	07/16/96	6198103
Reactive Sulfide	ND	200 DIL Factor: MS Run #:		SW846	7.3.4	07/16/96	6198110

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 Dilution Fact: 1 MS Run #: 619703	SW846 7470	07/15/96	6197166
Barium	ND	2.0 mg/L Dilution Fact: 10 MS Run #: 6197048	SW846 6010A	07/15-07/19/96	6197182
Cadmium	ND	0.050 mg/L Dilution Fact: 10 MS Run #: 619704:	SW846 6010A	07/15-07/19/96	6197182
Chromium	2.2	0.10 mg/L Dilution Fact: 10 MS Run #: 619704	SW846 6010A	07/15-07/19/96	6197182
Silver	ND	0.10 mg/L Dilution Fact: 10 MS Run #: 619704		07/15-07/19/96	6197182
Arsenic	ND	3.0 mg/L Dilution Fact: 10 MS.Run #: 619704		07/15-07/19/96	6197182
Lead	ND	1.0 mg/L Dilution Fact: 10 MS Run #: 619704	5.010 001011	07/15-07/19/96	6197182
Selenium	ND	2.5 mg/L Dilution Fact: 10 MS Run #: 619704		07/15-07/19/96	6197182

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.



TOTAL Metals

Client Lot #: I6G120107

MS Sample: 16G110105-001

Matrix: WATER

Percent Moist: 100

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	BATCH #
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
	מ	ilution Facto	r: 1				
	M	S Run #:	619	7035			

NOTE(S):

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



TOTAL Metals

Client Lot #: I6G120107

MS Sample: I6G120161-003

Matrix: WATER

Percent Moist: 100

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS RPI	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE BATCH #
Copper	84	(80-120)		MCAWW 200.7	07/15-07/19/96 6197182
Copper	99	(80-120) 4.	3 (0-20)	MCAWW 200.7	07/15-07/19/96 6197182
		ilution Factor: 1			
	r	IS Run #: 6	197048		
					•
Cadmium	91	(80-120)		MCAWW 200.7	07/15-07/19/96 6197182
	93	(80-120) 1.	•	MCAWW 200.7	07/15-07/19/96 6197182
		Dilution Factor: 1			
		1S Run #: 6	197048		
Lead	115	(80-120)		MCAWW 239.2	07/15-07/16/96 6197182
2000	120		5 (0-20)		07/15-07/16/96 6197182
		Dilution Factor: 1			0., 23 0., 20, 30 023, 202
	1	1S Run #: 6	197048		
				,	
Nickel	100	(80-120)		MCAWW 200.7	07/15-07/19/96 6197182
	88	(80-120) 11	,	MCAWW 200.7	07/15-07/19/96 6197182
		Dilution Factor: 1			
	1	1S Run #: 6	197048		
Silver	88	(80-120)		MCAWW 200.7	07/15-07/19/96 6197182
	90	(80-120) 2.	8 (0-20)		07/15-07/19/96 6197182
	I	Dilution Factor: 1			, ,
	1	1S Run #: 6	197048		
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
,	I	Dilution Factor: 1	•		
	1	IS Run #:	197048		
Chromium	92	(80-120)		MCAWW 200.7	07/15-07/19/96 6197182
CITOMILAM	93	(80-120) 1.	2 (0-20)		07/15-07/19/96 6197182
		Dilution Factor: 1			0.713 01713730 013.101
			197048		
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
	1	Dilution Factor: 3	L		
	1	MS Run #:	5197048		
Selenium	90	(80-120)		SW846 6010A	07/15-07/19/96 6197182
DGTGIITUIII	93		4 (0-20)	SW846 6010A	07/15-07/19/96 6197182
		Dilution Factor:		SHORD DOTON	0.715 0.715750 015.102
			5197048 .	•	
	•	(Co	ntinued o	n next page)	



TOTAL Metals

Client Lot #: I6G120107.

MS Sample: I6G120161-003

Matrix: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS RP	RPD D LIMITS	METHOD	PREPARATION- ANALYSIS DATE BATCH #
Barium	87 89	(80-120) (80-120) 2.	0 (0~20)	SW846 6010A SW846 6010A	07/15-07/19/96 6197182 07/15-07/19/96 6197182
	D	ilution Factor:		PHOAG GOTON	07/13/07/13/30 013/102

NOTE(S):	B(S):
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Calculations are performed before rounding to avoid round-off errors in calculated results.



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

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	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
		PERCENT			RECOVERY
SURROGATE		RECOVER	Y		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):



General Chemistry

Client Lot #: I6G120107

Percent Moist: 100

Matrix: WATER

PERCENT RECOVERY RPD PREPARATION-

PARAMETER RECOVERY LIMITS RPD LIMITS METHOD ANALYSIS DATE BATCH #

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

(1.0-64) 105 (0-213) SW846 7.3.3 07/16/96
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.



Matrix: WATER

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Metals

Client Lot #: I6G120107

PERCENT RECOVERY RPD -PREPARATION-RECOVERY LIMITS RPD LIMITS ANALYSIS DATE BATCH # PARAMETER METHOD MCAWW 200.7 103 07/15-07/19/96 6197182 Cadmium (80 - 120)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 MCAWW 239.2 07/15-07/16/96 6197182 106 (82-127) 1.7 (0-19)Dilution Factor: 1 MCAWW 200.7 07/15-07/19/96 6197182 101 (80 - 120)Silver 07/15-07/19/96 6197182 101 (80-120) 0.03 (0-20)MCAWW 200.7 Dilution Factor: 1 (80-120)MCAWW 200.7 07/15-07/19/96 6197182 Chromium 101 07/15-07/19/96 6197182 (80-120) 1.3 (0-20)MCAWW 200.7 103 Dilution Factor: 1 07/15-07/19/96 6197182 99 (80-120)SW846 6010A Barium 07/15-07/19/96 6197182 100 (80-120) 1.4 (0-20)SW846 6010A Dilution Factor: 1 (80-120)SW846 6010A 07/15-07/19/96 6197182 Arsenic 103 07/15-07/19/96 6197182 (80-120) 1.2 (0-20) SW846 6010A 105 Dilution Factor: 1 SW846 6010A 07/15-07/19/96 6197182 (80-120)Selenium 104 07/15-07/19/96 6197182 105 (8.0-120) 0.92 (0-20)SW846 6010A Dilution Factor: 1 07/15/96 Mercury 87 (81 - 120)MCAWW 245.1 6197166 (81-120) 0.04 (0-21) MCAWW 245.1 07/15/96 6197166 87

NOTE(S):

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

Dilution Factor: 1



LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #: I6G120107

Matrix: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS		RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	BATCH #
pH (liquid)		C41	RTH10	1-MS/C4F	RTH102-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
	Dil	lution Factor:	: 1				
Total Solids	(Residue)	C4'	TA610	2-MS/C45	TA6103-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
	Di	lution Factor	: 1				
Reactive Cya	ınide	C4	T3910	2-MS/C4	T39103-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
	Di	lution 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

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 Dilution Fact: 1 MS Run #: 6		SW846 7.3.4	07/16/96	6198110
Flashpoint						
>150	>150	deg F 0.0 Dilution Fact: 1 MS Run #: 6		SW846 1010	07/17/96	6200111
pH (liquid)						
4.1	4.1	No Units 0.7 Dilution Fact: 1 MS Run #:	L	MCAWW 150.1	07/12/96	6197132
Total Solids (Res	sidue)					
75000	75000	mg/L 0.4 Dilution Fact: 1	L	MCAWW 160.3	07/15/96	6198195

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: REPORTING	07	7/15/96 Prep	Batch #: ANALYSIS	6197166	DIL
PARAMETER	RESULT	LIMIT	UNITS	METHOD	DATE	•	FACT
Mercury	ND	0.00020	mg/L	SW846 7470	07/15/96		1
Work Order #	: C4T1J	Prep Date:	07	7/15/96 Prep	Batch #:	6197182	
	•	REPORTING			ANALYSIS		DIL
PARAMETER	RESULT	LIMIT	UNITS	METHOD	DATE		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

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

NOTE(S):

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

RESULT

ND

REPORTING LIMIT

UNITS mg/L

METHOD SW846 7.3.3

Work Order #:

PARAMETER

C4T3E

07/16/96

Analysis Date:

07/16/96

Prep Date:

Prep Batch #:

6198110

Dilution Factor: 1

Reactive Cyanide

REPORTING

mg/L

PARAMETER

Reactive Sulfide

METHOD SW846 7.3.4

Work Order #:

C4TA6

Prep Date:

07/15/96

Prep Batch #:

6198195

Analysis Date:

07/15/96

Dilution Factor: 1

RESULT

REPORTING

LIMIT

UNITS METHOD

PARAMETER Total Solids (Residue)

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

DRDODTING

		REPORTIN	IG	
PARAMETER	RESULT	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
	PERC	ENT	RECOVER	Y .
SURROGATE	RECO	VERY	LIMITS	
4-Bromofluorobenzene	9	7	(86-115)
1,2-Dichloroethane-d4	9	5	(76-114)
Toluene-d8	9	7	(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



QUA-4149																			
Client -				Project Manager						Date \	76			Cr	nain Of	Custo	122	mber	
- CONOCO, INC.				CHRIS H	ANSEN					7/2/6	10					77	16	<u> </u>	
Address				Telephone Numb	er (Area Code).	/Fax Number				Lab Number				ļ					
600 RORTH DAIRY ASHFORD					-1124 PA	X 713-293	-1214	!		C6-06-	040			Pε				of	
City	State	Zip Code		Site Contact											An	alysis	s		
HOUSTOR	TX	7.7252		DAVID BO) H	8	1]	j				
Project Name				Carrier/Waybill N	rrier/Waybill Number							c	c	¥	- 1			1	
AMINE WASHER WATER	,	·		PRD X							•	I	L	A.					
Contract/Purchase Order/Quote No.											ĥ,		P	ĭ					
00	1 270			PACK IN	WET ICE/S!	11P TO:	QUANT	ERRA AUSTIN			Ь		_	E	ŀ				
Sample I.D. No. and Description)	Date /	Time	Sample Type	Total Volume	Contain Type	ers No.	Preservative	1	on Receipt	S		۷	R					
SAN JUAN AKINE WASHER WATER		7/8/96		WATER	40NL		2	4 C	(100 -	4	-		X		_				
SAN JUAN AMINE WASHER WATER		MS		WATER	500KL	PLAST	1	HNO3	w 7	-10.95	X								
SAN JUAN AMINE WASHER WATER				WATER	1 I,	PLAST	1	4 Ľ	7			X							
SAN JUAN AKINE WASHER WATER		4		WATER	125 M L	PLAST	1	4 C						X					
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Considerations VERTICAL A DODA					<u> </u>				<u> </u>									$\bot\bot$	
Special Instructions METALS = 8 RCRA	RETALS	NATER=3 :	50L1D/D	DRY WT															
Possible Hazard Identification						Sample D	icnoca	1										····	<u></u>
_	Skin		Poison B	Unk.		Re			Dispos		Г	٦.		-					
Turn Around Time Required	L_ SKIII	imiani 🗀		QC Level	nown	Project Si			Uispos	sai By Lao	L	A/	CHIVE	FOI_			Months		
Normal Rush					. [] III.	1. 10,000 0,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(Opcomy)											
1. Relinquished By				Date ,	Time	1. Receive	ed Bv	7 7							Date			Time	···-
Warn Kon	1 12			7.8.76	12:451		,	100		_				1	7.1	0.90	.]		18
1. Relinquished By 2. Relinquished By				Date	Time	2. Receiv	ed By	<u> </u>							Date			Time	0
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3. Relinquished By	•	, -	·	Date	Time	3. Receive	ed By		······································					L	Date			Time	
£. ◆			-														l		
Comments					·												·		
÷ •	•																		



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.

Maintenance Foreman

Strict I - (505) 393-6161 D: Box 1980 bbs, NM 88241-1980 strict II - (505) 748-1283 S. First esia, NM 88210 trict III - (505) 334-6178 D Rio Brazos Road ec, NM 87410

urict IY - (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 I Copy to appropriate District Office

REQUEST FOR APPROVAL TO ACCEPT	SOLID WASTE
1. RCRA Exempt: Non-Exempt:	4. Generator William's Field
Verbal Approval Received: Yes 🗹 No 🔲	5. Originating Site ELCEDED PLANT
2. Management Facility Destination SUNCO DISPOSAL	6. Transporter SUNCO
3. Address of Facility Operator CR 3500 #345 AZHC NM	8. State NM
7. Location of Material (Street Address or ULSTR) ELCED20 HANT	
9. <u>Circle One</u> :	
All requests for approval to accept oilfield exempt wastes will be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved.	companied by necessary chemical analysis to
All transporters must certify the wastes delivered are only those consigne	ed for transport.
BRIEF DESCRIPTION OF MATERIAL: RAIN WATER, DIONIZI	ED WATER, AND LESS
than 1% Amine	
6-18-97 VERBAL APPROVAL RECURSORD FROM MR. D. FAU; +	DECEIVED N JUN 1 9 1997 OIL COM. DIV. DIST. 3
Estimated Volume 1400 bbls cy Known Volume (to be entered by the or SIGNATURE: Michael Management Fécility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TE	
APPROVED BY: APPROVED BY: TITLE: Div.	logent DATE: 6/19/97 DATE: 6/19/97

CERTIFICATE OF WASTE STATUS

I David & Thompson representative	
forEl 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 isExemptNon-Exempt and that it has been identified	
as non hazardous by characteristic analysis or by product identification as required.	•
	State
Physical Address if appropriate: Hwy 64 Mile Marker 100.5 Blanco, N.M. 87412	
Source and description of waste: Gas Plant Sweetening Waste	
Production impoundments (DI Water, Rain W	ater
Amine) LessThan 190 Amine CS+	
Est Volume 1400 bb) Check the appropriate line(s):	
Check the appropriate fine(s).	
MSDS Information sheet	
RCRA TCLP Analysis RCRA Metals Analysis	•
Corrosivity, Ignitability, Reactivity	
<u>✓</u> Exempt	
I futher certify that there has been no change in the waste stream at the facility	• •
generating the waste since N/A	
Signature Flair & Thomps	
Printed Name David & Thompson	
Title Lead Operator Date 6-17-77	
Dail 15-1/-//	

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

धांदरी - (५०५) ३९३-६१६१ D. Box 1980 : 1 bbs, NM 8824; -1980 strict II - (505) 748-1283 S. First csia, NM 88210 uict III - (505) 334-6178 7 Rio Brazos Road .cc, NM 87410 urici IY - (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 WASTL
1. RCRA Exempt: Non-Exempt:	4. Generator Cowoco
Verbal Approval Received: Yes 🔲 No 😈	5. Originating Site CONOX O Plant
2. Management Facility Destination GUNCO DISPOSA C	6. Transporter SUNES
3. Address of Facility Operator CA 3500 #345 AZ+EC , WM	8. State NM
7. Location of Material (Street Address or ULSTR) Blookfeld, WM	
9. <u>Circle One</u> :	
All requests for approval to accept oilfield exempt wastes will be accepted acceptator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted acce	companied by necessary chemical analysis to
All transporters must certify the wastes delivered are only those consigne	ed for transport.
BRIEF DESCRIPTION OF MATERIAL:	
WATER with CLEANING AGENT	the service of the services and the services to be the services and the services are the services and the services and the services are the se
mode attached	DECEIVED N JUN 1 2 1997
	OIL CON. DIV. DIST. 3
Estimated Volume 400 666s cy Known Volume (to be entered by the o	perator at the end of the haul) ————————————————————————————————————
SIGNATURE: Waste Management Facility Authorized Agent TITLE: Mice	DATE: 6-12-97
	ELEPHONE NO. 505-334-6186
(This space for State Use)	-1
APPROVED BY: Homy B. Fem TITLE: Geol	0915T DATE:6/16/97
APPROVED BY: rue Bush TITLE:	DATE:

CERTIFICATE OF WASTE STATUS

I Louis E. Ferrari	representative
for Coroco Inc.	
do hereby certify that according to the Reso	ource Conservation and Recovery Act
that the above described waste is ExeNor as non hazardous by characteristic analysis	n-Exempt and that it has been identified
Originating Site: S-14 T-29 R-11w1	14 114 County San Tuan State Nu
Physical Address if appropriate: #61 CR 4	1900 Bloom field NM. 87413
Source and description of waste: water	with cleaning agent from
flant in let filter housings.	
Check the appropriate line(s):	
I futher certify that there has been no chang generating the waste since	e in the waste stream at the facility
Signature Jours E. Ferraci	
Title Mant. Foreman Date 6-12-97	

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

		Bero	re using produ	ict, read and	Ollow directions	ina pi	ecautions on p	TO DUCT INDEL BOO DUILBEIL	18.
	ب ستک	Slight toxicity due to high pH ld(50) (rat):6.5 g/kg							
		Strong irritant, chemical burns possible							
		can cause burns					rritant		
		Chronic, Supchronic, etc	٤.			. <u> </u>			-
	TOXICITY	no chronic	effects						
	XE								
	2		. •						
			•						
		. ,	•						
			·:'	•					
									•
-	1	PERMISSIBLE EXPOSE	JRE LIMIT (SM					Others	
		ACGIH 19	(2)		SHA 19				
	e s		X Skin	<u> </u>	Savere Savere	X (Moderate	Mild (transient)	
3	Exposur	CORROSIVITY	5kin Eye	-	4 hrs. (OOT) May cause bilindried	4		24 ML (CPSC)	
THE COURT A WIND) Ja	SENSITIZATION			<u> </u>	INH	ALATION EFFE	CYS Cyangels	Asphyxiani
2	Effocts	X Skin	RESORATO	7	Allergen	<u> L</u>	effect	Cyandia	
Į.	- N	may cause		·					
1	ζ	OTHER (Specify): Repeated contact- skin defetter	Other (Specify):						
Man True Live Bill		INGESTION INDUS	Do NOT		Give plenty		Get medical	Give Give	cold H2O or
	First Ald	DERMAL .	vomiting		Contaminated	<u> </u>	Contaminated		
9	4	X Frush with soap and water EYE CONTACT	Get made	· L	remove & launder	لل	shoes - destroy	(specity))	
	Cuelou	Flush with plenty of Bt least 15 minutes	of water for	ĵC j	Get medical attention		Otner (specify):		<u> </u>
	F.	INHALATION X Remove to	If not brea	itali 🗍	Give oxygen	x	Get medical	Other (specify):	
-	لبـ	VENTILATION REQU		Uways maintain	exposure below per			3	k for air contaminant
Ì	*	or environmental h	esith specialist	Z.X	Local extrautt		wintilation		oxygen exictancy
) } }	X Other (specify):		<u> </u>	· .				
	BPECIAL PROTECTION INFORMATION	EYE X	Face shield and goggles	HAND (GLO			Butyl rupber		ecity): Any
	7. P. J.	Safety	Coggles	Polyvinyi			rupper [Poly- sinyleng Impervi	ous material
	18 X	PESPIRATOR TYPE	Supplied	Can er es	rerlage 1	Filter -		Other (specify):	
	3 B	OTHER PROTECTIVE	EQUIPMENT	gas or var	الكار	lume, I	mist L		
1		Auboer Scott	Apron	Other (specify):	Imperviou	15 (clothing		
	u	PRECAUTIONARY LA	Co not 9	et in ayes,	Do not breathe dust, vapor, mist,	П	Keep container	Keep away from	Stere in tightly cligate containers
	ا ق	after handling	CIDENING Keep fro	m contact	عبو ا	ш	closed	Godn fumas	C. C
	EPECIAL SECAUTIONS	Compassibles	with cio	thing and moustible	may container may contain nazardous residue	. 🗆	Use explosion proof equipment	Other (specify):	
	SP PRED	Store in a	Gool d	ry place	2	-			
} !			ABOVE ENFO	MATION IS	ACCURATE TO THE	BES"	OF OUR KNO	LEDGE. HOWEVER, SI	NCE DATA. SAFETY
	(دة	STA	NOAROS, AND	GOVERNMENT SUSE ARE BE	REGULATIONS AR YONO OUR CONTRO	E SU	BJECT TO CHAP F MAKE NO WA	HEE AND THE CONDITION BRANTY, EITHER EXPRE OF THE INFORMATION C	SS OR JOHPLIEU.
	•	CMA .	DISCLAIM	ALL LIABILI	TY FOR RELIANCE TO HIS PARTIC	THE	RECH, USER S	SHOULD SATISFY HIMSE	LF THAT HE HAS
		a carrier	***************				ر کرد سیام سازد دورتانی		

trict I - (505) 393-6161). Box 1980 5bs. Nie 88241-1980 trict II - (505) 748-1283 ! S. First esla, NM 88210 trict III - (505) 334-6178 PRO Brazos Road

ude IV · (505) 827-7131

.ac. NM 87410

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 8/6/95

> Submic Original Plus 1 Copyto appropriate District Office

REQUEST FOR APPROVAL TO ACCEPT	SOLID WASTE
1. RCRA Exempt: Non-Exempt: 🗹	4. Generator Hallibueton
Verbal Approval Received: Yes V No	5. Originating Site YARD
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) 4109 Emain	
9. <u>Circle One</u> :	
A. All requests for approval to accept oilfield exempt wastes will be accepted acceptator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigners.	ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by
BRIEF DESCRIPTION OF MATERIAL:	d for transport.
WG-19 Gel Water MIXED	with Fresh water
<i>\n</i> 1	BEIVED RECEIVED
Go Bill c	ON. DIV. OIL CON. DIV. DIST. 3 perator at the end of the haul) ————————————————————————————————————
SIGNATURE: Male Visto Management Facility Authorized Agent TITLE: DISMOSA	
(This space for State Use)	14
	membral Geologist DATE: 6/6/97

urici I - (505) 393-6161 D. Box 1980 1980 bbs, NM 88241-1980 strict_II - (505) 748-1283 1 S. First. .csia, NM 88210 rict III - (505) 334-6178 Rio Brazos Road .cc, NM 87410 urici IY - (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 I Copy to appropriate District Office

REQUEST FOR APPROVAL TO ACCEPT	SOLID WASTE
RCRA Exempt: Non-Exempt:	4. Generator HAll bucton
Verbal Approval Received: Yes Verbal No	5. Originating Site YALD
2. Management Facility Destination Sunco Disposal	6. Transporter SUNCO
3. Address of Facility Operator CR 3500 + 345, AZIEC NM	8. State UM
7. Location of Material (Street Address or ULSTR) 4109 E. MAIN	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accept one certificate per job. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigners.	ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by
BRIEF DESCRIPTION OF MATERIAL:	
WG-19 GEL WATER MIXED WITH FR	DECEIVED JUN - 5 1997 DOLL COM. DOLV.
Estimated Volume 90 BBLs cy Known Volume (to be entered by the op	perator at the end of the haul) — cy LMGR DATE: 6-5-97
(This space for State Use)	
APPROVED BY:TITLE:	DATE:
APPROVED BY: S 9 TITLE:	DATE (5/5/97)

CERTIFICATE OF WASTE STATUS

I Da/e	D. Kak	rich			representa	tive	
for Hallib	urTon	Egeng	y y	Serui	ces	· ·	
do hereby certify that	t according	g to the R	esource	Conservat	tion and Re	ecovery Act	
that the above descri	bed waste :	isI 	Exempt Non-Exe sis or by	empt and to product i	hat it has b dentificatio	peen identific on as require	ed :d.
Originating Site: S	T	R	1/4	1/4	County	San Juan	_State_ <i>UM</i>
Physical Address if a	ppropriate:	2615	San	Juga	Blud		
Source and description T futher ADDED to	CERTIFU	1 that	. Hee	e has	been	NOTHIN	6
Check the appropriat	e line(s):						
MSDS Informa RCRA TCLP A RCRA Metals A Corrosivity, Ign Exempt	nalysis Malysis	eactivity	· ·				•
I futher certify that the generating the waste		en no cha	inge in t	he waste s	stream at th	ne facility	
Signature Dale Printed Name Da	A Kal	vil Kalc	ich				
Title Team Con Date 6-5-97	-dina Tor	<u> </u>					4

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

HALLIBURTON ENERGY SERVICES - SH 3 PAPERS 44 . . 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 TRLR# : NAME: TOM COLLINS TELEPHONE: (505) 324-3500 DRIVER: U.S. DOT HAZMAT REG. NO. - 051496 005 031E 5 NUM CONTAINERS: * * TOT GROSS LBS 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

00/ VO/ //

TRANSPORTATION.

SIGNATURE

PAUL 01 Ur 01

MATERIAL SAFETY DATA SHEET HALLIBURTON ENERGY SERVICES REVISED DATE 01-17-96 DUNCAN, OKLAHOMA 73536

DATE: 06-05-97

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

AFTER HOURS: 405/251-3760

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

CHFNICAL CODE: WG-19 GELLING AGENT - 50 LGS PART NUMBER: 516001070

PKG QTY: 50 LB BAG APPLICATION: GELLING AGENT

SERVICE USED: STIMULATION

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

PERCENT TLV PEL

GUAR GUM > 60 % 10 MG/M3 15 MG/M3

* * * * * * * * * * * * * SECTION III - FHYSICAL DATA * * * * * * * * * * * * * * * *

PROPERTY

MEASUREMENT

OFF WHITE SOLID, POWDER APPEARANCE

BEAN-LIKE SPECIFIC GRAVITY (H2O=1) 1.300

BULK DENSITY 35.00 LB/CU.FT.

8.5 FOR 5% SOL

SOLUBILITY IN WATER AT

20 DEG C. GMS/100ML H20 FORMS GEL

BIODEGRADABILITY READILY

PERCENT VOLATILES N/A

EVAPORATION PATE(BUTYL ACETATE=1) N/A

VAPOR DENSITY

N/A VAPOR PRESSURE (MMHG)

BOILING FOINT(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

FLASH POINT N/A

430 F / AUTOIGNITION TEMPERATURE 221 C

FLAMMABLE LIMITS (OZ. PER CU. FT.) LOVER .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.

INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE, CARBON

MONOXIDE AND NITRUGEN OXIDES.

JNUSUAL 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

PN: 516001070 PAGE 2

```
HOUSEKEEPING PROCEDURES ARE REQUIRED TO MINIMIZE THIS POTENTIAL HAZARD.
* * * * * * * * * * * * * SECTION V - HEALTH HAZARO 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
                 "NTP, IARC, OSHA, OR, ACIGH".
ACCORDING TO :
PRODUCT TOXICITY DATA: TOX ORL-RAT LD50:7060 MG/KG
                       TOX ORL-MUS LD50:8100 MG/KG
                       TOX ORL-RBT L050:7000 MG/KG
                       TOX 6005=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 INDIVIOUALS.
OTHER SYMPTOMS AFFECTED:
  A REVIEW OF AVAILABLE DATA DOES NOT IDENTIFY ANY CONDITIONS WORSENED 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, CARGON DIOXIDE AND/OR CARBON MONOXIDE.
HAZARD POLYMERIZATION: WON"T OCCUR
CONDITIONS TO AVOID:
  NOT APPLICABLE,
```

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

PN: 516001070 PAGE 3

```
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.
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
            PRESSURE: N REACTIVE: N ACUTE (IMMEDIATE): Y
  FIRE: N
  CHRONIC (DELAYED): N MIXTURE OR PURE MATERIAL: MIX
8. 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
O. EPA - SARA TITLE III, 40 CFR 372 (LIST OF TOXIC CHEMICALS)
```

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

CEPA NE

TSCA YES

CHEMICAL CONTAINS NO TOXIC INGREDIENTS

E. COMPONENTS LISTED ON FOLLOWING CHEMICAL INVENTORIES

EEC N/D ACOIN N/D NPR NE

DRSM NE

PN: 516001070 PAGE 4

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 LAGORATORIES, 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 KANY SITUATIONS IN WHICH THE LISTED PRODUCT OR THIS INFORMATION HAY 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 PESPONSIBILITY 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, HALLIGURTON ENERGY SERVICES.

tirict I - (505) 393-6161

D. Box 1980

SES, NIVI 88241-1980

ttrict II - (505) 748-1283

S. First

csia, NM 88210

trict III - (505) 334-6178

Rio Brazos Road

uria IY - (505) 827-7131

.c, NM 87410

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

Roser Andrisa Form C-138 Originated 8/8/95

Submit Original
Plus I Copy
to appropriate
District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator BIGA WELLSELVICE |
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site WASH SUMP |
| 2. Management Facility Destination SUNCO DIS POSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator #345 CR 3500 . AZ+ec , NM | 8. State NM |
| 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 accept acceptance; one certificate per job. All requests for approval to accept non-exempt wastes must be acceptance. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigner. | ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | Annual Control of the |
| ESTIMATURE: Masse Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALDUICH TO THE CONTROL TESTING T | DIST. 3 Perator at the end of the haul) — cy |
| (This space for State Use) APPROVED BY: Deny 3. Jenny TITLE: Geol | |
| APPROVED BY: Mortyne of Kely TITLE: Enviro | nmental Geologist DATE: 5/6/97 |

HCLI - (505) 393-6161 Box 1980 51, NM 86241-1980 ricli - (505) 748-1283 5. First sia, NM 88210 rics III - (505) 334-6178 Rio Brazos Road c, NM 87410 rics IV - (505) 827-7131

New Mexico Energy Nuncrals and Natural Resources Department Oil Conservation Division

Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131 Form C-13 Originated 8:5%

> Submit Ongre Plus 1 Co to appropria District Offi

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|--|
| 1. RCRA Exempt: Non-Exempt: X | 4. Generator BIGA WELL SCRVICE |
| Verbal Approval Received: Yes 🔲 No 🔯 | 5. Originating Site WASH SUMP |
| 2. Management Facility Destination SUNCO DIS POSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator #345 CR 3500, AZ+EC, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) | |
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| Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | n of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | The state of the s |
| EQUIPMENT WASH DOWN WATER DECEIVED MAY 1 2 1997 OIL COM. DIV. DIST. 3 Estimated Volume 500 bb/s cy Known Volume (to be entered by the op | |
| Waste Managerhant Facility Authorized Agent | EPHONE NO. 505-334-6/86 |
| (This space for State Use) APPROVED BY: Deny 3. Jean TITLE: Geol | 09 13 DATE: 572/97 |

strict I - (505) 393-6161

D. Box 1980

bbs, NM 88241-1980

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Form C-138 Originated 8/8/95

> Submit Original Plus 1 Copy to appropriate District Office

| REQUEST | FOR | APPROV | 'AL TO | ACCEPT | SOLID | WASTE |
|---------|-----|--------|--------|--------|-------|-------|
| | | | | | | |

| 1. RCRA Exempt: Non-Exempt: | 4. Generator BIGA WELLSCLVICE |
|--|--|
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site WASH SUMP |
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| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: EQUIPMENT WASh DOWN WATER | |
| Confine to the confin | and the second of the second o |
| | DECEIVED
N MAY - 1 1997 |
| | OIL COM. DIV.
DIST. 3 |
| Estimated Volume 500 bbls cy Known Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Michael Jalon TITLE: DISpos. Waste Management Fecility Authorized Agent | AL MGR DATE: 5-1-97 |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TE | LEPHONE NO. <u>505-334-6/86</u> |
| (This space for State Use) | • (|
| APPROVED BY: Demy g. Found TITLE: Geold | 09 15) DATE: 5/2/97 |
| APPROVED BY: TITLE: | DATE: |

CERTIFICATE OF WASTE STATUS

| I RON Fellabaun | | _representative | |
|--|-----------------------|---------------------------------------|----------------------|
| for BIG A WELL SP. | ruice | | ·
 |
| do hereby certify that according to t | the Resource Conserv | ation and Recovery | y Act |
| that the above described waste isas non hazardous by characteristic a | Non-Exempt and | that it has been identification as re | entified
equired. |
| Originating Site: STR- | 1/41/4 | County | State |
| Physical Address if appropriate: 7 | 708 5, Tacke | e AUR, FAR. | MINGTON NM |
| Source and description of waste: 3 | | , | |
| Check the appropriate line(s): | | | |
| MSDS Information sheet X RCRA TCLP Analysis X RCRA Metals Analysis Corrosivity, Ignitability, Reacti Exempt | ivity | | , |
| I futher certify that there has been no generating the waste since | o change in the waste | stream at the facil | ity |
| Printed Name A RON fellab Title Hesident - CEO Date 5-1-97 | DAUM | _
 | |

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

| ENVIRONMENTALLABS | |
|-------------------|--|
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| 07 S. CARLTON • FARM | IINGTON, N | M 87401 • (5 | 05) 326-2395 | İ | | ~) | | 1 | | | | İ | | | İ | | | | | | | | | | | | • |
| PROJECT MANA
Analytica Lab I.D | | | | | | 2050L | | | | | | | | | | | | | | | | | | | | | • |
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address: | · | <u>Sinir</u> | Usyceals
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| Sample ID | Date | Time | Matrix Lab ID | | | X | | \ | | | | | | | | | | | | | | | | | | | |
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General Water Quality Sunco Disposal

Project ID: Big A Well Service
Sample ID: Big A Well Service
Laboratory ID: 6077

Date Reported:Date Sampled:Time Sampled:

12/31/96 15:00

12/13/96

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 CaCO3 | 129 | mg/L |
| | Carbonate Alkalinity as CaCO3 | NA | mg/L |
| | Hydroxide Alkalinity as CaCO3 | . 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 CaCO3 | . 179 | mg/L |
| | Calcium | . 55.8 | mg/L |
| | Magnesium | 9.67 | mg/L |
| | Potassium | . 19 | mg/L |
| | Sodium | . 140 | mg/L |
| Data Validatio | n | • | Acceptance Level |
| | 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, <u>Methods for Chemical Analysis of Water and Wastes</u>, 1983. <u>Standard Methods For The Examination Of Water And Wastewater</u>, 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 | * 3 | 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

01/08/97

Sample ID:

Big A Well Service

Lab ID:

12/31/96

Sample Matrix:

6077

Date Sampled: Date Received: 12/31/96

Report Date:

Water

Date Analyzed: 01/07/97

Preservative: Condition:

Cool Intact

| Tärget 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 |

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

101

88 - 110%

Bromofluorobenzene

94

86 - 115%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Review



Chlorinated Volatile Organic Compounds EPA Method 8010

Sunco Disposal

Project ID:

Big A Well Service

Report Date:

03/04/97

Sample ID:

Big A Well Service

Date Sampled:

12/31/96

Lab ID:

6077

Date Received:

12/31/96

Sample Matrix:

Water

Date Analyzed:

01/10/97

Preservative:

Cool, HCI

| Analyte. | Concentration | Detection Limit |
|---------------------------|---------------|-----------------|
| , and y C | (μg/L) | (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 |

Ştírrogate Recovery (1-Qhloro-2-fluorobenzene): 89%

70% - 130% (QC Limits)

Purgeable Aromatics

Matrix Spike Analysis

Lab ID:

6077Spk

Sample Matrix:

Water

Preservative: Condition:

Cool 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

Daview

Purgeable Aromatics

Duplicate Analysis

Lab ID:

6077Dup

01/08/97

Sample Matrix:

Water

Report Date:
Date Sampled:

12/31/96

Preservative: Condition:

Cool

Date Received:

12/31/96

Intact

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.

| | Surrogate- | Percent Recovery | Acceptance Limits |
|-------------------------|--------------------|------------------|-------------------|
| 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

Paviow

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>

Percent Recovery

Acceptance Limits

Trifluorotoluene

101

88 - 110%

Bromofluorobenzene

90

86 - 115%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Analys

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: Mehods for Determination of Metals; <u>Test Methods for Evaluating Solid Wates</u>, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

Réview

General Water Quality Quality Control Report

Sunco Disposal

Report Date:

12/13/96

| Parameter | Analytical Result | - Certified Value | Acceptance Range | Units |
|---|-------------------|--|------------------|----------|
| 1-32 3000 1 Canada a a a la como de la como | | A Company of the Comp | | |
| 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 - (505) 393-6161 P. C. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 Pirtict III - (505) 334-6178 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-138 Originated 8/8/95

> Submit Original Plus 1 Copy to appropriate District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| negoest for Approval to Accept | SOLID WAS IE |
|---|--|
| 1. RCRA Exempt: Non-Exempt: X | 4. Generator UNOCAL |
| Verbal Approval Received: Yes 🔲 No 🔲 | 5. Originating Site #1 _ # 2 - # 4 |
| 2. Management Facility Destination Sunco DisposaL | 6. Transporter Sunco Trucking |
| 3. Address of Facility Operator #345 CR. 3500, Azree, N.M. | 8. State New Mexico |
| 7. Location of Material (Street Address or ULSTR) (1) N.E. 1/4 N.E 1/4 (2) S.E. 1/4 N.W. 1/4 | |
| 9. <u>Circle One</u> : 4 S.w. 1/4 S.w. 1/4 | SEC-30 T-27N R-6W-R.A. COUNTY |
| A. All requests for approval to accept oilfield exempt wastes will be accepted. Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| EFFULENT LIQUIDS - WASH DOWN WATER - USED CO | empressor OIL - USES ENGINE OIL F |
| ANTI - FREEZE DECEIVED APR 2 9 1997 | RECEIVED
N APR 2 1 1997 |
| OIL CON. DIV.
DIST. 3 | OIL COM. DUV.
DIST. 3 |
| Estimated Volume 3400 Column Column Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Hal Stone TITLE: MANAGE | SER DATE: 4-18-97 |
| TYPE OR PRINT NAME: HAL STONE TE | LEPHONE NO. 505 - 334 - 6186 |
| (This space for State Use) | |
| APPROVED BY: Demy B. Faw TITLE: Geolo | 9 15 T DATE: 4/21/97 |
| APPROVED BY: Martyne of Mily TITLE: Finding | until Godavist DATE: 4/28/97 |

APPROVED BY:_

New Mexico nt

Form C-138 Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

| 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 Rio C, NM 87410 District IY - (505) 827-7131 |
|---|
|---|

4.5

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|---|
| 1. RCRA Exempt: Non-Exempt: 🔀 | 4. Generator UNOCAL |
| Verbal Approval Received: Yes No No | 5. Originating Site # 1 _ # 2 _ # 4 |
| 2. Management Facility Destination Sunco DisposaL | 6. Transporter Since Trucking |
| 3. Address of Facility Operator #345 CR. 3500, Azrec, N.M. | 8. State New Mexico |
| 7. Location of Material (Street Address or ULSTR) (1) N.E. 1/4 N.E. 1/4 | |
| 9. <u>Circle One</u> : # S.w. 1/4 S.w. 1/4 | Sec-30 T-27N R-6W-R.A. COUNT |
| Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | on of origin. No waste classified hazardous by |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: EFFULENT LIQUIDS - WASH DOWN WATER - USES CO | ompressor Oil - USES EVEINE Oil; |
| ANTI - FREEZE | |
| | PECEIVED APR 2 1 1997 OIL COM. DIV. DISTI. 3 |
| Estimated Volume 3400 Cols cy Known Volume (to be entered by the op | perator at the end of the haul) ————— cy |
| | DATE: 4-18-97
LEPHONE NO. 505-334-6186 |
| APPROVED BY: Demy of Jent TITLE: Geof | 0915T DATE: 4/2/197 |

TITLE:

DATE:

| do hereby certify that according to the Resource Conservation and Recovery Act that the above described waste isExempt | |
|---|----|
| that the above described waste isExempt | |
| that the above described waste isExempt | |
| 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 1/45w 1/45w County Rio Arriba State M. | и. |
| Physical Address if appropriate: LATERAL #4 Compresson Station | |
| Source and description of waste: EFFULENT LIQUIDS - WASHOOWN WATER, USED | |
| COMPRESSOR OIL, USED ENGINE OIL, ANTI-FREEZE | |
| METAL ANALYSIS REPRESENTIVE 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 futher certify that there has been no change in the waste stream at the facility generating the waste since $7-24-96$ | |
| Signature Sea Simber Printed Name LES GIMBER Title Field OPERATOR #1 Date 4-15-97 | - |

| 1 LES G | MBEL | representative | |
|--|---------------------------|---|------------|
| for UNOCAL | | | |
| | | | |
| do hereby certify that | according to the Resou | arce Conservation and Recovery Act | |
| | | npt -Exempt and that it has been identified or by product identification as required. | |
| Originating Site: S-2 | 6 T-26-N R-7-W 1/4 | 4 SE 1/4 NW County RIO ARAJBA State A | /.м. |
| Physical Address if ap | propriate: <u>LATERAL</u> | #2 CompRESSOR STATION | _ |
| Source and description | of waste: <u>FFULE</u> | INT LIQUIOS - WASHDOWN WATER, | - · |
| USED Compaess | · OIL, USED | ENGINE OIL, ANTI-FREEZE | - |
| METAL ANA | 4 SIS REPRESENT | TIVE FOR LATERAL #1, #2, #4 | - |
| Check the appropriate | line(s): | | - |
| X MSDS Informati | | | |
| RCRA TCLP Ana | · | | |
| Corrosivity Ignit | ability, Reactivity | · | |
| Exempt | , | | · |
| I futher certify that the generating the waste s | _ | in the waste stream at the facility | |
| Signature Les Ha | mb | | |
| | GIMBEL | | |
| Title FIELD OPER. | | | |
| Date 4-15-97 | | | |

| <u>I</u> | LES GIMBEL | representative |
|-------------|---|---|
| for | UNOCAL | |
| 101 | LA NOCAL | |
| | | |
| do here | by certify that according to | the Resource Conservation and Recovery Act |
| that the | above described waste is _ | Exempt |
| as non l | hazardous by characteristic | X Non-Exempt and that it has been identified analysis or by product identification as required. |
| | | |
| Originat | ting Site: S- <u>27</u> T- <u>27N</u> R | -6-w 1/4 NE 1/4 NE County Rio ARAIBA State NM |
| Physical | Address if appropriate: | LATERAL # 1 COMPRESSON STATION |
| Source a | and description of waste: <u>£</u> | FFULENT LIQUIOS - WASh DOWN WATER, |
| USE | O COMPRESSOR OIL, | USED ENGINE OIL, ANTI-FREEZE |
| MEI | CAL ANALYSIS REPRE | SENTINE FOR LATERAL #1, #2, #4 |
| Check tl | he appropriate line(s): | |
| _X_M | SDS Information sheet | |
| | RA TCLP Analysis | |
| | RA Metals Analysis | |
| | rrosi vity, Ignitabilit y, Reacti
empt | ivity , |
| | · | |
| | certify that there has been n
ng the waste since 7-2y- | o change in the waste stream at the facility |
| Signatu | se Les Dombe | |
| Printed : | Name LES Gimbel | |
| Title | reld OPERAtor #1 | |
| Date_4 | 1-15-97 | |



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 |
| 02 4 9G | 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 | NÖ
 | 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 | | |
| 03921 | Flame/ICP Prep For Metals, TCLP Method: SW-846 3010A | Complete | | |
| 10450 | Arsenic by ICP, TCLP
Method: SW-846 6010A | ND | mg/l | 0.10 |
| 10640 | S Selenium by ICP, TCLP
Method: SW-846 6010A | Ю | mg/l | 0.30 |
| 09471 | f TCLP Extraction, Metals
Method: SW-846 1311 | 100 | % Solids | 0.001 |

Analytical Repor



The Quality Solution

Sample ID: Lateral #1 Effluent Liq.

On Site Technologies, Ltd.

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 CFR1910.1200 (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.

| | | | SECTIO | ו אכ | | | | | |
|--|-----------------|-----------------|----------------------------|--|--|-------------------|--------------|--|-------------|
| MANUFACTURER'S NAME | | | | · · · · · · · · · · · · · · · · · · · | EMER | GENCY TELEPHONE N | 10. | | |
| CREST OIL AND CHE | MICAL, INC. | | | | | (405) 23 | 32-7738 | 3 | |
| OURESS 322 N, Fonshill, | P.O. E | зох | 36396, | OKLAHCMA C | ITY, OK | 73136-039 | 9.6 | | |
| RODUCT NAME
CREST FLEETGUARD | | | | | | UCT CODE NO. | 510000 | | 3. |
| CHEMICAL NAME AND SYNONYMS
ANTIFREEZE: SOLVEN | # FNCINE C | 001.3 | NT FC | | | | | | |
| CHEMICAL FAMILY | r, engine c | FORM | IULA | | MOLECUL | AR WEIGHT | | | |
| NA DEPARTMENT OF HAZARO CLASSIFICATION | | | | NA
SHIPPING NAME | | | | | |
| TRANSPORTATION CHEMICAL ABSTRACT | NA | | l | ANTI | FREEZE | ETHYLENE (| GLYCOL | BAS | 5E) |
| REGISTRY NAME . | ДИ | | | <u>.</u> | | | | | |
| CHEMICAL ABSTRACT
REGISTRY NUMBER | 107-21- | 1 | | | | | · | | |
| • | \$8 | CTION | I II - HAZAR | DOUS INGREDIENTS | • | | | | |
| | | 3 | TLY
(Units) | • | | . , | | 5 | (Units |
| ETHYLENE GLYCOL | | 20 | 50ppm | | ······································ | | | | |
| - CINIEDNA GEICOB | | - | 3055 | • . | | -, | | | |
| | | - | <u> </u> | <u> </u> | | | | | |
| | | - | | | | | | | <u> </u> |
| · | | <u> </u> | | ļ | | | | | |
| ······································ | | \$E(| TION III - P | HYSICAL DATA | | | | | `. |
| BOILING POINT (°F.) | 383° F. | FREE | ZING POINT | | • | O°F. | | sou | .10 |
| VAPOR PRESSURE (mm Hg.) | .1 | SPEC | IFIC GRAVITY | H,0 = 1) | | 1.12 | STATE | LIQ | UIO |
| VAPOR DENSITY (AIR = 1) | 2.1 | | ent, volatile
Dlume (%) | | | 95.0_ | SIAIE | XX | |
| SOLUBILITY IN WATER | COMPLETE | EYAP | ORATION RATE | = !) | • | LONG | | GAS | j |
| APPEARANCE AND OOOR DYED GO | REEN - SLIG | нт с | DOR | | | | | | |
| · | SECTIO | - עו א | FIRE AND E | XPLOSION HAZARD | DATA | | | <i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| FLASH POINT (Method used) | | | ············ | I FLAMMABLE LIM | | OWER 1.0 | UPPER | | |
| EXTINGUISHING MEDIA | F. (TCC) | • | · | S BY YOLUME | | 1.0 | _ | | 4D |
| NFPA CLASS B EXTI | NGUISHERS (| co ₂ | OR FOAL | M) FOR CLASS | III B F | TRES. | | | |
| Special fire fighting procedures WA | TER SPRAY M | AY E | E INEF | FECTIVE ON F | IRE BUT | CAN PROTEC | T FIG | HTE | RS, |
| COOL CLOSED CONTAINERS | | SE V | /apors. | USE FOG NO | ZZLES IF | WATER IS | USED. | US | 5 2 |
| AIR-SUPPLIED BREATHING | MASKS. | | | | | | | | |
| LIMITUAL SIRE AND EXPLOSION MATAROS | 7 7 CUDY 11 CO. | | | VEED COURTS | VED MIC | IMI V. CT OCT | | 01.34 | <u>-</u> |
| UNUSUAL FIRE AND EXPLOSION HAZAROS S | LIGHTLY CCM | .5US. | CIOSE | KEEP CONTAI
CONTAINERS | NEK TIGI
May fyi | TILL CLOSE | YDUSED
15 | ULA.
TO | LE |
| FROM OXIDIZERS, HEAT A EXTREME HEAT. APPLYIN | | | | | | | AF QUED | •• | |

- 4 THOSIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

i fattagrada et a coma a completa de la completa de la completa de la completa de la completa de la completa d I. PRODUCT IDENTIFICATION ******* MOBIL PEGASUS SPECIAL A SUPPLIER: HEALTH EMERGENCY TELEPHONE: MOSIL DIL CORP. 100 CHEMICAL NAMES AND SYNONYMS: 🖖 👊 (212) 883-4411 🔭 🖂 🎎 🎉 TRANSPORT EMERGENCY TELEPHONE: PET. HYDROCARBONS AND ADDITIVES (800) 424-9300 (CHEMTREC) USE CR GESCRIPTION: GAS ENGINE BIL ********* II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES ** APPEARANCE: ASTH 5 LIQUID COOR: MILD VISCOSITY AT 100 F, SUS: 450.0 AT 40 C, CS: 88.0 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 POIN
531LING POINT F(C): > 600(316) POUR POINT F(C): -30(-34) RELATIVE DENSITY, 15/4 C: 0.69 SOLUBILITY IN WATER: NEGLIGIBLE VAPOR PRESSURE-MM HG 200: < .1 NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES HADR FURTHER INFORMATION, CONTACT YOUR LOCAL MARKETING OFFICE. (APPROX) MG/M3 PPM (AND NOTES) CALERCOUS INGREDIENTS: MONE STHER INGREDIENTS: 1 REFINED MINERAL DILS ADDITIVES AND/OR OTHER INGREDS.~. <15 KEY TO SOURCES: A=ACGIH-TLV, A*=SUGGESTED-TLV, M=MOBIL, D=OSHA NOTE: LIMITS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS. ******************* IV. HEALTH HAZARD DATA *************** EFFECTS OF OVEREXPOSURE: SLIGHT EYE IRRITATION. SLIGHT SKIN IRRITATION. Company of the second ************ 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.

INSESTION: 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. OO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

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

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

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE NEACTIVITY: 0

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZERS
HAZARDOUS DECOMPOSITION PRODUCTS: METAL OXIDES. CARBON MONOXIDE.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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 SOO-424-9802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: ADSORB ON FIRE RETARDANT

PROCEDURES IF HATERIAL 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.

ASTE 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.

TOXICOLOGICAL DATA *** XI. ---ACUTE--

SAL TOXICITY (RATS): SLIGHTLY TOXIC (ESTIMATED) --- BASED DN 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

D.C.T. HAZARD CLASS: NOT APPLICABLE

US 03HA HAZARD COMMUNICATION STANDARD: PRODUCT ASSESSED IN ACCORDANCE WITH DSHA CFR 1910.1200 AND DETERMINED NOT TO BE HAZARDOUS.

RORA INFORMATION: THE UNUSED PRODUCT, IN OUR OPINION, IS NOT SPECIFICALLY LISTED BY THE EPA AS A HAZARDOUS WASTE (40 CFR, PART 2610); DOES NOT EXHIBIT THE HAZARDOUS CHARACTERISTICS OF IGNITABILITY, CORROSIVITY, OR REACTIVITY, AND IS NOT FORMULATED WITH THE HETALS CITED IN THE EP TOXICITY TEST. HOWEVER, USED PRODUCT MAY BE REGULATED.

THE FOLLOWING PRODUCT INGREDIENTS ARE CITED ON THE LISTS BELOW:

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

--- KEY TO LIST CITATIONS ---

1 = OSHA Z, 2 = ACGIH, 3 = IARC, 4 = NTP, 5 = NCI, 6 = EPA CARC, 7 = NFPA 49, 8 = NFPA 325H, 9 = DOT HMT, 10 = CA RTK, 12 = MA RTK, 13 = MN RTK, 14 = NJ RTK, 15 = MI 293, 17 = PA RTK. 16 = FL 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 SEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL MASSAVILES DE EYESY KIND AND NAIUSE, INCLUDING WARRANTIES DE MERCHANIABILITY AND ETINESS EDR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY DE THE PRODUCT. "HOTHING IS INTENDED AS A RECOUMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING THE LICEUSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING ROCEOURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

السيدينية أأران المعرزة سنحل

Mobil MARIL 25 US-SPECIAL - 275340 PAGE & OF WARREN OF W REPARED 3Y: MOBIL OIL CORPORATION
ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPARTMENT, PRINCETON, NJ

3225 GALLOWS ROAD, FAIRFAX, VA 22037 (703) 849-3265

*** SAPPENDIX HARAS

FGR MOBIL USE ONLY: (FILL NO: MTN3918802*2) MHC: 1* 1* NA 1* 1* PPEC: ID85-030 APPROVE REVISED: 05/09/85

1. Non-Exempt: x

2. Management Facility Destination: Sunco Disposal

3. Address of Facility Operator: #345 CR 3500, Aztec NM

4. Generator: Burlington Res.

5. Originating site: Val Verde Plant

6. Transporter: Sunco

7. Location of Materials: Bloomfield, NM

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: Mastyn J Mely TITLE: Environmental Gedays DATE: 4/10/97

printed in 7mt 4/10/97

011 G0N. D1V. DIGT, 33

4-10-97

Here is a copy For your Files

Including the additional Including the Sant to US By

Shown 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. Marbone Kicking

..... (505) 393-6161 U. Box 19. 0 obos, NM 88241-1980 strict II - (505) 748-1283 1 S. First tesia, NM 88210 trict III - (505) 334-6178

strict IV - (505) 827-7131

7 Rio Brazos Road

.cc, NM 87410

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 Čopy to appropriate District Office

| HEQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE | | | | | | |
|--|-------------------------------------|--|--|--|--|--|--|
| 1. RCRA Exempt: Non-Exempt: 🗹 | 4. Generator Buelington Res. | | | | | | |
| Verbal Approval Received: Yes 🔲 No 🗹 | 5. Originating Site WAI VERDE PLANT | | | | | | |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO | | | | | | |
| 3. Address of Facility Operator #345 CR 3500, AZTEC NM | 8. State NM | | | | | | |
| 7. Location of Material (Street Address or ULSTR) Hourfeld, NM | | | | | | | |
| 9. <u>Circle One</u> : | | | | | | | |
| A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. 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 | | | | | | | |
| WASH WATER FROM CLEANING PLANT EQUIPM | ient | | | | | | |
| | BECZIVED | | | | | | |

RECEIVED

MAR 2 7 1997

Environmental Bureau Oil Conservation Division



| | | · · · · · · · · · · · · · · · · · · · |
|---|---|---------------------------------------|
| Estimated Volume 1400 GALS cy Known Volume (| (to be entered by the operator at the e | nd of the haul) ————— cy |
| SIGNATURE: Maste Management Facility Authorized Agent | TITLE: DISPOSAL MOR | DATE: 3-26-97 |
| TYPE OR PRINT NAME: MICHAEL TALOUICH | TELEPHONE NO | 505-324-6186 |
| | · · · · · · · · · · · · · · · · · · · | |
| (This space for State Use) | Sample Not | T 150 |
| APPROVED BY: Deny & tom | TITLE: (FeologisT | DATE: 3/26/97 |
| DENIED A SAME | Petalenn | 107/4 |
| APPROVED BY: 170 Y M VILLE | TITLE: CN GFNCE | DATE: |

DIE COMSERVE IN DIVISION RECEIVED

LOGO 97 AP - 7 HM 8 52

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

Plants

Shown Dams

.

| | | ASSAIGAI | | | | OTC | | | | 01 | a | | | Al | LBUQUE | RQUE, N
(505) 34 | | CO 87109 |
|-----|-------------------------------------|--------------------------------|----------------|-----------------|----------------|------------------------|--------------|-------------|--------------------|-------------|----------|-------------|----------|------------|--------------------------------|---------------------|--------------------------------|--|
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LABORATOR | IES. | | Leb job n | 0: 304
Page | Date | 3/5/4
L_ | 77 | - | | | | PASO, 1 | DGEWO0
TEXAS 79
593-6000 | 9925 | MIDLA | 0 N. BIG SPRING
AND, TEXAS 79705
915) 570-1116 |
| | Client CON | SERVICE TAXIRON MEN | es, In | c. | Proje | ct Manager / C | ontact SH | HUN | 40 Am | S | | _ | , | CIUDA | | 411 LOC | ES ALANI
CAL UNO
UAHUA M | IS
IEXICO 32320 |
| | | | | | | hone No. 60 | | | | _ | , | /// | 1 (41.2) | | Analysis | Required | | Air Vallagian |
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| | Contract / Pur | chase Order / Quote | <i>ACTEN</i> | <u>/</u> | | | | | | | 45//09/ |]\d
 \d | / | 3/1 | 3/ | 3/ | | JSH WOFK |
| . [| AAL
ACTION
WBER | Field Sample Number / Location | Date | Time | Sample
Type | Type / Size | of Container | Temp. | Servation Chemical | / | 14/ | ا لا | 1 | / 7 | | /// | ··· 7 | the control of the second seco |
| | IA. | VALV-100 | 3/5/97 | 12:00 | | 802 9 | | | no | 1 | 1 | | | | | | Tan | KSample |
| | 18 | VALV-101 | 11 | 11 | 1/ | 212×7 | " Plastic | <u> </u> | no | | - | + | | | | | | 11 |
| l | -1C-3 | VALV-102 | 11 | 11 | 1) | 4×6" | | | no | 1 | | × | | | · | | | 1) |
| 1 | (| VA-V-103 | L _I | и | 11 | 4 x 6" | | <u> </u> | no | 1. | | | X | | | | | 11 |
| 1 | ID: | VALV- 104 | - 11 | " | 11 | | "Plastic | <u> </u> | no | 1 | | | | X | | | | 11 |
| . [| 1E | VALU- 105 | [1 | 11 | ιſ | 33446" | Plastic | | no | 1 | | | | | < . | | | 11 |
| | IF } | VAW-106 A/B | 11 | 11 | 11 | UOA S | | | no | 2 | | | | | X | | | ı f |
| ļ | | VAW-107 A/B | VI_ | \1 | 11 | UDAS | | | no | 2 | | | | | X | | | 11 |
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| | Relinquished by | um Wasur 3/5 | | elved by: | | | Relin | nquished | by: | | | | Date | e la | Rec | elved by: | A local | in Whit |
| l | Printed SHAWA | Adm S | / | gnature | | | | nature | | | | | 31 | e M | 1 | nature | DECK | 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
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ompany | Fed | -EX | | mpany | Fed- | EX | <i>,</i> | | Time | 115 | - | mpany | | AL |
| . [| Reason Anali | ير احتما | 00 | ason | | | Rea | 950n | | | | | 91 | 40 |) | ason | | |
| | • | Temp 11.2 | | | UP, | ISH" | ۷_ | TA | .4 | | | | After a | ınalysis | , samples | are to b | e: | |
| | Method of Shipment | t: | | emments: | - | DUE B | 4 7/12 | Jan | | | | | | RCMT | Disposed | - | • | |
| | Shipment No
Special Instructions | | Bi- | end | / | Λ (| | 44 | A | | | | | (| Stored (30
Stored ov | - | ax)
s (addition | nal fee) |
| | opecial instructions | | | hake | · An | 2 analys | e Ligu | 12 | phase | an | 19 | | | _ | Returned | - | • | ar vec) |
| | | | | Ju. | 0+ | 50414 | LABORATO | ORY | 0! | | | | <u> </u> | | | | | |
| | | | | | | | | • | | | | | | | | | | |

AMPLE RECEIPT CHECKLIST AND NONCONFORMANCE REPORT

WO#: DATE RCVD: RCVD BY:

NONCONFORM.?:

97-03-041 3·6·97

3.6.9 GM

| | | ** * | | | |
|------|-----|------|------|------|--|
| COOL | .ER | CO | NDIT | ION: | |

- 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 |
|------|----|-----|
| | | |
| ~ | | |
| V | | |
| 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 |
|-----|----|-----|
| 1 | | |
| سا | | |
| L- | | |
| | | |
| | - | |
| 1 | | |

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 |
|---------|----|-----|
| <u></u> | | |
| L | | |
| <u></u> | · | • . |
| - | | |
| 4 | | |

| NON-COL | NFOMRAN | CE SPECIF | ICS |
|---------|---------|-----------|-----|
| | | | |

Cooler temp slightly, chigh

| | conform | | |
|--|---------|--|--|
| | | | |
| | | | |

Who was client contact?

Non-conformance resolution:

to dien

-proceed w/ a

AAL Employee:

Program Management/QC Signature

Date: 3697

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

obbs. NM 88241-1980

istrict II - (505) 748-1283

11 S. First
rtesia, NM 88210

"trict III - (505) 334-6178

Rio Brazos Road

istrict IV - (505) 827-7131

...c. NM 87410

Energy 'inerals and Natural Resource epartment
Oil Conservation Divisio.
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Submit Original Plus 1 Cito appropria District Of

orm ...

Originated 8/8

(505) 827-7131

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|--|
| 1 RCRA Exempt: Non-Exempt: 1 | 4. Generator Buelington Res. |
| Verbal Approval Received: Yes No Yes | 5. Originating Site VAI VERDE PLANT |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator #345 CR 3500 , AZTEC NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) Flourfield, NM | |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will be accommon Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accompressed proved the material is not-hazardous and the Generator's certification listing or testing will be approved. | mpanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigned | for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | · ····y |
| REGEIVED PLANT EQUIPM | DECEIVED MAR 2 6 1997 |
| MAR 8 7 1997 | OIL COM. DIV. |
| Environmental Bureau Oil Conservation Division | DIST. 3 |
| Estimated Volume 1400 GALS cy Known Volume (to be entered by the ope | rator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Maste Management Facility Authorized Agent TITLE: DISPOSAL | 16R DATE: 3-26-97 |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TELI | EPHONE NO. 505-334-6186 |
| (This space for State Use) | Note (preserved and |
| DEVIED BY: Deny Stem TITLE: Geolo Petrole | Q15 DATE: 3/26/97 |

District I - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 trict III - (505) 334-6178 7 Rio Brazos Road _.c, NM 87410

District IV - (505) 827-7131

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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

| 1. RCRA Exempt: Non-Exempt: V | 4. Generator Burlington Res. |
|---|------------------------------------|
| Verbal Approval Received: Yes No | 5. Originating Site WAI VERDE PLAN |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator #345 CR 3500 , AZTEC NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) Broufield, NM | ^ |
| | |

9. Circle One:

- A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.
- 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



| • | • | | | |
|---|------------------------------------|-----------------------|------------------|-------|
| | | | M. DIV.
11. 3 | |
| Estimated Volume 1400 GALS cy Known | Volume (to be entered by the opera | tor at the end of the | haul) | су |
| SIGNATURE: Maste Management Facility Authorized Ago
TYPE OR PRINT NAME: MICHAEL TALO | | | | r
 |
| | | | / \ | |
| (This space for State Use) | | | | |
| APPROVED BY: Deny D. To | ent TITLE: (Feo 109 | ·15T 1 | DATE: 3/26/97 | 2 |
| APPROVED BY: | TITLE: | | DATE: | |
| | | |) | |

| 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 isExemptNon-Exempt and that it has been identify | |
| as non hazardous by characteristic analysis or by product identification as require | |
| Val Verde Plant
Originating Site: S-14 T-29NR-11W 1/4 1/4 County Son Jru | N_State_NN |
| Physical Address if appropriate: County Rd. 4937, Bldg. 101 A. | . Bloomfield, No |
| Source and description of waste: was h water from Cleaning | Plate / Frame |
| Exchangers at val verde Plant. | |
| <i>V</i> | |
| | |
| Check the appropriate line(s): | |
| MSDS Information sheet X RCRA TCLP Analysis X RCRA Metals Analysis | |
| X Corrosivity, Ignitability, Reactivity Exempt | |
| I futher 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. Bak | |
| Title Environmental Representative Date 3/25/47 | e e e e e e e e e e e e e e e e e e e |



ASSAIGAL **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 #

TO: PO BOX 3376

FARMINGTON, NM 87499

WORK ID

: 9703041 : MOI-VAL VERDE

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
Cyanide | NON-REACT
NON-REACT | mg/Kg of Waste
mg/Kg of Waste | 500
250 | 1.0
1.0 | 03/11/97
03/11/97 | W97114
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 | 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 | BATCH_ID |
|-------------------------------|----------|-------|--------|-------------|----------|----------|
| · | | | | | ANAL | |
| 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 | Ň/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 | |
|--------------------|--------|----------|-------|-----|--------------|----------|--|
| рН/ЕРА 150.1
рН | 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
TCLP (ICP) DIG/1311/3005
TCLP EXTRACTION/TCLP 1311
TCLP METALS/1311/SW8466010 | 1.00
03/09/97
03/06/97 | % (Percent)
N/A
N/A | | | | |
| Arsenic, As Barium, Ba Cadmium, Cd Chromium, Cr Lead, Pb Mercury, Hg Selenium, Se Silver, Ag TCLP(CVAA)Hg XT/SW846 7471 | ND
ND
ND
ND
ND
ND
ND
ND
ND
ND | mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
Mg/L | 0.40
0.50
0.0050
0.020
0.050
0.0020
0.050
0.040 | 1.0
1.0
1.0
1.0
1.0
1.0
1.0 | 03/10/97
03/10/97
03/10/97
03/10/97
03/10/97
03/11/97
03/10/97
03/10/97 | M97180,97178
M97180,97178
M97180,97178
M97180,97178
M97180,97178
M97180,97178
M97180,97178 |

Lab ID: 9703041-01F

Sample ID: VALV-106/107 A/B Matrix: LIQUID

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

| TEST / METHOD | RESULT | UNITS | LIMIT | D_F | DATE
ANAL | BATCH_ID |
|---|----------|-------|--------|-----|--------------|-----------|
| TCLP ZHE / TCLP 1311
ZHE/VOA/METHOD 1311/8240B | 03/06/97 | N/A | | | | • |
| Vinyl Chloride | ND | mg/L | 0.0050 | 5.0 | 03/07/97 | TVOA278 |
| 1.1-Dichloroethene | ND | mg/L | 0100.0 | 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 | 0100.0 | 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

: 03/12/97 DATE

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"

 \overline{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

Chain of Custody Record 7300 JEFFERSON, N.E. ALBUQUERQUE, NEW MEXICO 87109 (505) 345-8964 3332 WEDGEWOOD 1910 N. BIG SPRING EL PASO, TEXAS 79925 MIDLAND, TEXAS 79705 (915) 593-6000 (915) 570-1116 **MELQUIADES ALANIS** 6411 LOCAL UNO Client CONTRACT EXXIROW MENTAL _ Project Manager/Contact SHAWN ATAM'S CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320 ______ Telephone No. (705) 375 - 1198 Analysis Required City/State/Zip Falanington Win 87499 Fax No. Count (CAL) Project Name / Number mot will bende Samplers: (Signature) Remarks Contract / Purchase Order / Quote CONTRACTENV Field Sample Number / Location Preservation Type / Size of Container Type Chemical Temp. 2/5/97 12100 8 07 9/455 VAIV-100 300 1/4 10. VALV-101 no 4 x 6" Amber 1/ALV-102 no. 1.1 1.5 1/ALV-103 17 11 20 × VALV- 104 11 38, v 6" Plactic 11 VALU- 105 11 1. UOA S VALU- 106 11 UDAS 1.1 HOW-100 no Received by: Relinquished by: Received by: Relinquished by: 3/5/97 Company CANTALY (NU CLCC 2:00

Signature Macun Manuer 3/5/97 Signature Signat

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.

Sinceret

Shawn A. Adams

Contract Environmental Services, Inc.

Energy

ew exico

nerals and Natural Resources
Oil Conservation Division

2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131 partment

Form C-13
Originated 8/8/

Submit Origin Plus 1 Cop to appropria District Offi

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| 1. RCRA Exempt: Non-Exempt 4. Generator Banuarille Rule Copy Verbal Approval Received: Yes No 5. Originating Site Soft Fed 5. Origination Site Soft Fed 5. Originating Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Originating Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fed 5. Origination Site Soft Fe | | |
|--|--|---|
| 2. Management Facility Destination Sunco Disposal 6. Transporter Sunco 3. Address of Facility Operator CR 3500 * 345 AZEC , NM 7. Location of Material (Street Address or ULSTR) \$-25 T-27N R-11W 9. Circle One: A. All requests for approval to accept olifield 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 a certification of waste from the Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accompanied by a certification of waste from the 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: LEF + Over PRAC Fluid Left in bottom of Tank (UNUSEO) Only 3 constituents MAR 1 8 1997 Environmental Bureau Oil Conservation Division The Disposation Division Title: Disposation Division Type OR PRINT NAME: MICHAEL TALOUISM TITLE: Cologic of DATE: 3-13-97 Type OR PRINT NAME: MICHAEL TALOUISM TITLE: Geologic of DATE: 3/14/97 Approved by: Description Date: 3/14/97 | 1. RCRA Exempt: Non-Exempt: 🗹 | 4. Generator Bonneville Fuels Corp. |
| 3. Address of Facility Operator CR 3500 * 345 AZICC, NM 8. State NAM 7. Location of Material (Street Address or ULSTR) 5-25 T- 27N R-11 W 9. Circle One: A. All requests for approval to accept olifield 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: LEP + OURL PRAC Fluid Left in bottom of Tank (UNUSEO) ONLY 3 CONSTITUTES MAR 1 8 1997 Environmental Bureau Oil Conservation Division FECCIVED MAR 1 8 1997 Environmental Bureau Oil Conservation Division TITLE: Disposit MGL DATE: 3213-97. TYPE OR PRINT NAME: MICHAEL TALOUISM TITLE: Geologist DATE: 3/14/97 ALL ALL ALL ALL ALL ALL ALL ALL ALL AL | Verbal Approval Received: Yes No (| 5. Originating Site Scott E fed # 25-14 |
| 7. Location of Material (Street Address or ULSTR) \$-25 T-27N R-IIW 9. Circle One: A. All requests for approval to accept olifield 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 oues Prace Fluid Left in bottom of Tank (UNUSEO) MAR 1 8 1997 Briting and Division MAR 1 8 1997 Environmental Bureau Oil Conservation Division Estimated Volume 160 BBS cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Must be approved. TYPE OR PRINT NAME: MICHAEL TRIOUICH TITLE: Geology of DATE: 3/14/97 APPROVED BY: Jerus J. Zerus Title: Geology of DATE: 3/14/97 APPROVED BY: Jerus J. Zerus Title: Geology of DATE: 3/14/97 | 2. Management Facility Destination Suco Disposal | 6. Transporter SUNCO |
| 9. Circle Ona: A. All requests for approval to accept oltifield 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: LEF + OVER PRAC Fluid Left in bottom of TANK (UNUSED) MAR 1 8 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: The last transported facility fundational Agent TYPE OR PRINT NAME: MICHAEL TRIOUTEH TITLE: Occion 1541-6186 (This space for State Use) APPROVED BY: Description of the last o | | 8. State NM |
| 9. Circle Ona: A. All requests for approval to accept oltifield 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: LEF + OVER PRAC Fluid Left in bottom of TANK (UNUSED) MAR 1 8 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: The last transported facility fundational Agent TYPE OR PRINT NAME: MICHAEL TRIOUTEH TITLE: Occion 1541-6186 (This space for State Use) APPROVED BY: Description of the last o | 7. Location of Material (Street Address or ULSTR) 1190 FNL / 360 FWL | |
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| BRIEF DESCRIPTION OF MATERIAL: LEFT OVER PRAC Fluid Left in bottom of TANK (UNUSED) ONLY 3 CONSTITUENTS PART 1 3 1997 MAR 1 8 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: The bold Feeling Authoritzed Agent TYPE OR PRINT NAME: MICHAEL THEORY TITLE: DESCRIPTION NO. 3721-6186 (This space for State Use) APPROVED BY: Derry 2. Penny TITLE: Geologist DATE: 3/14/97 | Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to
on of origin. No waste classified hazardous by |
| RECEIVED MAR 1 3 1997 MAR 1 8 1997 Environmental Bureau Oil Conservation Division Estimated Volume GO BOLS Cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: March Conservation Division Cy Wasta Management Facility Authorited Agent TITLE: DISPOSAL MGL DATE: 3-13-97. TYPE OR PRINT NAME: MICHAEL TALOUICH TELEPHONE NO. 5741-6186. This space for State Use) APPROVED BY: Demand Conservation Division Cy APPROVED BY: Demand Conservation Division Cy APPROVED BY: Demand Conservation Division Cy APPROVED BY: Demand All lightsporters findst certify the wastes delivered and only those consigne | o to manaport. |
| Estimated Volume 160 BBS cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: The land of the haul cy Waste Management FacilityAuthorized Agent TYPE OR PRINT NAME: MICHAEL TALOVICH APPROVED BY: Denny 2. Penny TITLE: Geologist DATE: 3/14/97 | BRIEF DESCRIPTION OF MATERIAL: | 2 - 1/2 \ |
| Estimated Volume 160 BBLS cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Multiple Told Title: Disposal Male DATE: 3-13-97 TYPE OR PRINT NAME: MICHAEL TALOUICH TELEPHONE NO. 5-21-6186 (This space for State Use) APPROVED BY: Demy 3: Permy Title: Geologist DATE: 3/14/97 | | |
| SIGNATURE: Multiple Content Title: Disposal MGR DATE: 3-13-97 Waste Managerisent Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TELEPHONE NO. 334-6186 (This space for State Use) APPROVED BY: Demy 2: Zent Title: G-colog of DATE: 3/14/97 | onh 3 constituents DECEIVE | RECEIVED |
| APPROVED BY: Demy 2. Demy TITLE: Geologist DATE: 3/14/97 | only 3 constituents RECEIVE MAR 13 1997 DIVI CORL D | RECEIVED MAR 1 8 1997 Environmental Bureau |
| APPROVED BY: King falled TITLE: Buen Ming DATE: 3/1497 | Estimated Volume 160 BISLS cy Known Volume (to be entered by the op Waste Management Facility Authorized Agent TITLE: DISCOST | RECEIVED MAR 1 8 1997 Environmental Bureau Oil Conservation Division erator at the end of the haul)cy CAMBE DATE: 3-13-97 |
| | Estimated Volume 160 BISLS cy Known Volume (to be entered by the op SIGNATURE: Muscle Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TEL (This space for State Use) | RECEIVED MAR 1 8 1997 Environmental Bureau Oil Conservation Division erator at the end of the haul) — cy Compared Date: 3-13-97 LEPHONE NO. 53-1-61 86 |

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM (\$241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
Pirtict III - (505) 334-6178
Rio Brazos Road

District IV - (505) 827-7131

رير, NM 87410

New Mexico Energy Nunerals 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: Non-Exempt: 🗹 | 4. Generator BONNEVIlle Fuels Corp. |
|---|--|
| Verbal Approval Received: Yés No 🖸 | 5. Originating Site Scott E Fed # 25-14 |
| 2. Management Facility Destination Sunco Disposal | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500 #345 AZIEC, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) 5-25 T-27N R-II W 1190 FNL / 360 FWL | |
| 9. <u>Circle One</u> : | |
| A. All requests for approval to accept oilfield exempt wastes will be accommodated Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accommodated provided by the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to n of origin. No waste classified hazardous by |
| All transporters must certify the wastes delivered are only those consigned | d for transport. |
| | TANK (UNUSED) MAR 1 3 7007 |
| Estimated Volume 160 BBCS cy Known Volume (to be entered by the op | erator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Multiple Parish Signature: Misse Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOVICH TEL | EPHONE NO. 334-6186 |
| | ordere of the stat |
| (This space for State Use) | |
| APPROVED BY: Deny G. Fort TITLE: Geo /c | 05 15 DATE: 3/14/97 |
| APPROVED BY: | DATE: |
| | |

CERTIFICATE OF WASTE STATUS representative for Bonneville Fiels 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 Non-Exempt and that it has been identified as non hazardous by characteristic analysis or by product identification as required. 1190'FINL/360'FW L Originating Site: S-25 T-27N R-112 1/4 County San Juan State MM Physical Address if appropriate: Scott F. Fed # 25-14 Source and description of waste: 3% ECL with 2016/gel guar ge Check the appropriate line(s): MSDS Information sheet RCRA TCLP Analysis RCRA Metals Analysis Corrosivity, Ignitability, Reactivity Exempt I futher certify that there has been no change in the waste stream at the facility generating the waste since Signature

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

Printed Name

Title

MATERIAL SAFETY DATA SHEET HALLIBURTON ENERGY SERVICES DUNCAN, OKLAHOMA 73536

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

EMERCENCY TELEPHONE: 405/251-4687 OR 405/251-3569

AFTER HOURS: 405/251-3760

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

HEMICAL CODE: WG-19 GELLING ACENT - 50 LBS PART NUMBER: 516001070

KG QTY: 50 LC BAG APPLICATION: GELLING AGENT

ERVICE USED: STIMULATION

* * * * * * * * * * * SECTION II - CONFONENT INFORMATION * * * * * * * * * * * *

PERCENT TLV

PEL

UAR GUM

→ 60 % 10 MG/M3 15 MG/M3

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

PROPERTY

MEASUREMENT

PPEARANCE OFF WHITE SOLID, POWDER 90R BEAN-LIKE

PECIFIC GRAVITY (H2G=1)

1.300

ULK DENSITY

36.00 LB/CU.FT.

8.5 FOR 5% SOL

OLUBILITY IN WATER AT

O DEG C. GMS/100ML H20 FORMS GEL
IODEGRADABILITY READILY
ERCENT VOLATILES N/A
VAPORATION RATE(BUTYL ACETATE=1) N/A
APOR DENSITY N/A
APOR PRESSURE (MMHG) N/A

 APOR PRESSURE (MMHG)
 N/A

 JILING POINT (760 MMHG)
 N/A

 JUR POINT
 N/A

DUR POINT N/A REEZC POINT N/A

□LUBILITY IN SEAWATER NOT EVALUATED

ARTITION COEF (OCTANOL IN WATER) NOT EVALUATED

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

TPA(704) RATING:

HEALTH 1 FLAMMABILITY 1 REACTIVITY 0 SPECIAL NONE

LASH POINT N/A

JTOIGNITION TEMPERATURE 430 F / 221 C

LAMMABLE LIMITS (OZ. PER CU. FT.) LOWER .80 UPPER N/C

TINGUISHING MEDIA:

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

ECIAL 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.

MUSUAL FIRE AND EXPLOSION HAZARDS:

INCOMPLETE THERMAL DECOMPOSITION MAY PRODUCE CARDON DIDXIDE, CARDON 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 MIN'
                                              THIS POTENTIAL HAZARD.
                                 . .
* * * * * * * * * * * * * SECTION V - HEALTH HAZARO DATA * * * * * * * * * * * *
ALIFORNIA PROPOSITION 35:
RODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.
:ARCINGGENIC DETERMINATION:
RODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
                  "NTP, IARC, OSHA, OR, ACIGH".
CCORDING TO :
RODUCT TOXICITY DATA: TOX ORL-RAT LD50:7060 MG/KG
                      TOX ORL-MUS LD50:8100 MG/KG
                      TOX DRL-RBT LD50:7000 MG/KG
                      TOX BOD5=268,300 PPM
                      TOX COD=1.500.000 PPM
RODUCT TLV: 10 MG/M3 (N)
----- EFFECTS OF EXPOSURE ------
POUTES OF EXPOSURE:
EYE OR SKIN CONTACT, INHALATION.
 MAY CAUSE EYE IRRITATION.
BKIN:
  CONTACT MAY CAUSE SKIN IRRITATION,
INHALATION:
  MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.
 MAY BE IRRITATING.
. NGESTION:
 NO DATA AVAILABLE
HRONIC EFFECTS:
 MAY CAUSE ALLERGIC RESPIRATORY REACTION IN SUSCEPTIBLE INDIVIDUALS.
THER SYMPTOMS AFFECTED:
  A REVIEW OF AVAILABLE DATA DOES NOT IDENTIFY ANY CONDITIONS WORSENED BY
 EXPOSURE TO THIS PRODUCT.
----- EKERGENCY AND FIRST AID PROCEDURES ------ EKERGENCY AND FIRST AID PROCEDURES
IYE:
  IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF
 IRRITATION PERSISTS, SEEK PROMPT MEDICAL ATTENTION.
-KIN:
  PROMPTLY WASH SKIN WITH SOAP AND WATER.
NHALATION:
 REMOVE TO FRESH AIR. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION,
MGESTION:
  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 * * * * * * * * * * * * * *
TABILITY: STABLE
ENDITIONS TO AVOID:
 NOT APPLICABLE.
ROMPATIBILITY (MATERIALS TO AVOID):
  STRONG OXIDIZERS.
4ZARDOUS BECOMPOSITION PRODUCTS:
 NITROGEN OXIDES, CARBON DIOXIDE AND/OR CARBON MONOXIDE.
SZARD POLYMERIZATION: WON"T OCCUR
MIDITIONS TO AVOID:
 NOT APPLICABLE.
```

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

```
TEPS TO BE TAKEN IF MATERIAL IS RELEASED OR S
 USE PROTECTIVE EQUIPMENT. SWEEP UP AND REMU
                                                   AVOID CREATING OR INHALING
  DUST.
iASTE DISPOSAL METHOD:
 IF NOT CONTAMINATED, REUSE PRODUCT.
  GET APPROVAL FROM LANDFILL OPERATOR AND TRANSPORT TO SANITARY LANDFILL.
: + + + + + + SECTION VIII - SPECIAL PROTECTION INFORMATION + + + + + + +
<ESPIRATORY PROTECTION (USE NIDSH/MSHA APPROVED EQUIPMENT);</pre>
  NOT NORMALLY NECESSARY.
  TOXIC DUST/MIST RESPIRATOR.
  SULFUR DIOXIDE RESPIRATOR.
'ROTECTIVE GLOVES:
  NORMAL WORK GLOVES.
YE PROTECTION:
  GOGGLES AND/OR FACE SHIELD.
THER PROTECTIVE EQUIPMENT:
  NORMAL WORK COVERALLS.
· * * * * * * * * * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * * * * * * * *
RECAUTIONARY LADELING WG-19 GELLING ASENT - 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.
THER 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.
ONTAINER 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 * * * * * * * * * * *
OT SHIPPING DESCRIPTION:
OT RESTRICTED
 * * * * * * * * * SECTION XI - ENVIRONMENTAL EVALUATION * * * * * * * * * * * * *
PA 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 353 (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

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE MATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM MARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS ELVEN 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, OUT 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 JUSTOMER, THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS BUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY IF 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 BAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY remisited. Health, safety and environment department, Halliburton energy BERVICES.

GBW-3 BREAKER PAGE 1

MATERIAL SAFETY DATA SHEET HALLIBURTON ENERGY SERVICES - REVISED DATE 01-17-96

DATE: 03-17-97

DUNCAN, OKLAHOMA 73536

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

AFTER HOURS: 405/251-3760

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

HEMICAL CODE: GBW-3 BREAKER PART NUMBER: 070152090

'KG 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

WHITE SOLID POWDER APPEARANCE ODORLESS 100R

SPECIFIC GRAVITY (H2G=1)

1.580

50.00 LB/CU.FT.

BULK DENSITY

NOT DETERMINED

SOLUBILITY IN WATER AT

O DEG C. GMS/100ML H20

200

BIODEGRADABILITY PERCENT VOLATILES

эΗ

READILY

VAPORATION RATE(BUTYL ACETATE=1) N/A 'APOR DENSITY

N/A

'APOR PRESSURE (MMHG)

N/D

DILING POINT(760 MMHG)

/320 F / 160 C

JUR POINT REEZE POINT N/A

N/A

DLUBILITY IN SEAWATER

26 GM/100 ML

ARTITION COEF (OCTANOL IN WATER) NOT EVALUATED

.FPA(704) RATING:

HEALTH 1 FLAMMABILITY 1 REACTIVITY 0 SPECIAL NONE

LASH POINT

'JTOIGNITION TEMPERATURE

ND F / ND C

LAMMABLE LIMITS (OZ. PER CU. FT.) LOWER

N/D UPPER

XTINGUISHING MEDIA:

USE MEDIA APPROPRIATE FOR SURROUNDING MATERIALS.

PECIAL FIRE FIGHTING PROCEDURES:

AVDID CREATING DUST CLOUDS WITH EXTINGUISHERS.

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

NUSUAL 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.

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: * * * * * * * * * * * A SECTION V - HEALTH HA
CALIFORNIA PROPOSITION 65:
RODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF. PROPOSITION 65.
:ARCINOGENIC DETERMINATION:
RODUCT 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 TLM76: >3300 PPM (BROWN SHRIMP)
PRODUCT TLV: 10 MG/H3 NUISANCE
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 INDIVIOUALS.
  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 WORSENED 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.
BKIN:
  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 VOKITING! IN GENERAL, NO TREATMENT IS NECESSARY UNLESS LARGE
  QUANTITIES ARE INGESTED. HOWEVER, MEDICAL ADVICE SHOULD BE OBTAINED.
 TABILITY: STABLE
SHRITIONS TO AVOID:
 NOT APPLICABLE.
AZARDOUS DECOMPOSITION PRODUCTS:
 CARBON MONOXIDE AND/OR CARBON DIOXIDE.
AZARD POLYMERIZATION: WON"T OCCUR
ONDITIONS TO AVOID:
 NOT APPLICABLE.
 TEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
```

USE PROTECTIVE EQUIPMENT. SHEEP UP AND REHGVE. AVOID CREATING OR INHALING

DUST.

```
IF NOT CONTAMINATED, REUSE PRODUCT. . .
 GET APPROVAL FROM LANDFILL OPERATOR AND TRANSPORT TO SANITARY LANDFILL,
* * * * * * * * SECTION VIII - SPECIAL PROTECTION INFORMATION * * * * * *
ESPIRATORY PROTECTION (USE NIGSH/MSHA APPROVED EQUIPMENT):
 NOT NORHALLY NECESSARY.
 TOXIC DUST/WIST RESPIRATOR.
ENTILATION:
 USE ONLY WITH ADEQUATE VENTILATION.
ROTECTIVE GLOVES:
 NORMAL WORK GLOVES.
YE PROTECTION:
SAFETY GLASSES WITH SIDE SHIELDS.
THER PROTECTIVE EQUIPMENT:
 NORMAL WORK COVERALLS.
: * * * * * * * * * * * * SECTION IX - SPECIAL PRECAUTIONS * * * * * * * * * * *
RECAUTIONARY LABELING CBW-3 DREAKER
                                                                070.152090
  CAUTION!
  TREAT AS NUISANCE DUST.
  AIRBORNE DUST MAY BE EXPLOSIVE!
 FOR PRECAUTIONARY STATEMENTS, REFER TO SECTIONS IV-VIII.
ITHER 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.
PECIAL PRECAUTIONS:
  PRODUCT HAS A SHELF LIFE OF 12 MONTHS.
 * * * * * * * * * * SECTION X - TRANSPORTATION INFORMATION * * * * * * * * * * * *
OT SHIPPING DESCRIPTION:
OT 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
                                                             DRSM NE
                                                   NPR NE

    EPA - RCRA (HAZARDOUS WASTE), 40 CFR 261
```

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

HAZARDOUS WASTE

ASTE DISPOSAL METHOD:

THE INFORMATION WHICH IS CONTAINED IN THIS DOCUMENT IS BASED UPON AVAILABLE PATA AND BELIEVED TO BE CORRECT. HOWEVER, AS SUCH AS IT HAS BEEN OBTAINED FROM MARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS BIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE AND CAN 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 JUSTOMER, THERE IS NO GUARANTEE THAT THE NEALTH AND SAFETY PRECAUTIONS BUGGESTED 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 ROHIBITED. HEALTH, SAFETY AND ENVIRONMENT DEPARTMENT, HALLIBURTON ENERGY BERVICES.

MATERIAL SAFETY DATA SHEET HALLIBURTON ENERGY SERVICES DATE: 03-17-97 REVISED DATE 06-12-96

DUNCAN, OKLAHOMA 73536

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

AFTER HOURS: 405/251-3760

HEMICAL CODE: 8E-6 MICROBIOCIDE PART NUMBER: 516007710

KG QTY: 48 LB FIBER DRUM APPLICATION: KICROBIOCIDE

ERVICE USED: FRACTURING

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

COMPONENT+ + + + + + + + + + PERCENT TLV PEL

-BROMO-2-NITRO-1, 3-PROPANEDIOL > 60 % NOT EST NOT EST

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

PROPERTY MEASUREMENT

WHITE SOLID POWDER

DOR N/D PECIFIC GRAVITY (H20=1) N/D

ULK DENSITY N/D LB/CU.FT.

H 4 FOR 20% SOLUTION

OLUBILITY IN WATER AT

PPEARANCE

O DEG C. GMS/100HL H20 SOLUBLE
IODEGRADABILITY N/D

ERCENT VOLATILES NIL
VAPORATION RATE(BUTYL ACETATE=1) N/A

APOR DENSITY >1
APOR PRESSURE (MMHG) N/D

DILING POINT(760 MMHG) N/O

OUR POINT N/D
REEZE POINT N/O

GLUBILITY IN SEAWATER NOT EVALUATED ARTITION COEF (OCTANOL IN WATER) NOT EVALUATED

FPA(704) RATING:

HEALTH 2 FLAMMABILITY O REACTIVITY O SPECIAL NONE

_ASH POINT > 200 F / > 93 C FLASH MITHD SFCC

JTOIGNITION TEMPERATURE ND F / ND C

...AMMABLE LIMITS (OZ. PER CU, FT.) LOWER N/D UPPER N/D

«TINGUISHING MEDIA:

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

PECIAL FIRE FIGHTING PROCEDURES:

FULL PROTECTIVE CLOTHING AND NIOSH/KSHA 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 BROWIDE FUKES, AND OXIDES OF NITROGEN. THE PRODUCT SWELLS UP INTO A TARRY MASS WHICH BURNS READILY.

* * * * * * * * * * * SECTION V ~ HEALTH HAZARD DATA * * * * * * * * * * * * *

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ALIFORNIA PROPOSITION 65:
RODUCT OR PRODUCT COMPONENTS ARE NOT REGULATED UNDER CALIF, PROPOSITION 65.
CARCINOGENIC DETERMINATION:
'RODUCT OR COMPONENTS ARE NOT LISTED AS A POTENTIAL CARCINOGEN
ACCORDING TO :
                "NTP, IARC, OSHA, OR, ACIGH".
RODUCT TOXICITY DATA: TOX ORL-RAT LD50: 180-400 MG/KG
                     TOX INL RAT LC50: 5 MG/L
                     TOX SKN-RBT LD50: > 1600 MG/KG
RODUCT TLV: NOT ESTABLISHED
ROUTES OF EXPOSURE:
EYE OR SKIN CONTACT, INHALATION.
YE:
  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.
CNHALATION:
 THIS PRODUCT IS EXPECTED TO BE A LOW INHALATION HAZARD.
:NGESTION:
 LARGE DOSES CAUSES ABDOMINAL PAIN, NAUSEA, VOMITING AND DIARRHEA.
CHRONIC EFFECTS:
 NO SPECIFIC INFORMATION IS AVAILABLE ON THE CHRONIC EFFECTS OF EXPOSURE.
THER SYMPTOMS AFFECTED:
  BECAUSE OF ITS IRRITATING PROPERTIES, THIS MATERIAL MAY AGGRAVATE AN
 EXISTING DERMATITIS.
      ------ EMERGENCY AND FIRST AID PROCEDURES -----
IYE:
  IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SEEK
  PROMPT MEDICAL ATTENTION.
WIN:
  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,
NGESTION:
  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.
OTE TO PHYSICIAN:
  PROBALBE MUCOSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE.
TABILITY: STABLE
DNDITIONS TO AVOID:
  STABLE AT NORMAL AMBIENT TEMPERATURES. AVOID STORAGE AT HIGH TEMPERATURES.
 DECCMPOSITION OCCURS AT MELTING POINT OF 130 °C. ALKALINE PH WILL LIBERATE
 FORMALDEHYDE.
NCOMPATIBILITY (MATERIALS TO AVOID):
 STRONG OXIDIZERS AND STRONG ALKALIES.
AZARDOUS DECOMPOSITION PRODUCTS:
 OXIDES OF NITROGEN, BROMINE AND FORMALDEHYDE.
AZARD POLYMERIZATION: WON"T OCCUR
```

ONDITIONS TO AVOID: NOT APPLICABLE.

```
TEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SMILLED:
  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 EQUIFMENT AS
  NECESSARY.
MASTE 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.
ENTILATION:
 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
THER 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.
PECIAL PRECAUTIONS:
  PRODUCT HAS A SHELF LIFE OF 24 MONTHS.
 * * * * * * * * * SECTION X - TRANSPORTATION INFORMATION * * * * * * * * * * *
OT SHIPPING DESCRIPTION:
OXIC SOLID, ORGANIC, N.O.S. - 6.1 - UN2811 - III
CONTAINS 2-BROWO-2-NITRO-1,3-PROPANEDIOL)
 * * * * * * * * * SECTION XI - ENVIRONMENTAL EVALUATION & * * * * * * * * * * *
PA SUFERFUND(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 √ARIOUS 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 BELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO BUCH. 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 BUGGESTED 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 BAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY PROHIBITED. HEALTH, SAFETY AND ENVIRONMENT DEPARTMENT, HALLIBURTON ENERGY SERVICES.

1 O. Box 1980 lobbs, NM 88241-1980 <u>)istria II - (505) 748-1283</u> 11 S. Firgugreat and English stesia, NM 88210 ** trict III - (505) 334-6178

Rio Brazos Road

_.uc, NM 87410

Energy Minerals and Natural Resources Pepartment Oil Conservation Division

2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

Submit Origi Plus 1 Cc to appropri District Off

orm C-1;

Originaled 8/8.

Pistrict IV - (505) 827-7131 57 110 - 10 - 5 52

| REQUEST FOR APPROVAL TO ACCI | EPT SOLID WASTE |
|---|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator BIGA WELL Set, |
| Verbal Approval Received: Yes No 2 | 5. Originating Site WASh Sun P |
| 2. Management Facility Destination GUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator 345 CR 3500, AZICE, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) | |
| 9. Circle One: | |
| A. All requests for approval to accept cilifield exempt wastes will be Generator; one certificate per job. (B.) All requests for approval to accept non-exempt wastes must be PROVE the material is not-hazardous and the Generator's certificating or testing will be approved. | accompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those cons | igned for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| Equipment wish Down wither | |
| DECEIVED IN | ECEIVED MAR - 7 1997 |
| OHL COM. DIV
DIST. 3 | OL CON. DAV.
Dest. 3 |
| Estimated Volume 100 BBLS cy Known Volume (to be entered by the | |
| SIGNATURE: Management Fecility Authorized Agent TITLE: DISA | 16H MEL DATE: 3-7-97 |
| TYPE OR PRINT NAME: MICHAEL TALOWICK | TELEPHONE NO. 505-334-6186 |
| (This space for State Use) | |
| APPROVED BY: Demy & Fund TITLE: GCC | 0/05/5 DATE: 3/7/97 |
| APPROVED BY: Correct TITLE: Due | DATE: 3/10/97 |

District I - (505) 393-6161 O Box 1980 lobbs, NM &8241-1980 <u>District II - (505) 748-1283</u> 11 S. First rtesia, NM 88210 "-trict III - (505) 334-6178 TRio Brazos Road

<u>istrict IV</u> - (505) 827-7131

__c, NM 87410

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 Čopy to appropriate District Office

| REQUEST FOR APPROVAL TO AC | CCEPT SOLID WASTE |
|--|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator BIGA WELL See, |
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site WAShSumP |
| 2. Management Facility Destination GUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator 345 CR 3500, AZICC, N | M 8. State NM |
| 7. Location of Material (Street Address or ULSTR) | ^', |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will Generator; one certificate per job. All requests for approval to accept non-exempt wastes must PROVE the material is not-hazardous and the Generator's cellisting or testing will be approved. All transporters must certify the wastes delivered are only those certified. | t be accompanied by necessary chemical analysis to ertification of origin. No waste classified hazardous by |
| | eriographic transporti |
| BRIEF DESCRIPTION OF MATERIAL: EQUIPMENT WISH DOWN WATER | |
| | MECEWED
MAR - 7 1997 |
| | ON CON. DIV. |
| Estimated Volume 100 BBLS cy Known Volume (to be entered I | by the operator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Maste Management Facility Authorized Agent Waste Management Facility Authorized Agent | SPOSAL MGC DATE: 3-7-97 |
| TYPE OR PRINT NAME: MICNACL TALOWICH | TELEPHONE NO. 505-334-6186 |
| (This space for State Use) | -(|
| APPROVED BY: Denny B. Joury TITLE: GO | 20/09/ST DATE: 3/7/97 |
| APPROVED BY: | DATE: |

CERTIFICATE OF WASTE STATUS Kon tellabour representative for 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 Physical Address if appropriate: 708 5. Tucker Ave. TARMINGTON, N.M. Source and description of waste: Steam Cleaning WATER Sump MIXED WITH SOAD. Check the appropriate line(s): MSDS Information sheet ✓ RCRA TCLP Analysis Corrosivity, Ignitability, Reactivity Exempt I futher certify that there has been no change in the waste stream at the facility generating the waste since 1-1-97

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

Signature_____Printed Name

Title_Date



General Water Quality Sunco Disposal

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

| Parameter : | | Analytical Result | Units |
|---------------|---------------------------------|-------------------|-------------------|
| General | Lab pH | | s.u. |
| | Lab Conductivity @ 25° C | 1,080 | μ mhos/c m |
| | Total Dissolved Solids @ 180°C | 625 | mg/L |
| , | Total Dissolved Solids (Calc) | 616 | mg/L |
| Anions | Total Alkalinity as CaCO3 | 129 | mg/L |
| | Bicarbonate Alkalinity as CaCO3 | 129 | mg/L |
| | Carbonate Alkalinity as CaCO3 | NA · | mg/L |
| | Hydroxide Alkalinity as CaCO3 | 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 CaCO3 | 179 | mg/L |
| | Calcium | 55.8 | mg/L |
| | Magnesium | 9.67 | mg/L |
| | Potassium | 19 | mg/L |
| | Sodium | 140 | mg/L |
| Data Validati | on | | Acceptance Level |
| | 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, <u>Methods for Chemical Analysis of Water and Wastes</u>, 1983. <u>Standard Methods For The Examination Of Water And Wastewater</u>, 18th ed., 1992.



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

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.....

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.



PURGEABLE AROMATICS

Sunco Disposal

Project ID:

Big A Well Service

Report Date:

01/08/97

Sample ID:

Big A Well Service

Date Sampled:

Date Analyzed:

12/31/96

Lab ID:

6077

Date Received: 12/31/96

Sample Matrix:

Water

01/07/97

Preservative: Condition:

Cool Intact

| 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 |

| া হাং সাহার্য কর্মনার বিশ্ব করা বাবেছে মুক্তি নার্মানের ক্রিক্তির বা প্রকাশ করা মান্ত্র করা করা করা করা করা করা | a de la Parliculações de la como a como de Articologo de Carte |
|--|--|
| | - (1) (株元・1) (2) (Yu - 1) (Y |
| 1 | 現在の1960年記 (自然機能・ 4.3) 第一級の基準機能は1 |
| | |
| I · · · · · · · · · · · · · · · · · · · | Birth in a water to be to be a state that each |
| | 化分式分配效应 化氯化钾 医二代甲烷 经货品 |
| In this part is a factor of the control of the contro | |
| | azyadan maje kini zide negati |

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

101

88 - 110%

Bromofluorobenzene

94

86 - 115%

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Analyst

Kd Ch



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, HCI

Report Date:

03/04/97

Date Sampled: Date Received:

12/31/96

Date Analyzed:

12/31/96

01/10/97

| Analyte | -Concentration
(μg/L) | Detection Limit: |
|---------------------------|--------------------------|------------------|
| Bromodichloromethane | 6.44 | 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 |
| | | · · |

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

70% - 130% (QC Limits)

Purgeable Aromatics

Duplicate Analysis

Lab ID:

6077Dup

Sample Matrix:

Water

Preservative: Condition:

Cool 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> | Percent Recovery | Acceptance Limits |
|------------------|--------------------|------------------|-------------------|
| 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:

Purgeable Aromatics

Matrix Spike Analysis

Lab ID:

6077Spk

Sample Matrix:

Water

Preservative: Condition:

Cool

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 105

Acceptance Limits

88 - 110%

Bromofluorobenzene

Trifluorotoluene

102

86 - 115%

Reference:

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

Comments:

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> | Percent Recovery | Acceptance Limits |
|--------------------|------------------|-------------------|
| Trifluorotoluene | 101 | 88 - 110% |
| Bromofluorobenzene | 90 | 86 - 115% |

Reference:

Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,

Oct. 1984.

Comments:

Analyst

Quality Control Report

Sunco Disposal

Date Reported:

12/09/96

| Target Analyte | QC Sample ID. | Concentration (µg/L) | Certified | Acceptance Limits |
|----------------|---------------|----------------------|-----------|-------------------|
| Arsenic | ERA 9969 | 87.3 | 82.4 | 61.8 - 97.2 |
| Barium | ERA 9969 | 4 81 | 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: Mehods for Determination of Metals; <u>Test Methods for Evaluating Solid Wates</u>, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

Davian

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:

District I - (505) 393-6161 O. Box 1980 lobbs, NM 38241-1980 istrict II (505) 748-1283 11 S. First rtesia, NM 88210 "<u>vict.III</u> - (505) 334-6178 1 Rio Brazos Road ...c. NM 87410 istrict IY - (505) 827-7131

Energy

New Mexico inerals and Natural Resource. 2partment Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

Form C-1: Originated &'8

> Submit Origi Plus 1 C to appropr District Of

| RCRA Exempt: Non-Exempt: Verbal Approval Received: Yes No | 4. Generator Williams Field Surv. 5. Originating Site Milagro Plant | | |
|---|---|--|--|
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO TRUCKING | | |
| 3. Address of Facility Operator 345 CR 3500, AZKC, SWJWCo | 8. State NM | | |
| 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, MIXEO W | ith Cleaning chemicals | | |

| PEB 1 4 1997 | PECEIVED
FEB 1 1 1997 | | |
|---|---|-----------------|--------|
| OH CON. DIV. | OIL COM DAY, | | |
| Estimated Volume 2000 64L5 cy Known Volume (| to be entered by the operator at the end of t | he haul) ———— c | :y |
| SIGNATURE: Masie Management Facility Authorized Agent | TITLE: DISPOSAL MOR | DATE: 2-11-97 | |
| TYPE OR PRINT NAME: MICHAEL TALOVICH | TELEPHONE NO. 50 | 05-334-6186 | • |
| (This space for State Use) | | 1 | |
| APPROVED BY: Dans Dr. Fount | TITLE; Geologist | DATE: 2/11/97 | |
| APPROVED BY: | TITLE: ENGINOTIONS SPOR | | -
- |

District I - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 Pi-trict III - (505) 334-6178

Rio Brazos Road

District IV - (505) 827-7131 The Committee of the Co

r_.ec, NM 87410

New Mexico Energy Munerals 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 Čopy to appropriate District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator William's Field Seev. |
| Verbal Approval Received: Yes No No | 5. Originating Site MILAGRO PLANT |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO TRUCKING |
| 3. Address of Facility Operator 345 CR 3500, AZKC, SAVJUN Co | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) | ~ , |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. B. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| CAUSTIC RINSE FROM PROCESS VESSELS, MIXEO N | PECELVED FEB 1 1 1997 OIL CON. DIV. |
| Waste Management FacilityAuthorized Agent | Dieli' 3 |
| (This space for State Use) APPROVED BY: TITLE: Geo lo APPROVED BY: TITLE: | DATE: 2/1/97 |



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

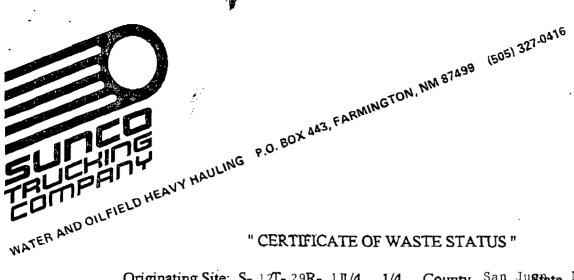
enclosure

cc:

Hal Stone, Sunco

Denny Foust. NMOCD

MIKE T.



4962

Originating Site: S-12T-29R-14/4 1/4 County San Justate 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_ 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): X MSDS Information sheet RCRA TCLP Analysis X RCRA Metals Analysis X 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 12/96 Signature Printed Name Leigh E. Gooding Title Senior Environmental Specialist Date

Inter-Mountain Laboratories, Inc. 2

Client:

Williams Field Service

2506 W. Main Street Farmington, New Mexico 87401

Project:

Milagro Plant

Sample ID:

Train 5 Amine Wash

Laboratory ID:

0397W00094

Sample Matrix:

Water

Condition:

Cool/Intact

Date Reported:

01/28/97

Date Sampled:

01/21/97

Time Sampled:

1:30 PM

Date Received:

01/21/97

| Analytical | | |
|------------|--|-------------------------|
| Result | Units | Units |
| | | |
| 10.3 | s.u. | |
| >140 | °F | · |
| | | , |
| 0.01 | mg/L | |
| 321 | mg/L | |
| | | |
| | | |
| | | |
| <0.005 | mg/L | |
| 0.01 | _ | |
| <0.001 | mg/L | |
| 0.16 | mg/L | |
| 0.006 | mg/L | |
| <0.001 | mg/L | |
| <0.005 | mg/L | |
| <0.01 | mg/L | |
| | 10.3 >140 0.01 321 <0.005 0.01 <0.001 0.16 0.006 <0.001 <0.005 | 10.3 s.u. >140 °F |

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:

Reviewed by

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: CHEWITREC 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:

NA2SIO3

FORMULA WT.: 284.20

6834-92-0

CAS NO.:

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 CONTAINER. USE WITH ADEQUATE VENTILATION, WASH TIGHTLY CLOSED THOROUGHLY AFTER HANDLING.

INTERNATIONAL LABELING: AVOID CONTACT WITH EYES. AFTER CONTACT WITH IMMEDIATELY WITH PLENTY OF WATER. KEEP CONTAINER SKIN, WASH TIGHTLY CLOSED.

SECTION II - COMPONENTS

WEIGHT % OSHA/PEL ACGIH/TLV CAS NO. COMPONENT 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

SPECIFIC GRAVITY: N/A (H2O=1)

SOLUBILITY(H2O): APPRECIA

SOLUBILITY(H20): 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 EXTINQUISHING 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.

SODMETSI: 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

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)

SPRYICE.

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 OPDITION 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 IMPORMATION IS OPPERED 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 1723 AND EMPLOYEE TRAINING 49CFR 173.1. THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET WAS PREPARED FROM INPORMATION RETRIEVED ON THE CHEMICAL INPORMATION SYSTEM AS PROYIDED BY CIS, INC. AND MEETS THE REQUIREMENTS OF THE UNITED STATES OCCUPATIONAL SAPETY AND HEALTH ACT AND REGULATIONS PROMULGATED THEREUNDER (25 CFR 1910.1200 ET. SEQ.) AND THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INPORMATION 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 BANDLING. THE USER IS RESPONSIBLE FOR DETERMINING THE PRECAUTIONS AND DANGERS OF THIS CREMICAL 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 BY PATHING CHEMICAL YAPORS FUMES. EXPOSURE TO THIS PRODUCT MAY HAVE SPRIOUS ADVERSE HEALTH EPPPECTS. 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 DISCLADAS ANY WARRANTES, EXPRESSED OR DAPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER. ITS MERCHANTABILITY OR ITS PITNESS FOR A PARTICULAR PURPOSE. THE USER SHOULD RECOGNIZE THAT THIS PRODUCT CAN CAUSE SEVERE INJURY AND EVEN DEATH ESPECIALLY IF DIPROPERLY HANDLED OR THE INFORM DANCERS OF USE ARE NOT HEEDED. READ ALL FRECAUTIONARY INFORMATION. AS NEW DOCUMENTED GENERAL SAPETY INFORMATION BECOMES AVAILABLE, SUPPLIER WILL PERIODICALLY REVISE THIS MATERIAL SAPETY DATA SHEET. NOTE: CHEMITREC, 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

HARCROS CHEMICALS INC KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PHOS SODA TRI CRYS FINE 50# PRODUCT CODE: 16-01128-01 DATE: 03/02/94 PAGE 01

CAS # 007601-54-9

Na(3)PO(4).12H(2)O.1/4NaOHFORMULA:

CHEMICAL FAMILY: Phosphates

CHEMICAL NAME AND SYNONYMS:

Trisodium Phosphate Crystals; Trisodium Phosphate Dodecahydrate; TSP Crystals; Trisodium Orthophosphate

Ks 66106

SUPPLIERS NAME: Harcros Chemicals Inc
5200 Speaker Rd
Kansas City Ks
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) PEL 15mg/m(3)Total Dust 5mg/m(3)Respirable fraction OSHA TLV 10mg/m(3)Total Dust ACGIH 100

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.

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 opén. Get medical attention.

`flush with water while removing contaminated clothing and shoes. ollow by washing with soap and water.
Do not reuse clothing or shoes until cleaned.

HARCROS CHEMICALS INC KANSAS CITY, KANSAS

MATERIAL SAFETY DATA SHEET

RODUCT NAME: PHOS SODA TRI CRYS FINE 50# DATE: 03/02/94 PAGE 03 RODUCT CODE: 16-01128-01

JOC1 CODE: 10 01120 01

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.

ECTION 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)0=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

RODUCT NAME: PHOS SODA TRI CRYS FINE 50# RODUCT CODE: 16-01128-01 DATE: 03/02/94 PAGE 05

ECTION 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

****** ENDOFREPORT ******

NAME: GENE TURNER

DATE ISSUED: 10/28/1985 DATE REVISED: 10/22/1987

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 information, 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.



Aylı-ciliplesa, ı

Manufactures & Packager & Distributor THE CHEMICALS - 25-512

MATERIAL SAFETY DATA

MSDS NUMBER

M32413

bounima

MSDS DATE

12-30-93

PRODUCT NAME : CADETA SOUL ANHYDROUS (ALL GRADES)

(For specific products - see Section XI)

24 HOUR EMERGENCY PHONE: 1-800-733-3665 OR 716-278-7021

Control of the second

I. PRODUCT IDENTIFICATION

HMIS HAZARD RATINGS

HEALTH HAZARD

FIRE HAZARD 0

REACTIVITY

Based on the National Point & Coatings Association HMIS rating system

SARA/TITLE III HAZARD CATEGORIES (See Section X)

Immediate (ACUTE) Health: YES Delayed (Chronic) Health: NO

Reactive Hazard:

Sudden Release of Pressure: NO

Fire Hazard: NO

MANUFACTURER'S:

Occidental Chemical Corporation

NAME AND ADDRESS

Customer Service, Occidental Tower, P O Box 809050, Dallas, Texas 75380

Te l'ephone (1-800-752-5151)

CAS NUMBER: 1310-73-2

SYNONYMS/COMMON NAMES: Sodium Hydroxide-Dry

CHEMICAL NAME: Sodium hydroxide

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:

DOT I.D. NUMBER:

UN 1823

DOT PACKAGING GROUP: II

DOT HAZARDOUS SUBSTANCE:

RQ 1000 lbs. (Sodium Hydromids)

DOT MARINE POLLUTANT: NA

ADDITIONAL DESCRIPTION REQUIREMENT:

23.502

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OCCIDENTAL CHEMICAL

MSDS NUMBER: PRODUCT NAME:

M32413

CAUSTIC SODA ANHYDROUS (ALL GRADES)

II. HEALTH HAZARD INFORMATION (Continued)

EFFECTS OF OVEREXPOSURE

ACUTE:

Corrosive to all body tissues by all routes of exposure. 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 =>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.

PRODUCT NAME: CAUSTIC SODA ANHYDROUS (ALL GRADES)

Page 5 of 10

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 NICSH/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).

Page 9 of 10 12-30-93

1.332

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.

froduct 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.

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.

Ashland Chemical Co.

Page 001

Date Prepared: 01/05/96 Date Printed: 10/26/96

MSDS No: 0004462-003.001

MURIATIC ACID 22 DEGREE

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

Eve

Exposure can cause irreversible eye damage. Symptoms may include stinging, tearing, redness, swelling, corneal damage, and blindness.

Exposure can cause irreversible skin damage. Symptoms may include redness, swelling, burns, and severe skin damage.

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.

Exposure to dust is possible. Exposure may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory trac-

Symptoms of Exposure No data

Target Organ Effects

No data

Developmental Information No data

Continued on next page

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

ACCIDENTAL RELEASE MEASURES 6.

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. Scool 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.

HANDLING AND STORAGE 7.

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.

EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

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..

Ashland Chemical Co.

Page 005

Date Prepared: 01/05/96 Date Printed: 10/26/96 MSDS No: 0004462-003.001

MURIATIC ACID 22 **DEGREE**

Physical Form

HOMOGENEOUS SOLUTION

Color

COLORLESS TO LIGHT YELLOW

Odor

No data

pH.

No data

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..

TOXICOLOGICAL INFORMATION 11.

No data

ECOLOGICAL INFORMATION

No data

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.

TRANSPORT INFORMATION 14.

DOT Information - 49 CFR 172.101

DOT Description:

HYDROCHLORIC ACID, SOLUTION, 8, UN1789, II

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. Sirst Artesia, NM 88210 D'-trict III - (505) 334-6178

7 Rio Brazos Road

District IV - (505) 827-7131

c, NM 87410 مدردر

New Mexico Energy Munerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Street

Originated 8/8/95

Form C-138

Submit Original Plus 1 Copy to appropriate District Office

Santa Fe, New Mexico 87505 (505) 827-7131

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|---|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator William's Field Grev. |
| Verbal Approval Received: Yes 🔲 No 🛂 | 5. Originating Site GAS PIAN + |
| 2. Management Facility Destination Sunco Disposal | 6. Transporter SUNCO TRUCKING |
| 3. Address of Facility Operator 345 CR 3000, AZ+ec NM | 8. State N M |
| 7. Location of Material (Street Address or ULSTR) MILAGROPIANH | , |
| 9. Circle One: All requests for approval to accept oilfield exempt wastes will be accepted acceptance. Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted ac | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigned | d for transport. |
| further review at wFs classified the waters as exempt. Estimated Volume 200,000 646s cy Known Volume (to be entered by the op | ECENVED JAN 2 8 1997 L CON. DIV. DIST. 3 Perator at the end of the haul) — cy |
| SIGNATURE: Maste Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TEL | () - , , , , , |
| APPROVED BY: Bush TITLE: Geo local | DATE: 1/28/97 |

| JAN 27 '97 84:49PM WILL 3 FIELD SVCS. FO. BOX 4A3, FARMINGTON, N. A. R. A. B. B. B. B. B. B. B. B. B. B. B. B. B. | DATE 1/27/97 DA |
|--|--|
| "CERTIFICATE OF WASTE STATUS" | From Le, Co. Williem Phone KB, |
| Originating Site: S-12T-29R-11 1/4 1/4 County Sandar State MM Physical Address if appropriate: 192 County Kd 4900 13/00m field, NM 87 4/3 Source and description of waste: | is Field Services |
| Evaporation pond water from amine treatment plant. | - |
| Destination: Sumco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M. I Leigh Gooding representative for Milliams Field Services Conformy | |
| 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 require | i
d. |
| The required documentation is hereto attached: Check the appropriate line(s): 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 199 | 6 |
| Printed Name Leigh Good ding Title Senior Faviormental Specialist | • |



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,

Anna Schaerer

Organic Analyst/IML-Farmington

Anna Schauer

Enclosure

xc: File

inter:Mountain Laboratories, Inc

Client:

Williams Field Service

Project:

Milagro Plant

Sample ID:

North Evap Pond 0398VV01325

Laboratory ID: Sample Matrix:

Water

Condition

Cool/Intact

2508 W. Main Street Fermington, New Mexico 8740)

Date Reported:

Date Sampled:

08/01/96 07/11/96

Time Sampled:

9:45 AM

Date Received:

07/11/98

| Condition: Cool/Intact | | | | |
|--------------------------------|-----------|----------|-------|-------|
| | | | | |
| | Amelytica | | | |
| Parameter | Result | Units | | Unles |
| 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 | meg/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 | | |
| Chromlum | 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 lam

Reviewed by SB

2508 W Main Street Farmington, New Mexico 87401

6. Client:

Williams Field Service

Project:

Milagro Plant

Sample ID:

West Evep Pond

Laboratory ID: -

0398W01328

Sample Matrix:

Water

Date Reported:

08/01/98

Date Sampled:

07/11/96

Time Sampled:

10:00 AM

Date Received:

07/11/96

Condition:

CooVintact

| Condition. Coordinate | | | | |
|--------------------------------|-----------|----------|-------|-------|
| | | | | |
| | Analytica | | | |
| Paremeter | Rosult | Units | | Unks |
| | | | | |
| Leb pH | 8.6 | 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/Ļ | | |
| Total Phosphorous | 184 | mg/L | | |
| Bicarbonate as HCO3 | 7,600 | mg/L | 125 | meq/L |
| Carbonata 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 | mea/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 | mea/L |
| Magnesiurn | 15.7 | mg/L | 1.29 | meq/L |
| Sodium | 1,570 | mg/L | 68.3 | meg/L |
| Potassium | 104 | mg/L | 2.67 | meq/L |
| Trace Metals (Total) | | | | |
| Arsenic | <0.005 | mg/L | | |
| Barium | 0.09 | mg/L | | |
| Cadmium | 0.048 | 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:

Reviewed by

2506 W. Main Street Farmington New Maxico 87401 Cilent: Williams Field Bervice Project: Milagro Plant Date Reported: 08/01/98 07/11/98 Date Sampled: Sample ID: South Evap Pond 10:10 AM 0398W01327 Time Sampled: Laboratory ID: 07/11/96 Date Received: Water Sample Matrix:

| mention filter and amount and a second | | | | |
|--|-----------|----------|-------|-------|
| Condition: Cool/Intact | | | | |
| | Analytica | | | |
| Parameter | Rosult | 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 CaCO3 | 91.0 | mg/L | | |
| Total Alkalinity as CaCO3 | 43,520 | mg/L | | |
| Total Phosphorous | 73.7 | mg/L | | |
| Bicarbonate as HCO3 | 2,800 | mg/L | 46.4 | meq/L |
| Carbonate as CO3 | 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 | meg/L |
| Nitrate | 8.15 | 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 | , | |
| Badum | 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 W

Reviewed by_

2506 W. Main Street Farmington, New Mexico 87401

Quality Control / Quality Assurance

Trace Metals / Known Analysis TOTAL METALS

Client:

Williams Flold 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:

07/11/98

Known Analysis

| | Found | Known | |
|-----------|--------|---------|---------|
| | Value | Value | Percent |
| Parameter | (mg/L) | (m)q/L} | Recover |
| 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: しいつ

Reviewed By

2508 W Main Street Farmington, New Mexico 87401

Quality Control / Quality Assurance

FIELD SVCS.

Trace Metals / Spike Analysis **TOTAL METALS**

Client:

Williams Field Service

Project:

Milagro Plant

Laboratory ID:

0396W01325-1327

Sample Mairix:

Water

Condition:

Cool / Intact

Date Reported:

08/01/96

Date Sampled:

07/11/98

Date Received:

07/11/98

Spike Analysis

| | Spike | Unapliced
Sample | Solke | |
|-----------|------------------|---------------------|------------------|---------------------|
| Paramoter | Result
(mg/L) | Result
(mg/L) | Amount
(mg/L) | Percent
Recevery |
| 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 | 88% |
| Lead | 0.024 | <0.005 | 0.025 | 95% |
| Mercury | 0.005 | < 0.001 | 0.005 | 108% |
| Selenium | 0.024 | < 0.005 | 0.025 | 96% |
| Silver | 0.025 | 0.025 | 0.025 | 108% |

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:

Reviewed By:

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

North Evap. Pond

Water

Project ID: Lab ID:

Matrix:

B965800

Milagro Plant

0396G01325

FIELD SVCS.

Date Reported:

08/07/96

Date Sampled: Date Received: 07/11/96 07/12/96

Date Extracted:

NA

| ~ . | |
|------|------|
| Date | Anal |

07/19/96 lyzed:

| 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-Dichloroethene | ND | 5.0 | սց/Ն |
| 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 | սք/Լ |
| 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 | սց/և |
| 1,2-Dichloropropane | ND | 5.0 | ug/L |
| 1,3,5-Trimethylbenzene | αи | 5.0 | ug/L |
| 1,3-Dichlorobenzene | ND | 5:O | ug/L |
| 1,3-Dichloropropane | ND | 5.0 | ug/L |
| 1,4-Dichlorabenzene | ND | 5.0 | ug/L |
| 2,2-Dichloropropane | ND | 5.0 | ug/L |
| 2-Chlorotoluane | ND | . 5.0 | ug/L |
| 4-Chlorotoluene | ДИ | 5.0 | ug/L |
| 4-Isopropyltoluene | ND | 5.0 | ug/L |
| Benzene | ND | 5.0 | ug/L |
| Bromobenzene | ND | 5.0 | ug/L |
| Bromochloromethane | ИD | 6.0 | ug/L |
| Bromodichloromethane | ND | 5.0 | ug/L |
| Bromoform | NO | 5.0 | ug/L |
| Bromomethane | ND | 5.0 | ug/L |

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

North Evap. Pond

Project ID:

Milagro Plant

Lab ID: Matrix: B965800

Water

0396G01325

Date Reported:

08/07/96

Date Sampled:

07/11/96

Date Received: Date Extracted: 07/12/96 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-Dichloroethana | 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 | ս ը /L |
| Hexachlorobutadiene | ND | 5.0 | ug/L |
| Isopropyibenzene | ND | 5.0 | ug/L |
| m,p-Xylene | ND | 5.0 | ս ք/Լ |
| 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 |

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

North Evap. Pond Milagro Plant

Project ID: Lab ID:

8965800

0396G01325

Date Reported: Date Sampled:

08/07/96

07/11/96

Date Received: Date Extracted: 07/12/96

NA

Water Matrix:

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 (POL)

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 F.D. 8/1/10

1160 Research Drive Bozeman, Morkena 59715

EPA METHOD 8270 POLYNUCLEAR AROMATIC HYDROCARBONS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

North Evap. Pond

Project ID:

Milagro Plant

Lab ID: Matrix:

8965800

Water

0396G01325

Date Reported:

08/05/96

Date Sampled: Date Received: 07/11/96

Date Extracted:

07/12/96 07/15/96

Date Analyzed

07/31/08

| 07/31/98 |
|--------------|
| Units |
| |
| ug/L |
| ug/L
ug/L |
| սց/Է
սց/Է |
| ug/L |
| ug/L |
| ug/L |
| ug/L |
| ug/L |
| սց/է |
| ug/L |
| ug/L |
| |
| 23 |
| 6 |
| 0 |
| - |
| 4 |
| 4 |
| 1 |

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.

1160 Research Drive Bozomen, Montena 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

West Evap. Pond

Project ID: Lab ID:

Milagro Plant 8965801

0396G01326

Date Reported:

08/07/96

Date Sampled: Date Received: 07/11/96 07/12/96

Date Extracted:

07/18/96 Date Analyzed:

NA

Matrix: Water

| Parameter | Result | PQL | Units |
|------------------------------------|--------|-------------|-------|
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/L |
| 1,1,1-Trichloroethane | ND | 5.0 | n8\r |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/L |
| 1,1,2-Trichloroethane | ND | 5.0 | սց/Լ |
| 1,1-Dichloroethane | ND | 5.0 | ug/L |
| 1,1-Dichlorgethene | 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. Q | ug/L |
| 1,2-Dichlorobenzene | ND | 5.0 | ug/L |
| 1,2-Dichloroethane | ND | 5.0 | սք/Լ |
| 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 | МÐ | 5.0 | ug/L |
| Bromochloromethane | ND | 5.0 | ug/L |
| Bromodichloromethans | ND | 5.0 | ug/L |
| Bromoform | ND | 5.0 | ug/L |
| Bromomethane | ND | 5.Q | ug/L |

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

West Evap. Pond Milagro Plant

Project ID: Lab ID:

B965801

0396G01326

Date Reported:

Date Sampled:

08/07/96

Date Received:

07/11/96 07/12/96

| Matrix; Water | | Date Extracted:
Date Analyzed: | NA
07/18/96 |
|--------------------------|--------|-----------------------------------|----------------|
| Parameter | Result | PQL | Units |
| l
onปักบอส | | | ····· |
| Carbon Tetrachloride | ND | 5.0 | ug/t |
| Chlorobenzene | ND | 5.0 | ug/l |
| Chloroethane | ND | 5.0 | ug/L |
| Chloroform | ND | 5.0 | ug/l |
| Chloromethane | ND | 5.0 | ug/L |
| cls-1,2-Dichloroethane | ND | 5.0 | ոն/բ |
| cis-1,3-Dichloropropene | ND | 5.0 | սք/և |
| 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-Xylane | ND | 5.0 | ug/L |
| Methylene chloride | ND | 20 | ug/L |
| n-Butylbenzene | ND | 5.0 | ນg/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 | սց/Լ |
| Tetrachloroethene (PCE) | ND | 5.0 | ug/L |
| Toluena | ND | 5.O | 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 |

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

West Evap. Pond

Project ID: Lab ID:

Matrix:

Milagro Plant 8965801

Water

0396G01326

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.D. 8/7/96

Reviewed____

1180 Pessardh Onvo Boxeman, Montana 69715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

South Evap. Pond

Project ID:

Matrix:

Milagro Plant

B9658Q2

0396G01327

Lab ID:

Water

Date Reported:

08/07/96

Date Sampled: Date Received: 07/11/96 07/12/96

Date Extracted:

NA 07/19/96 Date Analyzed:

| 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-Tetrachloroothane | 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 | սց/Լ |
| 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 | սք/Լ |
| 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 | սք/Լ |
| Bromoform | ND | 5.0 | ug/L |
| Bromomethane | ND | 5.0 | սց/Լ |
| Bromoform | ND | 5.0 | |

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

South Evap. Pond

Project ID: Lab ID: Milagro Plant B965802

0396G01327

Date Reported: Date Sampled:

08/07/96

Date Received:

07/11/96 07/12/96

07/19/96

Date Extracted: Date Analyzed:

NA

| ∕latrix: | Water |
|----------|-------|
| | |

| 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 |
| cls-1,2-Dichloroethene | ND | 5.0 | ug/L |
| cis-1,3-Dichloropropene | ND | 5.O | ug/L |
| Dibromochloromethane | ND | 5.0 | ug/L |
| Dibromomethane | ND | 5.0 | ug/L |
| Dichlorodifluoromethane | ND | 5.0 | ug/L |
| Ethylbenzene | ND | 5. Q | 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.Q· | ug/L |
| tert-Butylbanzene | ND | 5.0 | ψg/L |
| Tetrachloroethene (PCE) | ND | 5.0 | ug/L |
| Toluene | ND | 5.0 | աք/Լ |
| 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 |

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

Bromofluorobenzene

Toluene-d8

South Evap. Pond

Project ID: Lab ID:

Matrix:

Milagro Plant

B965802

0396G01327

Water

Date Reported:

08/07/96

Date Sampled:

07/11/96

Date Received: Date Extracted:

86 - 115

88 - 110

07/12/98 NA

Date Analyzed:

07/19/96

| Parameter | Result | PQL | Units |
|--------------------------------------|--------|-----------|-------|
| QUALITY CONTROL - Surrogate Recovery | % | QC Limits | |
| 1.2-Dichloroethane-d4 | 97 | 80 - 120 | |

105

105

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 60 . 8/7/46

Reviewed_____

EPA METHOD 8270 POLYNUCLEAR AROMATIC HYDROCARBONS

Client:

Matrix:

WILLIAMS FIELD SERVICE

Sample ID.

South Evap. Pond

Project ID: Lab ID: Milagro Plant

8965802

Water

0396G01327

Date Reported:

08/05/96

Date Sampled: Date Received: 07/11/96 07/12/96

Date Extracted:

07/15/96

| Data | Analyzadi | |
|------|-----------|--|
| Date | Analyzed: | |

07/30/96

| | | Date Analyzed: | 07/30/96 |
|--------------------------------------|----------|------------------|--------------|
| Parameter | Result | PQL | Units |
| 2 Mathulahalanthana | ND | 400 | ug/L |
| 3-Methylcholanthrene | ND
ND | 400 | ug/L
ug/L |
| Acenaphtheles | ND
ND | 400 | ug/L |
| Acenaphthylene
Anthracene | ND | 400 | |
| | ND | 400 | սք/L
սք/L |
| Benzo(a)anthracene | | | _ |
| 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 |
| Fluarene | 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 | I |
| 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 | |
| i dipitoriji di T | • • | - · · | |

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 70

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-Dichlorosthane | 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-Chlarotoluene | ND | 0.005 | mg/L |
| 2-Hexanone | ND | 0.005 | mg/L |
| 3-Chloroprene (Allyl Chloride) | ND | 0.005 | mg/L |
| 4-Chlorotoluene | NO | 0.005 | mg/L |
| 4-lsopropyltoluene | 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

| Paramoter | Result | POL | Units |
|------------------------------|--------|-------|-------|
| ontinued | | | |
| 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 |
| Ethylbenzens | ND | 0.005 | mg/L |
| | ИД | 0.005 | mg/L |
| odomethane | ND | 0.005 | mg/L |
| sobutanol | ND | 0.005 | mg/L |
| sopropylbenzene | ND | 0.005 | mg/L |
| n,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

Data Analyzed: 07/18/96

Lab ID:

IBW96200A

Matrix:

Water

| Parameter | Result | PQL | Units | |
|--------------------------------------|--------|--|--------|--|
| onthued | | ······································ | | |
| 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 | |
| Propionitrila | 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 Fo. 8/7/96

1160 Research Drive Bozernen, Montaria 59715

LAB QA/QC **EPA METHOD 8260** INSTRUMENT BLANK

Date Analyzed: 07/19/96

Lab ID:

IBW96201A

Matrix:

Water

| Parameter | Result | PQL | Units |
|------------------------------|--------|-------|-------|
| ontinued | | | |
| 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 | DA | 0.005 | mg/L |
| Ethyl methacrylate | ND | 0.005 | mg/L |
| Ethylbenzene | ND | 0.005 | mg/L |
| Hexachlorobutadiene | ND | 0.005 | mg/l |
| lodomethane | ND | 0.005 | rng/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: 07/19/96

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-Trichtoropropane | 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-Dichloropropana | 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

1160 Research Ethe Bozeman, Montana 59715

LAB QA/QC **EPA METHOD 8260** INSTRUMENT BLANK

Date Analyzed: 07/19/96

Lab ID:

IBW96201A

Matrix:

Water

| Parameter | Result | POL | Units |
|--------------------------------------|--------|-----------|-------|
| ontinued | | | |
| Mathylana chlorida | ND | 0.005 | mg/L |
| n-Butanol . | ND | 0.005 | mg/L |
| n-Butyibenzene | ND | 0.005 | mg/l |
| n-Propylbenzene | ND | 0.005 | mg/L |
| Naphthalene | ND | 0.005 | mg/L |
| o-Xylene | ND | 0.005 | mg/i |
| Propionitrile | ND | 0.005 | mg/l |
| sec-Butylbenzene | ND | 0.005 | mg/l |
| \$tyrene | ND | 0.005 | mg/L |
| tert-Butylbenzene | ND | 0.005 | mg/l |
| Tetrachloroethene (PCE) | ND | 0.005 | mp/l |
| Toluene | ND | 0.005 | mg/l |
| trans-1,2-Dichloroethene | ND | 0.005 | mp/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 Chlorida | 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 10 8/7/16

1160 Repairon Crive Bozeman, Montaina 59715

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 | POL | Units |
|-------------------------------|--------|------|-------|
| 1.2,4-Trichlorobenzene | ND | 10 | ug/L |
| 1,2-Dichlorobenzene | ND | . 10 | ug/L |
| 1,3-Dichlorobenzene | ND | 10 | սց/Լ |
| 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-Methylphenoi/4-Methylphenoi | 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

1160 Heseerch Drive Bozemen, Mortena 59715

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 |
|-----------------------------|--------|-----|-------|
| ontinued | | | |
| Benzo(g,h,i)perylene | ND | 10 | ug/L |
| Banzo(k)fluoranthane | ND | 10 | ug/l |
| Benzoic Acid | ND | 50 | ug/L |
| Benzyl Alcohol | ND | 20 | ug/L |
| bis(2-Chloroethoxy)methane | ND | 30 | 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 | ИD | 10 | ug/L |
| Chrysene | DM | 10 | ug/L |
| Di-n-Butylphthalate | ND | 50 | ug/L |
| Di-n-Octylphthalate | ND | 50 | ug/L |
| Dibenz(a,h)anthracene | ND | 10 | นถู/เ |
| Dibenzofuran | ND | 10 | ug/L |
| Diethylphthalate | ND | 10 | ug/L |
| Dimethylphthalate | ND | 10 | ug/L |
| Fluoranthene | ND | 10 | ug/l |
| Fluorana | 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 |
| Vaphthalene | ND | 10 | ug/l |
| Nitrobenzene | ND | 10 | |
| 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 | | | 1 |

| QUALITY CONTROL - Surrogate Recovery | % | QC Limits |
|---|---------------|-----------|
| *************************************** | * 8 8 8 9 9 8 | |
| 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 (POL)

LAB QA/QC **EPA METHOD 8260 MATRIX SPIKE**

Date Analyzed: 07/19/96

Lab ID:

O596H05800

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 | 1113 | 75 -145 |
| 3enzene | 20 | 0 | 20 | 100 | 71 -120 |
| Chlorobenzene | 20 | 0 | 19.4 | 97 | 76 -127 |
| Taluene | 20 | 0 | 21.1 | 106 | 7 1 -127 |
| Frichloroethene (TCE) | 20 | 0 | 19,3 | 97 | 75 -1 3 0 |
| QUALITY CONTROL - Surrogate Recovery | | | % | , | QC Limits |
| 1,2-Dichloroethane-d4 | | | 103 | | 88 -110 |
| Bromofluorobenzene | | | 102 | | 76 -114 |
| Coluene-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.

1. 0. 8/7/06 Analyst_

LAB QA/QC **EPA METHOD 8260** MATRIX SPIKE

Date Analyzed: 07/18/96

Lab ID:

0596H05801

SKI

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 | Q | 17.2 | 86 | 71 -127 |
| Trichloroethene (TCE) | 20 | O | 16.6 | 83 | 75 -130 |
| QUALITY CONTROL - Surrogate Recover | у | | % | , | QC Limits |
| Bromofluorobenzene | | *************************************** | 108 | ! | 76 -114 |
| 1,2-Dichloroethane-d4 | | | 93 | | 88 -110 |
| Foluene-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

1160 Research Drive Bozeman, Montana 59715

LAB QA/QC **EPA METHOD 8270** MATRIX SPIKE

Date Analyzed: 07/26/96

Lab ID:

0596H05754

\$K1

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 |
| Pentachiorophenol | 200 | 0 | 125 | 63 | 9 -103 |
| Phenoi | 200 | 0 | 102 | 51 | 12 - 89 |
| Pyrene | 100 | 0 | 61 | 61 | 26 -127 |
| QUALITY CONTROL - Surrogate Recove | ry | | % | | QC Limits |
| 2,4,6-Tribromophenol | | | 69 | | 10 -123 |
| 2-Fluorobiphenyl | | | 66 | • | 43 -116 |
| 2-Fluorophenol | | | 50 | | 21 -110 |
| Nitrobenzene-d5 | | | 86 | | 35 -114 |
| Phenal-d6 | | | 53 | | 10 -110 |
| Terphonyl-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.

Reviewed

2508 W. Main Street Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1

Client.

Williams Field Serv.

Project:

Milegro Plant

Matrix:

Water Intact/Cool

Condition:

Date Reported: Date Sampled:

07/30/96

07/11/96

Date Received: Date Extracted: 07/11/96 07/18/96

Date Analyzed:

07/18/96

| and application | GENERAL TERMINATION OF THE PERSON OF THE PER | Part Court
Part Court
Court Court | CLCSCHTT
HEALTH |
|-----------------|--|---|--------------------|
| N. Evap. Pond | 0396W01325 | * 108 | 5.0 |
| W. Evap. Pond | 0396W01326 | ° 69.8 | 5.0 |
| S. Evep. Pond | 0396W01327 | * 61.6 | 5.0 |

ND - Analyte not detected at stated detection level.

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 250 mg/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.

Reviewed:

2506 W. Main Straat Farmington, New Maxico 87401

TOTAL PETROLEUM HYDROCARBONS Quality Assurance/Quality Control

Client:

Williams Fleid Services

Project:

Milagro Plant

Matrix: Condition: water Intect/Cool Date Reported:

07/30/96

Date Sampled: Date Received: 07/11/96

Dale Extracted:

07/11/96 07/18/96

Date Analyzed.

07/18/96

Duplicate Analysis

| | i be | 1 4/0 25 10 17
1 5/5 13 | ghar. | S AND COMMON | |
|------------|------|----------------------------|-------|--------------|--|
| 0396G01326 | 68.8 | 71.6 | mg/L | 4.0% | |

Method Blank Analysis

| | Played | | Control Control |
|--------------|--------|------|-----------------|
| Method Blank | ND | mg/L | 1.0 |

Spike Analysis

| | Contraction of the Contraction o | erania di
Capata
Banga | | | Legend . |
|--------------|--|------------------------------|------|------|----------|
| Method Blank | 13.3 | ND | 12.5 | 106% | 70-130% |

Known Analysia

| Tangga as | Folso:
Ceros:
Folso: | Annual
Confi | Protects. | Agentania
Pariser |
|-----------|----------------------------|-----------------|-----------|----------------------|
| QC . | 21.1 | 20.6 | 103% | 70-130% |

References:

Method 418.1; Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Weste, 1978.

Method 3510: Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.

Analyst:

Reviewed: 65



CHAIN OF CUSTODY RECORD

Leigh food ng

| Cilent/Project Name Williams Field | 12 Serv | 1.ce 5 | 1 7 | lagin | Flan | } | | 7 | ANAL | YSES. | /PAF | RAME | TERS | | NOV 25 |
|--|--|-----------|---|----------|---|-------------|-------------------------------|--------------------------------|------------------------------|----------------------|------------------------------------|---------|----------------------------|--------------------|---------|
| Sampler (Signature) | With | | Chain of Cu | | | | More . | | N. S. | \darange \frac{1}{2} | 4 2 | | Remarks | | 3 96, |
| Sample No./
Identification | Date | Time | Lab Number | | Matrix | - | No. of
Containers | 8260 | Com. 1. | KORA
Meda | WALLON | TOH | | - | 22:53PM |
| North Evap Pord | 7/11/96 | 9.45 | 1 | unte i | water | | 7 | V . | ン | ン | | 13 | 7 7.00 | A hai | MIL |
| West Evop Good | | | | 1 | water | | 7 | 1 | <u> </u> | <u></u> | <i>''</i> | 14 | two | · 83_ | - |
| South Euro Pond | 7/11/16 | 10.10 | | waste | instr | | 7 | ' س | 1 | i | : | 4 | 2/22/ | has to | 1 T |
| | | | | | | | | | | | | | <u>TPH</u> | 418.1 | FIEL |
| | | | | | | | | | | | | | | | |
| | - | | | | | | | | | | <u> </u> | | | | SVCS |
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| Relinquished by: (Signature) | | ···· | | Date | Time . | Received b | y- (Sign | sture | 1 | | | · | Date | T/Inst | |
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Time | an. |
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میمند کرد | | | 7-11 | 12:5 | 5 |
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| | • | | Inter-Mo | untain l | Laboral | tories, l | nc. | _ | | | | | | • | P. (3) |
| 1633 Terra Avenue
Sheridan, Wyoning 82801
Telephone (307) 672-8945 | 1701 Phillips (
Gillette, Wyom
Telephone (30 | ing 82718 | 2506 West Main Stre
Farmington, NM 8741
Telephone (505) 326 | of Boze | Research Dr.
eman, Montana
phone (406) 56 | 59715 | 11183 S
College
Telepho | H 30
Station, 1
ne (409) | TX 7784!
7 76 -894 | 5 Coll | 4 Longm
lege State
aphone (« | ion, TX | 77845 | 7678 | 33/33 |

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

District IV - (505) 827-7131

c, NM 87410عدر

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

| nequest for Approval to Accept | SOLID WAS IE |
|--|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator SG INTERESTS |
| Verbal Approval Received: Yes ☐ No ☑ | 5. Originating Site FIELD LOCATION |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator 345 CR 3500 42+CC, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) 515-T33-R8W | ~ . |
| 9. Circle One: (A.) All requests for approval to accept oilfield exempt wastes will be accepted acceptator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted acc | ompanied by necessary chemical analysis to
on of origin. No waste classified hazardous by |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: PRODUCED WATER MILED WITH REFIN | JAN - 6 1997 OILL CON DIV |
| SIGNATURE: Management Facility Authorized Agent TYPE OR PRINT NAME: MICNACL TALOUICH TELESTIMATE TO BELS CY Known Volume (to be entered by the open to be entered by the op | |
| APPROVED BY: Send TITLE: Geold APPROVED BY: Send TITLE: Geold | og ist DATE: 1/6/97 |

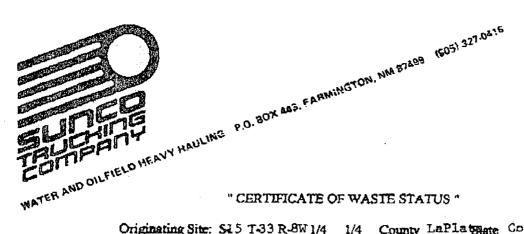
Jan. 3, 1996

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



Originating Site: SL5 T-33 R-8W 1/4 1/4 County LaPlatement Co.

Physical Address if appropriate Just past mile marker 12 on Highway 318 west of Ignacio Colorado

| Source and d | escription of wa | este: | • | · | |
|----------------|---------------------|------------------|----------------|--|--------------|
| Bypass 11q | uid from we | iter pump. | Includes | approximately | 7 80% |
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| | | *···· | | | |
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| I Dennis D | . Reimers | | | | |
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| Signature() | | C. Them | | | |
| rinted Name_ | Dennis R. R | eimers | | | |
| itle | Engineering | Manager | | | |
| pare | Jenuary 3. | 1997 | | | |



MATERIAL SAFETY DATA SHEET

| Sureau | | MSDS NUMBER | B 864.040 | -4 PAGE |
|---|--|--|--|--|
| 24 HOUR EMEASE | NCV:(A-RUICYANLE LIBERTAN | GENERAL MESS | ASSISTANCE | |
| | 461 CHEMTREC: 800-424-930 | SHELL: 713 | 1-241-4819 | BE SAFE |
| 4 | 1 PAZARO RATI | NEG LEAST - D ELIGHT | | SAPETT ON BRODUST ANTITY ON GENEVIEW FASE IT ON FASE IT ON PAGE THE LITTLE |
| #For sout | e and chronic hosith affects refer to | the discussion in Sect | ion III | MOUNTS!? |
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| | PINAX(R) HEAVY DUTY BEW/140 | | <u> </u> | |
| NAME - | (SEE SEC. 11A) | The state of the s | | |
| PAMILY PETROLE | M HYDROGANBON: GEAN DIL | | | |
| SPELL 38212 | | | | |
| | | | | |
| SECTION 11-A
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| | | | | ******** |
| SHELL SPIRAX F | EAVY CUTY 85W/140 | | MIXTURE | 100 |
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Brotreated, Heavy Parappinic D
Dtreated Heavy Naphthenic Dist
Loe | | 54742-57-0
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בארדב צ רחיי זארי ובריזבססבסככו

01/03/97 15:57 TX/RX NO.1861

P.003

11315 804.000-a PASE 2 PRODUCT MAME: SHELL SPIRAR(R) HEAVY OUTY SEW/140 INDESTICAL PROPERTY SHEEPHATISH THESE PRODUCT RIGHE AND SYMPTOMS TRRITATION AS NOTED ADOVE. MOURAVATED MEDICAL COMDITIONS Reexisting skin and respiratory disorders may be adgravated by exposure to this product. SECTION 1V COMPATIONAL CHPOCHE LIMITS
OSHA
ACOM POST-OGGSAND TEMPERATURE TEMPERATURE TEMPERATURE TEMPERATURE TO MG/MG* MQ. PEL/TWA B MG/MS. TOIL MIST, MINERAL SECTION V RYSEASON AND PLACE ALD PROCESURES EVE CONTACT FLUGH GITH WATER FOR TO MINUTES WHILE HOLDSHO BYGLEDS GREN, GRY MEDICAL ATTENTITIE. SKIN CONTACT REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS UFF. WASH WITH BOAP AND WATER OR A WATERLESS HAND CLEANER FOLLOWED BY SOAP AND WATER, IF THRITATION OCCUBB, GET MEDICAL ATTENTION. IRSHALATION Remove victim to regen air and provide oxygen if dreathing is difficult. Here redical attention EMBERTION
DO NOT INDUCE VONITING. IN GENERAL NO TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES OF
ARE INDESTED, HOWEVER, GET MEDICAL ADVICE. NOTE TO PHYSICIAN IN GENERAL, EMESIS INDUCTION IS UNMECESSARY IN MIGH VISCOSITY, LOW VOLATILITY PRODUCTS, I.E., MOST OILS AND GREASES. SUPPLEMENTAL HEALTH INFORMATION RECTION VI NOME IDENTIFIED.

SECTION VII

BOILING POINT: NOT AVAILABLE (DEG F)

SPECIFIC BRAVITY: 0.8094 (H20=1)

MELTING POINT: -15 (POUR POINT) (DEG F)

SOLUBILITY: (IN WATER)

NEGLIGIBLE

VAPOR DENSITY: NOT AVAILABLE (ATR+1)

PRODUCT NAME: SHELL SPIRAX(R) HRAVY DUTY 684/140

MADE 884.545-4

EVAPORATION RATE (N-EUTYL ACETATE + 1): NOT AVAILABLE

VIS. CS (40 DEG C):380

APPEARANCE AND ODDR: BROWN LIQUID: SLIGHT HYDROGARBON GDDR.

SECTION VIII FIRE AND EXPLOSION KAZANOS

FLASH POINT AND MAINUE:

PLASMABLE LEMETS OF VOLUME IN ATD LOWER: N/AV UPPER: N/AV

EXTINGUIRMING MEDIA USE WATER FOG, FOAM, DRY CHEMICAL OR COP. OG NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN'BE REIGNITED ON BURFACE OF WATER.

SPECIAL FIRE PIGHTING PROCEDURES AND PRECAUTIONS
MATERIAL DILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE-SPARF WITHOUT FULL BURKET GEAR
(HELMAT WITH PROG THELD BURNER MATER. COVER AND PUMPER ROOTS) INCLUDING A POSITIVE-PRESSURE
NIGHT-APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WAFER.

SECTION IX REACTEVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID: AVOID HEAT. OPEN FLAMES AND DISIDIZING MATERIALS.

MAXAMOUS DECOMPOSITION PRODUCTS
THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRSORNE EGLIO, LIQUID, PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES DEPOLYPTION CARBON MONDERS AND OTHER UNIDENTIFIED DEGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

TECTION X GMPLOYES PROTECTION

RESPIRATORY PROTEFYYMM

IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SECTION IV) USE A NAUSH-SPACEO
RESPIRATOR TO PREVENT DVEREXPOSURE. IN ACCORD SITH 26 CFR 1810.134 USE EITHER AN
ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS AND PARTICULATES.

PROTECTIVE CLOTMING

VEAR CHEMICAL RESISTANT GLOVES AND OTHER PROTECTIVE CLOTHING AS REQUIRED TO MINIMIZE SKIN CONTACT.

VEAR SAFETY GOOGLES 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

EPELL 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 VACCUM TRUCKS OR PUMP TO STORAGE SALVAGE VESSELS.
SOAK UP RESIDUE WITH AN ADSORBERT 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 ABSORBERT NATERIAL AND DISPOSE OF PROPERLY.

EDS NUMBER \$ 864.040-2

PAGE 1



Environmental data sheet

PRODUCT & SHELL SPIRAX(R) HEAVY DUTY BEW/140 CODE 59212 PRODUCT/CREPOSITION CONFONERT SOLVENT REFINED, MYDROTREATED RESIDUAL DIL SOL, REF., MYDROTREATED, MEAVY PARAFFINIC DIST. SEVERELY MYDROTREATED MEAVY NAPHTMENIC DIST. ADDITIVE PACKAGE 64742-57-0 54742-54-7 64742-52-5 MIXTURE

BECTION II SABA TETLE III EMPORMATION

NO. EMS RG (LBS) DMS TPQ (LBS) SBC 312 312 CATEGORY 311/312 CATEGORIES (+1) (+2) (+2) (+3) (+4)

BASED ON THE DATA AVAILABLE TO SHELL THIS PRODUCT IS NOT REGULATED BY SARA, TITLE III

#1 = REPORTABLE QUANTITY DF EXTREMELY MAZARDOUS SUBSTANCE, SEC.302
#2 = THRESHOLD PLANNING GUANTITY, EXTREMELY MAZARDOUS SUBSTANCE, SEC.302
#3 = TOXIC CHEMICAL, SEC.313
#4 = CATEGORY AS REQUIRED BY SEC.313 (AD CFR.371.85 C), MUST BE USED ON TOXIC RELEASE INVENTORY FORM
#5 = MAZARD CATEGORY FOR SAMA SEC. 311/312 REPORTING
HEALTH H-1 = IMMEDIATE (ACUTE) MEALTH MAZARD H-2 = DELAYED (CHRONIC) MEALTH HAZARD
PHYSICAL P-3 = FIRE MAZARD
P-4 = SUDDEN RELEASE OF PRESSURE MAZARD
P-5 = REACTIVE MAZARD

יין לאחייטע הדירד ווביכה עדר

SECTION III CAVEROMENTAL RELEASE INFORMATION

THIS PRODUCT IS CLASSIFIED AS AN DIL UNDER SECTION 211 OF THE CLEAN WATER ACT. SPILLS ENTERING (A) Surface waters or (B) any water courses or severs entering/leading to surface waters that cause a Smeen must be reported to the national response center. 800-494-8802.

SECTION IV RCAL INFORMATION

PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH LOCAL REGULATIONS

1EF:1-202-252-8551

FRALEY & CO., INC.

3.4

PRODUCT NAME: SHELL SPIRAX(R) HEAVY DUTY 854/140

FAGE SOL, ONOF THE PAGE

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 ACQURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMED NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED MEREIN.

DATE PREPAREDIMARCH 22, 1880

SHELL DIL CEMPANT SAPETY, INBUSTRIAL HYGIGNE AND ENVIRONMENT P. G. BOX 4220 HELETON, TX 77210

FOR ADDITIONAL INFORMATION ON THIS ENVEROPORTION DATA PLEASE CALL (713) 241-2282

FOR AMERGENCY ABBISTANCE PLEASE CALL SHELL: (712) 475-9481 GRENTASO: (800) 424-8300

30.9, 100. by \$1:21 \2.50 A5

01/03/97 16:03

TX/RX NO.1862

P.002



District I - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First

Artesia, NM 88210 ritrict III - (505) 334-6178 Rio Brazos Road

~_.cc, NM 87410 District IV - (505) 827-7131

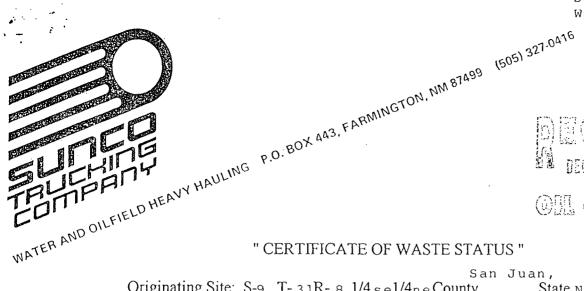
New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division

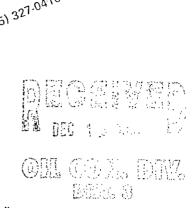
2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

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: Non-Exempt: | 4. Generator Phillips Petroleum |
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site Field Locations |
| 2. Management Facility Destination Sunco DIS POSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator #345 CR 3500, AZ+EC NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) | |
| 9. Circle One: All requests for approval to accept oilfield exempt wastes will be accept acceptator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be acceptatored. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigner. | ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| S.J. 29-6#1 CDP S.J. 29-6#1 CDP S.J. 29-6#3 CDP S.J. 29-6#4 CDP S.J. 30-5#1 CDP S.J. 31-6#1 CDP S.J. 32-8#1 CDP S.J. 32-8#2 CDP Estimated Volume B76 BBLS cy Known Volume (to be entered by the op waste Management Facility Authorized Agent TITLE: Disposal | DEC 1 6 1996 ON COM. DIV. Derator at the end of the haul) — cy |
| APPROVED BY: Jemy S. Formy TITLE: Geolog APPROVED BY: TITLE: Disk | DATE: 12/16/96 DATE: 12/16/96 |





| " CERTIFICATE OF WASTE STATUS " |
|--|
| Originating Site: S-9 T-31R-8 1/4se1/4ne 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 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 sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, Reactivity xI futher certify that there has been no change in the process employed or chemicals stored / used at the facility generating the waste since1993 SignatureRichard Allred Title Production/Rig Supervisor Date12-13-96 |

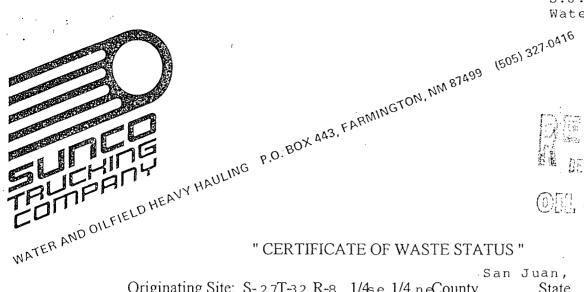
ATTACHMENT: List of wells that flow into this CDP.

UNIT 32-8 CDP #3

| | WEX Y | FIRST | MANZANARES | | OTT A TO N |
|-------------|-----------|------------------|-----------------|---------------|--------------|
| UNIT | WELL
| DELIVERY
DATE | CONNECT
DATE | LOCATION | STATION
|
| CDP #3 32-8 | | DATE | 09/15/92 | LOCATION | C65044-00 |
| , | 221 | 06/04/03 | | CW 00 21N 0NV | |
| 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



OM COM. DIV.

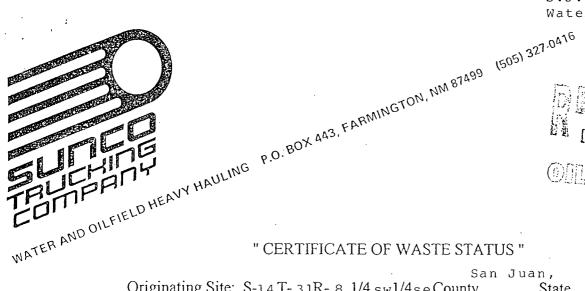
| " CERTIFICATE OF WASTE STATUS " |
|---|
| San Juan, |
| Originating Site: S-27T-32 R-8 1/4se 1/4neCounty State NM |
| Physical Address if appropriate: |
| |
| Source and description of waste: |
| 15 bbls Tretolite CGO 118F |
| Corrosion Inhibitor mixed with equal |
| amount of Diesel used to treat casing, |
| tubing, related equipment and lines. |
| |
| |
| Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M. |
| I Pichard Allred representative |
| I Richard Allred representative for Phillips Petroleum Co. |
| 101 THITTIPS TECTOTERM CO. |
| 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 & a Clean |
| 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

| | WELL | FIRST | MANZANARES | | CT L TYON |
|-------------|------|----------|------------|--------------|-----------|
| | WELL | DELIVERY | CONNECT | | STATION |
| UNIT | # | DATE | DATE | LOCATION | # |
| 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 |

12/12/96





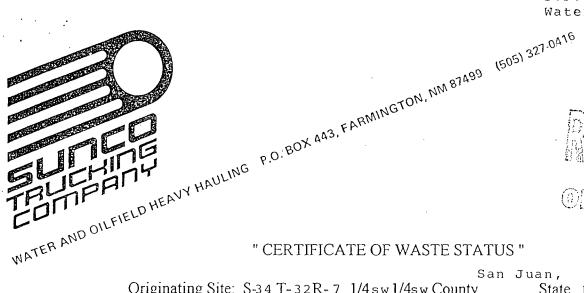
| "CERTIFICATE OF WASTE STATUS" |
|--|
| San Juan, |
| Originating Site: S-14 T-31R-8 1/4 sw1/4 se County State NM Physical Address if appropriate: |
| 1 hysical readless if appropriate. |
| Source and description of waste: |
| 4 bbls Tretolite CGO 118F |
| Corrosion Inhibitor mixed with equal |
| amount 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 Allredrepresentative |
| for Phillips Petroleum Company |
| de hombre and first and a Decrease of the American |
| do hereby certify that according to the Resource Conservation and Recovery Ac 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 require |
| 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 K U Ulli- |
| 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

| | | FIRST | MANZANARES | | |
|-------------|---------|----------|------------|--------------|-----------|
| | WELL | DELIVERY | CONNECT | | STATION |
| UNIT | # | DATE_ | DATE | LOCATION | # |
| 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 26-3 N-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 |

3281.WK3 12/12/96

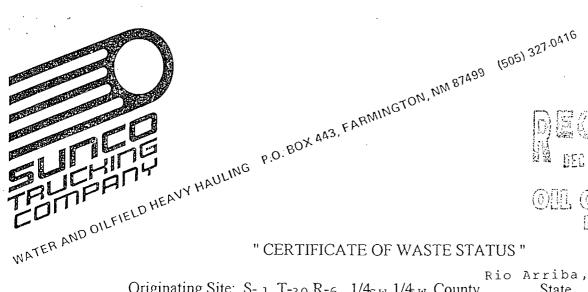


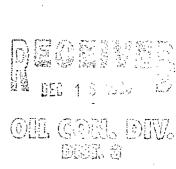


| The required documentation is hereto attached: Check the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, Reactivityx_I futher certify that there has been no change in the process employed or chemicals stored / used at the facility generating the waste since1993 Signature Printed NameRichard_Allred TitleProduction/Rig_Supervisor | | CERTIFICATE | OF MASIE STAT | 05 " |
|--|--|--|--|----------------------------|
| 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 Richard Allred Fitle Production/Rig Supervisor | | | <u>sw 1/4sw</u> County | State NM |
| | | | | |
| 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 Richard Allred Title Production/Rig Supervisor | · · | • | | |
| 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 Richard Allred Title Production/Rig Supervisor | | | * , 1 | |
| 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 Richard Allred Title Production/Rig Supervisor | | | - | |
| IRichard_Allredrepresentative forPhillips_Petroleum_Company do hereby certify that according to the Resource Conservation and Recovery Act that the above described waste is xExempt | | | _ | |
| 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 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 Richard Allred Title Production/Rig Supervisor | Destination : Su | ınco Disposal, 345 | CR 3500, Aztec, | San Juan Co. N.M. |
| do hereby certify that according to the Resource Conservation and Recovery Act that the above described waste isx 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 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 Richard Allred Fitle Production/Rig Supervisor | I Rich | ard Allred | | representative |
| do hereby certify that according to the Resource Conservation and Recovery Act that the above described waste isX_ExemptNon-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 sheetRCRA TCLP AnalysisRCRA 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 1993 Signature Richard Allred Frinted Name Richard Allred Fitle Production/Rig Supervisor | for Phillips | Petroleum Com | | |
| Check the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityX I futher certify that there has been no change in the process employed or chemicals stored / used at the facility generating the waste since1993 SignatureRichard_Allred TitleProduction/Rig_Supervisor | that the above des | scribed waste is x y characteristic analy | Exempt Non-Exempt and to sis or by product | hat it has been identified |
| MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, Reactivityx_I futher certify that there has been no change in the process employed or chemicals stored / used at the facility generating the waste since1993 SignatureRichard_Allred Title_Production/Rig_Supervisor | The required docu | mentation is hereto a | ttached: | • |
| 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 Printed Name Richard Allred Title Production/Rig Supervisor | Check the appropri | iate line(s): | · | |
| Printed Name Richard Allred Title Production/Rig Supervisor | RCRA TCLP A RCRA Metals Corrosivity, Ign x I futher certify chemicals stored / | Analysis
Analysis
nitability , Reactivity
that there has been r | o change in the pr | |
| | Printed Name _{Ri}
Title Producti | on/Rig Supervi | sor | |

ATTACHMENT: List of wells that flow to this CDP.

| | | FIRST | MANZANARES | ' | T |
|-------------|---------|----------|------------|---------------|------------|
| | WELL | DELIVERY | CONNECT | | STATION |
| UNIT | # | DATE | DATE | LOCATION | # |
| 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 |



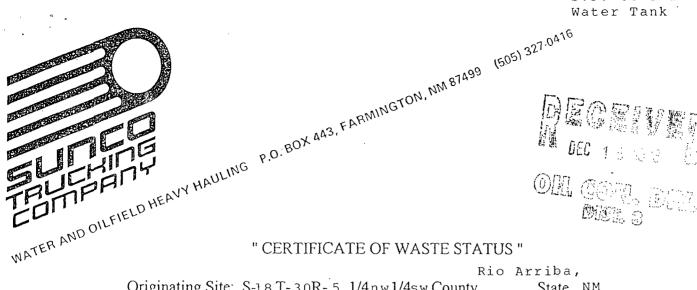


| | 16. | | | didn't settler didn't the |
|--|--|---|---|---------------------------|
| Originating Site: S-1 T-30 R-6 1/45w County State NM Physical Address if appropriate: Source and description of waste: 15 bbls Tretolite CGO 118F Corrosion inhibitor mixed with equal amount of Diesel used to treat 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 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 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 Richard Allred Title Production/Rig Supervisor | | " CERTIFICAT | TE OF WASTE STAT | TUS " |
| 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 Printed Name Richard Allred Title Production/Rig Supervisor | Originating Physical Add | Site: S-1 T-30 R-6 1
dress if appropriate: | 1/4 _{≤w} 1/4 _{≤w} County_ | State NM |
| | 15 bbls Ti | retolite CGO 118 | | |
| 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 Printed Name Richard Allred Title Production/Rig Supervisor | amount of | Diesel used to | treat casing, | |
| 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 Richard Allred Title Production/Rig Supervisor | | | | |
| 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 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 Richard Allred Title Production/Rig Supervisor | | • | · | San Juan Co. N.M. |
| 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 Richard Allred Title Production/Rig Supervisor | I Ri | chard Allred | | representative |
| 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 _ Richard Allred _ Richard Supervisor | for Phillip | s Petroleum Com | | |
| Check the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityX 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 | as non hazardo | ous by characteristic an | Non-Exempt and tallysis or by product | |
| MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, Reactivityx I futher certify that there has been no change in the process employed or chemicals stored / used at the facility generating the waste since1993 Signature | The required d | locumentation is hereto | o attached: | • |
| 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 1993 Signature Printed Name Richard Allred Title Production/Rig Supervisor | Check the appr | ropriate line(s): | | |
| | RCRA TC RCRA Me Corrosivity X I futher ce chemicals store Signature Printed Name Title Produce | CLP Analysis etals Analysis y, Ignitability, Reactive entify that there has been ed / used at the facility Richard Allred etion/Rig Superv | n no change in the pr
generating the waste | 2 7 |

ATTACHMENT: List of wells that flow into this CDP.

| | | FIRS | MANZANARES | | |
|-------------|--------------|------------------|-----------------|--------------|--------------|
| UNIT | WELL
| DELIVERY
DATE | CONNECT
DATE | LOCATION | STATION
|
| CDP #1 31-6 | | | 09/23/92 | BOCATION | 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 | A65039-03 |
| 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 |

3161.WK3 12/12/96



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. Richard Allred representative 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 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

| | | FIRST | MANZANARES | | |
|-------------|------|----------|------------|--------------|-------------|
| | WELL | DELIVERY | CONNECT | | STATION |
| UNIT | # | DATE | DATE | LOCATION | # |
| 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 17-30Ņ-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 |

3051.WK3 12/12/96

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 1/4se 1/4seCounty 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 sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, Reactivityx_I futher certify that there has been no change in the process employed or chemicals stored/used at the facility generating the waste since1993 |
| Signature KU (lllu) |
| 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

| | | FIRST | MANZANARES | <u> </u> | |
|-------------|------|----------|------------|--------------|-----------|
| | WELL | DELIVERY | CONNECT | | STATION |
| UNIT | # | DATE | DATE | LOCATION | # |
| 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 |

2964.WK3 12/12/96

S.J. 29-6 #3 CDP Water Tank



| | | S.J. 29-6 #3 6
Water Tank |
|-------------|---|---|
| | | 251 327.0416 |
| | 1/09 | (503) |
| | MNGTON, NM 819 | PEC 1 |
| | AA3, FARMI | DEC 1 |
| | 00.80X | 1 7 M |
| | JILING T. | OF DEC 16 16 16 16 16 16 16 16 16 16 16 16 16 |
| TALA | LEAVY HAO | District |
| | LEIELD HE | |
| WATER AND O | "CERTIFICATE OF WASTE STATE Originating Site: S-14Tao Rec. 1/4 - 1/4 - County | rus" |
| | Originating Site: S. 14Tao P.c. 1/4 1/4 County | State NM |
| | Originating Site: S-14T29 R6 1/4 nw1/4 ne County Physical Address if appropriate: | State |
| | Thysical 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. representative |
| | for Phillips Petroleum Company | |
| | | |
| | do hereby certify that according to the Resource Conserv | vation and Recovery Act |
| | that the above described waste is X Exempt | 41 - 41 - 41 - 41 - 41 - 41 - 41 - 41 - |
| | | 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 p | process employed or |
| | chemicals stored / used at the facility generating the was | te since 1993 |
| | | |
| | | |
| | Signature K W William Printed Name Richard Allred | |

ATTACHMENT: List of wells that flow into this CDP.

. Title Production/Rig Supervisor

Date 12-13-96

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 |

12/12/96

P.O. BOX AA3, FARMINGTON, NM 87499 (505) 327.0416

WATER AND OILFIELD HEAVY HAULING

ON COM. DIV. Divide

| Originating Site: S-4 T-29 R-6 1/4sw 1/4 NECounty 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 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 |
| Of Company the Marie Same Company to the Company to |
| Signature (Cullum) |
| Printed Name Richard Allred |
| Title Production/Rig Supervisor |
| Date 12-13-96 |
| Jaic 12 13 30 |

UNIT 29-6 CDP #1

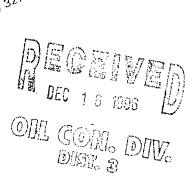
| | | WELL | FIRST
DELIVERY | MANZANARES
CONNECT | | STATION |
|---|-------------|-------------|-------------------|-----------------------|------------------|--------------|
| | UNIT | WELL
. | DATE | DATE | LOCATION | STATION
|
| | CDP #1 29-6 | | DIVID | 04/07/93 | BOCKHON | A65037-00 |
| | S. J. 29-6 | 201 | 12/06/90 | 11/01/96 | NE 06-29N-6W | A65037-01 |
| | 3. 3. 23-0 | 201 | 12/00/90 | 11/01/90 | 14E 00-2914-0 44 | A03037-01 |
| | 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

2961.WK3 12/12/96

 $^{^{\}star}$ These wells are currently flowing to the 29-6 #2 CDP, effective 3/14/96.

WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327.0416



| " CERTIFICATE OF WASTE STATUS " |
|--|
| Rio Arriba |
| Originating Site: S-10T-29 R-6 1/4NE 1/4NE County State NM |
| Physical Address if appropriate: |
| |
| Source and description of wester |
| Source and description of waste: 86 bbls Tretolite CGO 118F |
| Corrosion inhibitor mixed with equal |
| amount of diesel used to treat casing, |
| tubing, related equipment and lines. |
| |
| Destination Company Discount 245 CD 2500 A to C NIM |
| 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 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: |
| The required documentation is noteto 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 |
| O C C C C C C C C C C C C C C C C C C C |
| Signature K (l (elli) |
| Printed Name Richard Allred |
| Title Production/Rig Supervisor |
| Date 12-13-96 |

ATTACHMENT: List of wells that flow into this CDP.

| | WELL | FIRST
DELIVERY | MANZANARES
CONNECT | | STATION |
|-------------|-------|-------------------|-----------------------|--------------|------------|
| UNIT | # | DATE | DATE | LOCATION | # |
| 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 | В65037-08 |
| 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 |

 $^{^{\}star}$ These wells were switched from the 29-6 #1 CDP to the 29-6 #2 CDP 3/14/96.

2962.WK3 12/12/96

O. Box 1980 obbs, 13M 88241-1980 istrict II - (505) 748-1283 11 S. First resis, NM 88210

'trict III · (505) 334-6178

1 Rio Brazos Road

...c, NM 87410

Energy

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

partment

Form C-13 Originated 8/8/

Originated 8/8/

Submit Origin Plus I Coi to appropria District Offi

| rict IV - (505) 827-7131 | OOLIO MA OTE |
|---|---|
| REQUEST FOR APPROVAL TO ACCEPT | |
| 1. RCRA Exempt: Non-Exempt: | 4. Generator Williams Field Secure |
| Verbal Approval Received: Yes ☐ No ☑ | 5. Originating Site GAS Plant |
| 2. Management Facility Destination Scuco Disposa L | 6. Transporter Sunco Trucking |
| 3. Address of Facility Operator 345 CR 3500 AZTEC NM | 8. State WM |
| 7. Location of Material (Street Address or ULSTR) MILAGRO PLANT | |
| 9. Circle One: | |
| Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accopanced proved the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | n of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | |
| WASTE WATER GENERATED AT MILAGRO RECEIVED | Plant (Amine Plant) |
| DEC 03 1996 | NOV 2 7 1896 |
| Environmental Bureau Oil Conservation Division Oil Conservation Division | ON GOW. DIV. DIM. |
| Estimated Volume 200,000 Cal.5 cy Known Volume (to be entered by the ope | erator at the end of the haul) ————— cy |
| SIGNATURE: Management Facility Authorized Agent TYPE OR PRINT NAME: MENAGEL THOUGH TEL | DATE: 11-27-96
EPHONE NO. 505 334-6186 |
| (This space for State Use) APPROVED BY: Deny & Pant TITLE: Gold | DATE: 11/27/96 |
| APPROVED BY: Partial Strains | |



GARY E. JOHNSON GOVERNOR

State of New Mexico ENVIRONMENT DEPARTMI

ENVIRONMENT DEPARIMENT Hazardous & Radioactive Materials Bureau

> 2044 Galisteo P.O. Box 26110

Santa Fe, New Mexico 87503

(505) 827-1557

Pax (505) 827-154- 6 6 6



MARK E. WEIDLER SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

DEC - 3 1996

TRIMTADE L'

November 27, 1996

Mr. Patricio Sanchez New Mexico Oil Conservation Division 2046 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, Acting Program Manager

Hazardous and Radioactive Materials Bureau

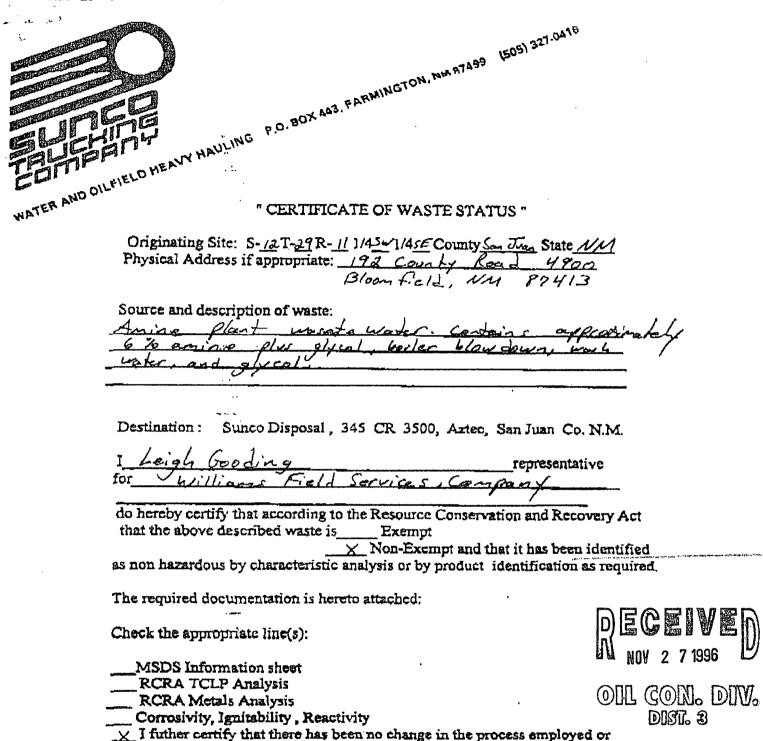
xc: Leigh E. Gooding, Williams Field Services

FAX TO: HAL STUNE - SHULD TRUCKING FROM: PATRICIO W. SANCHER -OCD

DEC 0.3 1996

Environmental Education Cit Conservation Division





chemicals stored / used at the facility generating the waste since July 1996

(Dade of lest analysis)

Signature

Title Sc.



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 Hai Stone, Sunco

| WILLIAMS FIELD SERVICE | S pol pages ⊳ |
|------------------------|-----------------------------|
| Date: 11/26/86 | From Leigh Conding |
| To: Hol Store | Co. Williams Field Services |
| Co. | Phone # |
| Fax (505) 317-4462 | Fax# |

295 Chipeta Way Salt Lake City, Utah 84108 (801) 584-7033

OLD



MEMORANDUM OF MEETING OR CONVERSATION

| ☑Telephone ☐Personal | Time 7:45 / | M. | Date Nov. 27, 1996 | |
|---|-------------|--|--------------------|--|
| Originating Party | | | Other Parties | |
| Jim Senbert, | | Pat | Sanchez, | |
| MMED HRMB | | | MOCD | |
| Subject WFS - Milo | agro u | vastc | water- 6w-60 | |
| Regulatory De- | terminati | w | | |
| "Lotter / Analysis f | rim WF | 5 do | Hed Nov. 26, 1996" | |
| | | 1 1 | | |
| Mr. Senbert a | igreed u | ith | the determination | |
| as sited by | Ms. 6601 | ding. | in the November | |
| 26, 1996 Letter ro
Wastengter From | garding | <u> D</u> | lisposal of | |
| Wastengter From | Milagro | Ylui | nt' 6W-60. | |
| | | | | |
| Mr. Seubert gan | | ` ` | | |
| with a written | correspo | Nden | ce to tallow. | |
| | | , , | , | |
| Conclusions or Agreements | | , ———————————————————————————————————— | | |
| (1) The wasten | ater 7 | pr | N'MED, HRMB | |
| (Mr. Jim Seubert) | | | +AZARDONS in | |
| terms of RCRA | SUBTITE | | C Regulations. | |
| | | | | |
| Distribution File, Hal Stoni | e, Sig | ned | Robin W. Q. | |
| <u>Cistribution</u> File, Hal Stoni
Leigh Good | ing - | | - V - Cro | |



2506 West Main Street Farmington, New Mexico 87401 Tel. (505) 326-4737

12 August 1996

Leigh Gooding Williams Field Service P. O. Box 58900 Salt Lake City, UT 64158-0900

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,

Anna Schaerer

Organic Analyst/IML-Farmington

Anna Schaeser

Enclosure

xc: File

2508 W. Main Street Client: Williams Field Service Farmington, Naw Mexico 87401

Project: Milagro Plant Date Reported: 08/01/96 Sample ID: North Evap Pond Date Sampled: 07/11/98 Laboratory ID: 0398W01325 Time Sampled: 9:45 AM 07/11/98

Sample Matrix: Water Date Received: Condition: Cool/Intact

| Parameter | Analytica
Result | Units | | Units |
|--------------------------------|---------------------|----------|-------|---------|
| | 146-94031 | Million | | CHITES. |
| 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 | meg/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 | 0.069 | mg/L | | |
| Mercury | <0.001 | mg/L | | |
| Selenium | 0.007 | mg/L | | |
| Sliver | <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___

Reviewed by 38

2508 W Main Street Farmington, New Mexico 87401

Client:

Williams Field Service

Project:

Milagro Plant

Sample ID:

West Evap Pond

Laboratory ID: Sample Matrix: 0396W01326

Water

Date Reported: Date Sampled:

08/01/98 07/11/96

Time Sampled:

10:00 AM

Date Received:

07/11/96

| Condition: CooVintact | | | | |
|--------------------------------|------------------|----------|-------|-------|
| | | | | |
| | Analytica | | | |
| Paremeter | Result | Units | | Units |
| | | | | |
| Lab pH | 8.8 | 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 | 1 8 4 | 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 | meg/L |
| Nitrate | 2.90 | mg/L | 0.21 | meq/L |
| Calcium | 26.7 | mp/L | 1.33 | meq/L |
| Magnesiurn | 15.7 | mg/L | 1.29 | mea/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 | 90.0 | mg/L | | |
| Cadmlum | 0.046 | mg/L | | |
| Chromium | 28.3 | mg/L | | |
| Lead | 0.060 | mg/L | | |
| Mercury | <0.001 | mg/L | | |
| Selenium | < 0.005 | mg/L | | |

Reference:

U.S.E.P.A. 800/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

mg/L

< 0.01

"Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Silver.....

Reviewed by 33

2508 W. Main Street Farmington New Mexico 87401

Client:

Williams Field Service

Project:

Milagro Plant

Sample ID:

South Evap Pond

Laboratory ID:

0396W01327

Sample Matrix: Condition: Water Cool/Intact Date Reported:

Date Sampled:

08/01/96 07/11/98

Time Sampled: Date Received: 10:10 AM

| te | Received: | 07/11/9 8 |
|----|-----------|----------------------|
| | | |

| WORKING CONTROL | | | والمتعادمة والتركيف تعالم معادم | |
|--------------------------------|-----------|---|---------------------------------|--------|
| | Analytica | in the second of the second of the second | | |
| Parameter | Result | Units | | Units |
| | | | | |
| Lab pH | 8.8 | 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 CaCO3 | 91.0 | mg/L | • | |
| Total Alkalinity as CaCO3 | 43,520 | mg/L | | |
| Total Phosphorous | 73.7 | mg/L | | |
| Bicarbonate as HCO3 | 2,800 | mg/L | 46.4 | meg/L: |
| Carbonate as CO3 | 24,700 | mg/L | 824 | meg/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 | 8.15 | mg/L | 0.58 | meq/L |
| Wittate | 0.15 | 1116vc | 0.50 | more |
| 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 | | |
| Barlum | 0.10 | mg/L | | |
| Cadmium | 0.032 | mg/L | | * 6 |
| 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 Lon

Reviewed by

2506 W. Main Street Farmington, Naw Maxico 87401

Quality Control / Quality Assurance Trace Metals / Known Analysis TOTAL METALS

Client:

Williams Flatd 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

| | Found | Known | |
|-----------|--------|--------|---------|
| | Vetve | Value | Percent |
| Parameter | (mg/L) | (mg/L) | Recover |
| 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: \square \square

Reviewed By

2508 W Main Street Farmington, New Maxico 87401

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:

07/11/98

Date Received:

07/11/98

Spike Analysis

| | Spike | Unaplicad
Sample | \$plke | |
|-----------|------------------|---------------------|------------------|---------------------|
| Paramoter | Result
(mg/L) | Result (mg/L) | Amount
(mg/L) | Percent
Recevery |
| 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 | 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 | 108% |

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: 1500

Reviewed By:

1180 Retearch Drive Bozeman, Montana 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

North Evap. Pond

Project ID: Lab ID:

Matrix:

Milagro Plant 8965800

Water

0396GQ1325

Date Reported:

08/07/96

Date Sampled:

07/11/96

Date Received: Date Extracted: 07/12/96

Date Analyzed:

NA 07/19/96

| Parameter | Result | PQL | Units |
|------------------------------------|--------|------|-------|
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/L |
| 1,1,1-Trichlorosthane | ND | 5.0 | ug/L |
| 1,1,2,2-Tetrachlorosthane | 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 | սը/Լ |
| 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.O | 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-isopropyitoluene | 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 | NO | 5.0 | ug/L |
| Bromomethane | ND | 5.0 | ug/L |

1160 Research Drive Bozemen, Montene 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

Matrix:

WILLIAMS FIELD SERVICE

Sample ID:

North Evap. Pond

Project ID:

Milagro Plant

Lab ID:

B965800

Water

0396G01325

Date Reported:

08/07/96

Date Sampled:
Date Received:

07/11/96 07/12/96

Date Extracted:

NA

Date Analyzed:

07/19/96

| | | Date Analyzeu. | 07/19/30 |
|--------------------------|--------|----------------|----------|
| Parameter | Result | PQL | Units |
| ontinuad | | | |
| Carbon Tetrachloride | ND | 5.0 | ug/l |
| Chlorobenzene | ND | 5.0 | ug/l |
| Chloroethane | ND | 5.0 | ug/l |
| Chloroform | ND | 5.0 | ug/i |
| Chloromethane | ND | 5.0 | սք/(|
| cis-1,2-Dichloroethene | ND | 5.0 | ug/l |
| cis-1,3-Dichloropropene | ND | 5.0 | ug/l |
| Dibromochloromethane | ND | 5.0 | ug/i |
| Dibromomethane | ND | 5.0 | սք/Լ |
| Dichlorodifluoromethane | ND | 5.0 | uġ/l |
| Ethylbenzene | ND | , 5.0 | սք/ |
| Hexachlorobutadiene | ND | 5.0 | սը/Լ |
| Isopropylbenzene | ND | 5.0 | ր Ֆ/լ |
| m,p-Xylene | ND | 5.0 | սք/Մ |
| Methylene chloride | ND | 20 | ug/ |
| n-Butylbenzene | ND | 5.0 | ug/ |
| n-Propylbenzene | ND | 5.0 | ug/ |
| Naphthalene | ND | 5.0 | ug/ |
| o-Xylene | ND | 5.0 | սց/ |
| sec-Butylbenzene | ND | 5.0 | ug/ |
| Styrene | ND | 5.0 | បន្ន/ |
| tert-Butylbenzene | ND | 5.0 | ug/ |
| Tetrachloroethene (PCE) | ND | 5.0 | ນ໘/ |
| Toluene | ND . | 5.0 | ug/ |
| trans-1,2-Dichloroethene | ND | 5.0 | սց/ |
| Trichloroethene (TCE) | ND | 5.0 | ug/ |
| Trichlorofluoromathane | ND | 5.0 | ug/ |
| Vinyl Chloride | . ND | 5.0 | ug/ |
| Xylenes (total) | ND | 5.0 | ug/ |

Continued

1180 Research Drive Bozenian, Montana 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

Matrix:

WILLIAMS FIELD SERVICE

Sample ID:

North Evap. Pond

Project ID: Lab ID:

Milagro Plant

8965800 Water

Date Reported:

08/07/96

Date Sampled: Date Received: 07/11/96 07/12/96

Date Extracted:

NA

Date Analyzed:

07/19/96

| Parameter | Result | PQL | Units |
|-----------|--------|-----|-------|
| <u> </u> | | | |

Continued

| QUALITY CONTROL - Surrogate Recovery | % | QC Limits |
|--------------------------------------|-----|-----------|
| 1,2-Dichloroethane-d4 | 99 | 80 · 120 |
| Bromofluorobenzene | 100 | 86 - 115 |
| Toluene-d8 | 104 | 88 - 110 |

0396G01325

ND - Not Detected at Practical Quantitation Level (POL)

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 F.D. Shiple

1160 Research Drive Bozeman, Mortana 59715

EPA METHOD 8270 POLYNUCLEAR AROMATIC HYDROCARBONS

Client:

WILLIAMS FIELD SERVICE

Sample ID: Project ID: North Evap. Pond

Lab ID: Matrix: Milagro Plant

Water

8965800

0396G01325

Date Reported: Date Sampled: 08/05/96 07/11/96

Date Received:

07/11/96

Date Extracted:
Date Analyzed:

07/15/96 07/31/96

| | | 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 |
| Benza(g,h,i)perylene | ND | 1000 | ug/L |
| Benzo(k)fluoranthene | ND | 1000 | ug/L |
| Chrysen a | 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 | 1.000 | ug/L |
| Pyrene | ND | 1000 | ug/L |
| QUALITY CONTROL - Surrogate Recovery | % | QC Limits | |
| 2,4,6-Tribromophenol | 71 | 10 - 123 | ·•
5 |
| 2-Fluorobiphenyl | 74 | 43 - 116 | |
| 2-Fluorophenol | 62 | 21 - 110 | |
| Nitrobenzene-d5 | 72 | | |
| Phenol-d6 | 78 | 35 - 11 4
10 - 110 | |
| Terphanyl-d14 | 75
75 | | |
| received the second of the sec | 7 4 | 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

1160 Research Drive Bozeman, Montana 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID: Project ID:

West Evap. Pond

Lab ID: Matrix:

Milagro Plant 8965801

Water

0396G01326

Date Reported: Date Sampled:

08/07/96 07/11/96

Date Received:

Date Extracted:

07/12/96

Date Analyzed:

07/18/96

NA

| | | Date Allalyzed: | 07/10/90 |
|------------------------------------|--------|-----------------|--------------|
| 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 | NO | 5.0 | ug/L |
| 1,1,2-Trichloroethane | ND | 5.0 | ug/L |
| 1,1-Dichloroethane | ND | 5.0 | ug/L |
| 1,1-Dichlorgethene | 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-Trimethylbenzena | ND | 5.0 | ug/L |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND . | 5.0 | ug/L |
| 1,2-Dibromoethane (EDB) | ND | 5.Q | 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-Chlorotoluane | ND | 5.0 | ug/L |
| 4-Chlorotoluene | ND | 5.0 | ug/L
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 |

1160 Research Drive Bozeman, Montana 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

West Evap. Pond

Project ID: Lab ID:

Matrix:

Milagro Plant B965801

Water

0396G01326

Date Reported:

08/07/96

Date Sampled:

07/11/96

Date Received:

07/12/96

Date Extracted:

NA

Date Analyzed:

07/18/96

| | | Date Analyzeo: | 07/18/98 |
|--------------------------|--------|----------------|---------------|
| Parameter | Result | PQL | Units |
| Continued | | ! | |
| Cárbon 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 | υ <u></u> β/L |
| cis-1,3-Dichloropropene | DN | 5.0 | ug/L |
| Dibromochloromethane | ND | . 5.0 | սց/Լ |
| Dibromomethane | ND | 5.0 | ug/L |
| Dichlorodifluoromethane | ND | 5.0 | ug/L |
| Ethylbenzene | ND | 5.Q | ug/L |
| Hexachlorobutadiene | ND | 5.0 | ug/L |
| Isopropylbenzene | ND | · 5.O | 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) | ИD | 5.0 | ug/L |
| Toluene | NO | 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 |

1160 Research Orive Bozeman, Moniana 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

West Evap. Pond

Project ID: Lab ID: Matrix: Milagro Plant B965801

Water

0396G01326

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 | POL | Units |
| | | | | 1 |

Continued

| QUALITY CONTROL - Surrogate Recovery | % | | | QC Lin | nits |
|---|------------------|---|---|--------|-------------------|
| 1,2-Dichloroethane-d4
Bromofluorobenzene
Toluene-d8 | 90
110
111 | # | : | 86 - | 120
115
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.D. 8/7/96

1180 Pasaarch Onvo Bozeman, Montana 69716

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

South Evap. Pond

Project ID: Lab ID: Matrix: Milagro Plant B965802

Water

0396G01327

Date Reported: Date Sampled: 08/07/96

Date Sampled:

07/11/96

Date Extracted:

07/12/96 NA

Date Analyzed:

07/19/96

| | | Date Analyzed. | ******** |
|------------------------------------|--------|----------------|--------------|
| Parameter | Result | PQL | Units |
| 1,1,1,2-Tetrachloroethans | ND | 5.0 | ug/L |
| 1,1,1-Trichloroethane | ND | 5.0 | սց/Լ |
| 1,1,2,2-Tetrachloroothane | ND | 5.0 | ug/L |
| 1,1,2-Trichloroethane | ND | 5.0 | սց/Լ |
| 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.Q | ug/L |
| 1,2,4-Trimethylbenzene | ND | 5.0 | սք/Լ |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | 5.0 | սք/Լ |
| 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/i |
| 4-Chlorotoluene | ND | 5.0 | ս ք/Լ |
| 4-Isopropyltoluene | ND | 5.0 | ug/l |
| Benzene | ND · | 5.0 | ug/l |
| Bromobanzene | ND · | 5.0 | սց/Լ |
| Bromochloromethane | ND | 5.0 | ug/l |
| Bromodichloromethane | ND | 5.0 | սք/Լ |
| Bromoform | . ND | 5.0 | սք/կ |
| Bromomethane | ND | 5.0 | /(քա |

1160 Research Driva Bozeman, Montana 59715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

Matrix:

WILLIAMS FIELD SERVICE

Sample ID:

South Evap. Pond

Project ID:

Milagro Plant

Lab ID:

B965802

Water

0396G01327

Date Reported:

08/07/96

Date Sampled:
Date Received:

07/11/96

Date Extracted:

07/12/96 NA

Date Analyzed:

07/19/96

| | | Outo / Wildry Zed: | 0, |
|--------------------------|--------|--------------------|-------|
| Parameter | Result | PQL | Units |
| ontinued | | | |
| Carbon Tetrachloride | ND | 5.0 | ug/L |
| Chlorobenzene | ΝD | 5.0 | ug/L |
| Chloroethane | ND | 5.0 | ug/L |
| Chloroform | ND | 5.0 | ug/L |
| Chloromethane | ND | 5.0 | ug/L |
| cls-1,2-Dichloroethene | · ND | 5.0 | ug/L |
| cis-1,3-Dichloropropene | ND | 5.0 | ug/L |
| Dibromochloromethane | DM | 5.0 | ug/L |
| Dibromomethane | ND | 5.0 | ug/L |
| Dichlorodifluoromethane | ND . | 5.0 | ug/L |
| Ethylbenzene | ND | 5.0 | ug/L |
| Hexachlorobutadiane | 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 |

1160 Research Drive Bozeman, Montana 69715

EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS

Client:

WILLIAMS FIELD SERVICE

Sample ID:

South Evap. Pond

Project ID:

Milagro Plant

Lab ID: Matrix: B965802

Water

0396G01327

Date Reported:

08/07/96

Date Sampled:

07/11/96

Date Received:

07/12/98

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
Toluene-d8 | 105
105 | 86 - 115
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 5.0 . 8/7/46

Reviewed S

1100 Research Drive Bozeman, Montana 59715

EPA METHOD 8270 POLYNUCLEAR AROMATIC HYDROCARBONS

0396G01327

Client:

WILLIAMS FIELD SERVICE

Sample ID:

South Evap. Pond

Project ID: Lab ID: Matrix:

Milagro Plant

8965802

Water

Date Reported:

Date Sampled:

08/05/96 07/11/96

Date Received:

07/12/96

Date Extracted: Date Analyzed

07/15/96 07/30/96

| • | | 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 | սք/Լ |
| 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 - 12 | 3 |
| 2-Fluorobiphenyl | 78 | 43 - 11 | |
| 2-Fluorophenol | 69 | 21 - 11 | / |
| Nitrobenzene-d5 | 78 | 35 - 11 | |
| Phenol-d6 | 32 | 10 - 11 | |
| Terphenyl-d14 | 60 | 33 - 14 | • |
| i diprioriti di CV | ~~ | 40 11 | - |

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.

1160 Research Drive Bozemen, Montane 59715

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-Tetrachioroethane | 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-Dichlorobanzene | 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 (Aliyi Chloride) | ND | 0.005 | mg/L |
| 4-Chlorotoluene | NO | 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

1180 Aveaurch Crive Bozernan, Montana 59715

LAB QA/QC **EPA METHOD 8260** INSTRUMENT BLANK

Date Analyzed: 07/18/96

Lab ID:

IBW96200A

Matrix:

Water

| Parameter | Result | POL | Units |
|------------------------------|--------|-------|--------|
| ontinued | | | |
| 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 |
| sis-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 | ИΩ | 0.005 | . mg/L |
| Ethyl ether | ND | 0.005 | mg/L |
| Ethyl methacrylate | ND | 0.005 | mg/L |
| Ethylbenzens | ND | 0.005 | mg/L |
| dexachlorobutadiene | ПΝ | 0.005 | mg/L |
| odomethane . | ND | 0.005 | mg/L |
| sobutanol | ND | 0.005 | mg/L |
| sopropylbenzene | ND | 0.005 | mg/L |
| n,p-Xylene | ND | 0.005 | mg/L |
| Methacrylonitrile | ND | 0.005 | mg/L |
| Methyl methacrylate | ND | 0.005 | mg/L |

Continued

1160 Research Drive Bozemen, Montene 59715

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-Propylbanzene | ND | 0.005 | mg/l |
| Naphthalene | ND | 0.005 | mg/l |
| o-Xylene | ND | 0.005 | mg/l |
| Propionitrila | ND | 0.005 | mg/i |
| 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 (POL)

Analyst P. 0. 8/7/96

1160 Research Drive Bezernen, Montana 59715

LAB QA/QC **EPA METHOD 8260 INSTRUMENT BLANK**

Date Analyzed: 07/19/96

Lab ID:

IBW96201A

Matrix:

Water

| Parameter | Result | PQL | Units |
|------------------------------|--------|-------|-------|
| ontinued | | | |
| Acetonitrile (Methylcyanide) | , ND | 0.005 | mg/L |
| Acrolein | ND | 0.005 | mg/L |
| Acrylonitrile | ND | 0.005 | mg/L |
| Велгене | 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 | аи | 0.005 | mg/L |
| Ethylbenzene | ND | 0.005 | mg/L |
| Hexachlorobutadiene | ND | 0.005 | mg/l |
| lodomethane | . 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

1160 Research Drive Bozemen, Montana 59715

LAB QA/QC **EPA METHOD 8260 INSTRUMENT BLANK**

Date Analyzed: 07/19/96

Lab ID:

IBW96201A

Matrix:

Water

| Parameter | Result | POL | 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 | NĎ | 0.005 | mg/L |
| 1,2-Dichloroethane | ND | 0.005 | mg/L |
| 1,2-Dichloropropane | ИD | 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) | ОИ | 0.005 | mg/L |
| Acetone | ND | 0.005 | mg/L |

Continued

1160 Research Enve Bozeman, Moritana 59715

LAB QA/QC **EPA METHOD 8260** INSTRUMENT BLANK

Date Analyzed: 07/19/96

Lab ID:

IBW96201A

Matrix:

Water

| Parameter | Result | PQL | Units | |
|--------------------------------------|---------------------------------------|-----------|---------------|--|
| ontinued | · · · · · · · · · · · · · · · · · · · | | | |
| Mathylene chlorida | ND | 0.005 | mg/L | |
| n-Butanol | ND | 0.005 | mg/l | |
| n-Butylbenzene | ND | 0.005 | mg/L | |
| n-Propylbanzene | ND | 0.005 | mg/L | |
| Naphthalene | ND | 0.005 | mg/L | |
| o-Xylene | ND | 0.005 | mg/i | |
| Propionitrile 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 | m ģ /l | |
| Toluens | ND · | 0.005 | mg/l | |
| trans-1,2-Dichloroethene | ND | 0.005 | mp/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 6.0 \$17/16

1160 Resserch Crive Bozemen, Monteine 59715

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 |
|-------------------------------|--------|-----|-------|
| 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 | ψg/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-Nitroaniling | 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

1160 Hesearch Orlina Bozemen, Mortana 59716

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 | POL | Units |
|-----------------------------|--------|-----|----------|
| ontinued | | | |
| Benzo(g,h,i)perylene | αи | 10 | ug/l |
| Benzo(k)fluoranthene | ND | 10 | ug/i |
| Benzoic Acid | ND | 50 | ug/l |
| Benzyl Alcohol | ND | 20 | ug/i |
| bis(2-Chloroethoxy)methane | ND | 10 | սք/ |
| bis(2-Chloroethyl)ether | ND | .10 | ug/l |
| bis(2-Chloroisopropyl)ether | ND | 10 | ug/ |
| bis(2-Ethylhexyl)phthalate | ДИ | 50 | ug/ |
| Butylbenzylphthalate | ND | 10 | ug/ |
| Chrysene | ND | 10 | ug/ |
| Di-n-Butylphthalate | ND | 50 | ug/ |
| Di-n-Octylphthalate | ND | 50 | บฏ/ |
| Dibenz(a,h)anthracene | ND | 10 | បច្ច/ |
| Dibenzofuran | ND · | 10 | ug/ |
| Diethylphthalate | ND | 10 | ug/ |
| Dimethylphthalate | ND | 10 | ug/ |
| Fluoranthene | ND . | 10 | ug/ |
| Fluorene | ND | 10 | ug/ |
| Hexachlorobenzene | ND | 20 | ug/ |
| Hexachlorobutadiene | ND | 20 | ug/ |
| Hexachlorocyclopentadiene | ND | 10 | սք/ |
| Hexachloroethane | ND | 20 | ug/ |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/ |
| Isophorone | ND | 10 | ມ໘/ |
| N-Nitrosodi-n-propylamine | ND | 10 | ug/ |
| N-Nitrosodiphenylamine | ND | 10 | ug/ |
| Naphthalens | ND | 10 | ug/ |
| Nitrobenzene | ND | 10 | _
ug/ |
| Pentachlorophenol | ND | 50 | ug/ |
| Phenanthrene" | ND | 10 | ug/ |
| Phenol | ND | 10 | ug/ |
| Pyrene | ND | 10 | ug/ |

Continued

1160 Research Drive Bozeman, Montana 59715

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 | POL | Units |
|---|-----------|--------|-----|-------|
| C | 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 (POL)

1160 Research Drive Bozeman, Montana 59715

LAB QA/QC **EPA METHOD 8260 MATRIX SPIKE**

Date Analyzed: 07/19/96

Lab ID:

O596H05800

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 | O | 22.5 | 113 | 75 -145 |
| Benzene | 20 | 0 | 20 | 100 | 71 -120 |
| Chlorobenzene | 20 | O | 19.4 | 97 | 76 -127 |
| Taluane · | 20 | 0 | 21.1 | 106 | 7 1 -127 |
| Trichloroethene (TCE) | 20 | 0 | 19.3 | 97 | 75 -130 |
| QUALITY CONTROL - Surrogate Reco | svery | | % | | QC Limits |
| 1,2-Dichloroethane-d4 | | | 103 | | 88 -110 |
| Bromofluorabenzene | | | 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 1. 0. 8./7/06

1160 Research Drive Bozernan, Montana 59715

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-Dichloroethene | 20 | 0 | 19.6 | 98 | 75 -145 |
| Велхепе | 20 | 0 | 17.1 | 86 | 71 -120 |
| Chlorobenzene | 20 | 0 | 16.1 | 81 | 76 -127 |
| Toluene | 20 | Q | 17.2 | . 86 | 71 -127 |
| Trichloroethene (TCE) | 20 | 0 | 16.6 | 83 | 75 -130 · |
| QUALITY CONTROL - Surrogate Recovery | y | | % | | QC Limits |
| Bromofluorabenzene | | *************************************** | 108. | | 76 -114 |
| 1,2-Dichloroethane-d4 | | | 93 | | 88 -110 |
| Toluene-d8 | | | 108 | 1 | 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 F.O. 8/7/46

1160 Research Drive Bozemen, Montana 59715

LAB QA/QC **EPA METHOD 8270 MATRIX SPIKE**

Date Analyzed: 07/26/96

Lab ID:

O596HO5754

\$K1

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 - 9 6 |
| 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 |
| Pantachlorophenol | 200 | 0 | 125 | 63 | 9 -103 |
| Phenol | 200 | 0 | 102 | 51 | 12 - 89 |
| Pyrene | 100 | Ó | 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.

Reviewed____

2508 W. Main Street Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1

Client

Williams Field Serv.

Project: Matrix: Milagro Plani

Condition:

Water Intact/Cool

Date Reported:

07/30/96

Date Sampled: Date Received:

07/11/96 07/11/96

Date Extracted:

07/18/96

Date Analyzed:

07/18/96

| | 76490 | Recuts
accept | Alexandra
Listopi
Maria |
|--------------------------------|------------|------------------|-------------------------------|
| N. Evap. Pond | 0396W01325 | * 108 | 5.0 |
| W. Evap. Pond | 0396W01326 | * 69.8 | 5.0 |
| W. Evap. Pond
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:

2506 W. Main Street Farmington, New Mexico 97401

TOTAL PETROLEUM HYDROCARBONS Quality Assurance/Quality Control

Client:

Williams Field Services

Project:

Milagro Plant

Matrix: Condition: water Intect/Cool Date Reported:

07/30/96

Date Sampled:

07/11/96

Date Received: Date Extracted: 07/11/96 07/18/96

Date Analyzed:

07/18/96

Duplicate Analysis

| | Service Control | Alexandra
September | | Te dell'armone | |
|------------|-----------------|------------------------|-------|----------------|--|
| 0396G01326 | 68.8 | 71.6 | mg/L. | 4.0% | |

Method Blank Analysis

| | Toyon . | Maga . | ere de la constant de la constant de la constant de la constant de la constant de la constant de la constant d
La constant de la --------------|---------|--------|--|
| Method Biank | ND | mg/L | 1.0 |

Spike Analysia

| 1000 | Escape
Casal
Escape | | Andrews
Description | | ALCO PER PER PERAPE
AND PER PER PER PER PER PER PER PER PER PER |
|--------------|---------------------------|----|------------------------|------|--|
| Method Blank | 13.3 | ND | 12.5 | 106% | 70-130% |

Known Analysis

| 124 | Formation Control | Course
Cours
1992 | Parkers
Economics | Political and |
|-----|-------------------|-------------------------|----------------------|---------------|
| ac | 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:



CHAIN OF CUSTODY RECORD

Leigh food ng WFS

| Client/Project Name Williams Field | 12 Seri | 1.ce 5 | | Location | Plan | | 7 | 7 | ANAL | YSES. | /PAF | AME | TERS | | NOV. 25 |
|--|--|-----------|---|------------|---|-------------|----------------------|----------------------------------|---------|----------|-----------------------------------|----------|-------------|--------------|---------------------|
| Sampler: (Signature) | inth | | Chain of Cu | stody Tape | No. | | 97.0 | | Z.Z. | la ~ | 73 | 1 | Remarks | | 96, |
| Sample No./
Identification | Date | Time | Lab Number | | Matrix | - | No. of
Containers | 8260 | Som. 4 | KCRA | for Take | TOH | | | 82:53PM |
| North Evap Pord | 17/11/96 | 9.45 | .1 | wate i | vates | | 7 | ~ | 1 | ン | / | 1 | 7 7.2.1 | H. Aa: |]Σ |
| West Evop Good | | | | 1 | wefer | | 7 | 1 | ~ | <u> </u> | <i>'\'</i> | 1 |) two | 83_ | 1:2 |
| South Euro Pond | 7/11/16 | 10.10 | | waste | water | | _7_ | ٠,٠ | 1 | i | 1 - | 4 | 2/22/ | | ₹ <u>"</u> |
| | | | | | | | | | | | | | TPH_ | 418.1 | 벌 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | - K |
| | | | · · · · · · · · · · · · · · · · · · · | | | | | <u> </u> | | | | | 1 110 | Hank |] |
| | | | | | | | | | | | | | und | | Î |
| | | | | | | | | | | | | | | | 1 |
| | | | | | | | | CC | 7 | inte | w. | | Roth | havor | |
| | | - | | | | | | | | | | | | ov 826 | |
| | - | | | ļ | - <u></u> | | | | | | | | second | is emi | <i>\frac{1}{4}'</i> |
| | | | | | , | | | | | | | | | | - |
| Melinquiahed by: (Signature) | . I | | | Date | Time | Received b | ry': (Sign | witurey | (, | | | | Date | Time | |
| Helinquighted by: (Signetyre) | /h | | | Date Date | 11:42ah | Received b | ربر
در (2) مو | 1776 | / | | | | Date | 16 /1. /2 a | |
| 1/// | | | | | 12:27 | 1 1 | ny: (orgn | | | of sur | | | | 8 12:53 | |
| Resingulahed by (Signature) | | | | Date | Time | Received b | y labor | dory: (S | gnature | 1 | | | Date | emiT | 1 |
| | | | | <u> </u> | <u> </u> | | | | | | | | | | |
| | | | Inter-Mo | untain . | Laborat | tories, l | Inc. | | | | | | | | |
| 1633 Terra Avenue
Sheridan, Wyoning 82901
Telephone (307) 672-8945 | 1701 Phillips (
Gillette, Wyon
Telephone (30 | ing 82718 | 2506 West Main Stre
Farmington, NM 8741
Telephone (505) 326 | 01 Boze | Research Dr.
Iman, Montana
phone (406) 58 | 59715 | | SH 30
Station, 1
Ine (409) | | 5 Colk | 4 Longmi
ege Stati
phone (4 | on, TX 2 | 77845 | 678 | 23/33 |



GARY E. JOHNSON GOVERNOR

State of New Mexico ENVIRONMENT DEPARTMENT Hazardova & Radioactive Metaricle Buses

Hazardous & Radioactive Materials Bureau 2044 Galisteo

> P.O. Box 26110 Santa Fe, New Mexico 87502

> > (505) 827-1557 Fax (505) 827-15442



MARK E. WEIDLER SECRETARY

DEC - 3 🧐

RDGAR T. THORNTON, III

November 27, 1996

Mr. Patricio Sanchez New Mexico Oil Conservation Division 2046 South Pacheco Santa Fe, New Mexico 87505 DECEIVED DEC 1 1 1996

OIL COM. 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, Acting Program Manager Hazardous and Radioactive Materials Bureau

E Seubert

xc: Leigh E. Gooding, Williams Field Services

DEC 03 1996

Environmental State
Cil Conservation Division

<XC: DENNY FOUST>

O. Box 1980
obbs, N.M. 88241-1980
istrict II - (505) 748-1283
il S. First
tesia, N.M. 88210
rict III - (505) 334-6178
Rio Brazos Road
...c, N.M. 87410
istrict IV - (505) 827-7131

Energy.

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

partment

Form C-1 Originated 8/8

> Submit Orig Plus I C to appropr District Of

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|---|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator M.D-AMERICA PIPELINE CO. |
| Verbal Approval Received: Yes No W | 5. Originating Site Compressol 57A |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator 345 CR 3500 AZTEC | 8. State N.M. |
| 7. Location of Material (Street Address or ULSTR) HORPANO STATION | |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will be acco Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be acco PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | empanied by necessary chemical analysis to
n of origin. No waste classified hazardous by |
| All transporters must certify the wastes delivered are only those consigned | i for transport. |
| STORM WATER MIXED WITH COMPLESS | son Pluids(IE) water |
| This is fluid from 2 compressor State 1500 Gals Bach accept RECEIVE SUN accept SEP16199 declined to twater SEP16199 Environmental Bur Non Bood GALS Environmental Bur Oil Conservation Di Estimated Volume 3000 GALS SIGNATURE: Michael Mans TITLE: DISPOSA | SEP - 9 1936 OUL COMO DIVIS reau ivision prator at the end of the haul) — cy |
| Waste Management FacilityAuthorized Agent | |
| Roger This lab daty in outdated and lack | the state of the s |
| (This space for State Use) | |
| APPROVED BY: APPROVED BY: TITLE Business | DATE: 9/9/96 DATE: 9/7/96 |

District I - (505) 393-6161 P. O. Box 1980 Hobbs, N.M. 88241-1980 District W - (505) 748-1283 811 S. First Artesia, N.M. 88210 District III - (505) 334-6178 Rio Brazos Road

District IV - (505) 827-7131

~_.cc, NM 87410

New Mexico Energy Amerals and Natural Resources Lepartment 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

| TEQUEST FOR AFFROVAL TO ACCEPT | COLID WITOIL |
|---|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator MID-AMERICA PIDELINE CO. |
| Verbal Approval Received: Yes 🔲 No 💟 | 5. Originating Site Compressor STA, |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator 3:45 CR 3500, AZTEC | 8. State N.M. |
| 7. Location of Material (Street Address or ULSTR) HUCRFAND STATION | |
| 9. <u>Circle One</u> : | |
| A. All requests for approval to accept oilfield exempt wastes will be acc Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigner. | ompanied by necessary chemical analysis to
on of origin. No waste classified hazardous by |
| | |
| BRIEF DESCRIPTION OF MATERIAL: STORM WATER MIXED WITH COMPTES AND DILS | Section 1 |
| This is Fluid From Z compressor Sta | 1,000 5 |
| 1500 Gals Each | RECEIVED SEP - 9 1996 |
| Estimated Volume 3000 GALS cy Known Volume (to be entered by the op | OIL CON. DIV. DIST. 3 perator at the end of the haul) ———————————————————————————————————— |
| | |
| Waste Management FacilityAuthorized Agent | tl M6R DATE: 9-9-96 |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TEL | LEPHONE NO. 334-6186 |
| Roger this lab data is outdated, lacks qual | ity control |
| (This space for State Use) | |
| APPROVED BY: TITLE: | DATE: 9/9/9/6 |
| APPROVED BY: TITLE: | DATE: |

| "CERTIFICATE OF WASTE STATUS" | |
|--|---------|
| "CERTIFICATE OF WASTE STATUS" | |
| Originating Site: STR1/4 1/4 County State
Physical Address if appropriate: | |
| Source and description of waste: MED. AMERICA PEPELINE PUMP STATIONS: HUTTHON AND LYBROOK. WASTE WELL BE A MIX OF RAIN VALUE + OIL. | W0
- |
| Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M. I MARK R. POSTMA representative for MAR AMENTEA PERSONNE | • |
| 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. | ied |
| The required documentation is hereto attached: | |
| Check the appropriate line(s): | |
| 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 Palls Into Printed Name MARK R. POSTA Title FIGO TECHNICAL SUPERVISOR Date 9-9-96 | |

Fox 325-7714 Phone 325-0789 Mid-America Pipeline Co.

Attn: John Mobley
5414 U.S. Huy 64.

Farmington INM. 8740)

MAPCO Huerfano Station Environmental Drain Sump. ~1500gal MAPCO Lybrook Station Environmental Drain Sump ~1500 gal

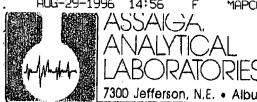
Contract $E_{\text{NVIRONMENTAL}}$ Services, I_{NC} .

JAYSON BLANCHARD Field Engineer



Post Office Box 505 Kirtland, New Mexico 87417-0505

505-325-1198



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 (916) 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/Á | | | | |
| TCLP (GPAA)DJG/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 |
| Barlum, 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, Ph | 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 | 0,010 | 2 ,0 | 3.,,,,,,,, | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |

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 | | • | | |
| CCLP HERB XT/SM 509B | 07/17/95 | N/A | | | | |
| 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 |
| CLP PEST XT/1311/3520
CLP PESTICIDES/1311/8080A | 07/12/95 | N/A | | | | |
| 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 | 010000.0 | 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 |
| CLP SV/METHOD 1311/8270B | 142 | mg/ L | 0.001.0 | 20 | 5.,20,75 | |
| 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 |
| | | | | | _,,, | |

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 | | | | | | |
| Nitrohenzene | 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 |
| Hexachlorohenzene | 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 |
| ICLP SVOA XT/1311/3520 | 07/13/95 | mg/L
N/A | 2.30.0 | | | |

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 |
| Chlorohenzene | 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 IV - (505) 827-7131

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Street

r: trict III - (505) 334-6178 Santa Fe, New Mexico 87505 Rio Brazos Road در NM 87410

Submit Original Plus 1 Copy to appropriate District Office

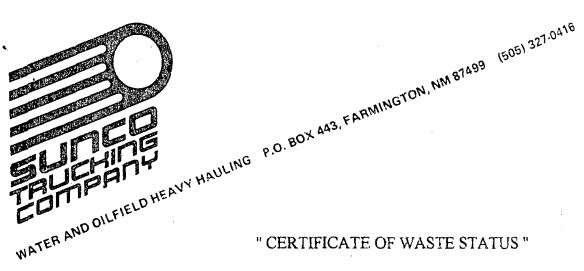
Form C-138

Originated 8/8/95

RECLIEST FOR APPROVAL TO ACCEPT SOLID WASTE

(505) 827-7131

| TIEGOED FOR ALTO ADDEL 1 | 00215 11/1012 |
|--|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator Bavew Tods |
| Verbal Approval Received: Yes 📉 No 🛄 | 5. Originating Site Bowen PARD |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator 345 CR 3500, AZTEC | 8. State N.M. |
| 7. Location of Material (Street Address or ULSTR) #14 CR 5860 | ~ . |
| 9. Circle One: (A.) All requests for approval to accept oilfield exempt wastes will be accept acceptator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be acceptator. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigner. | ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: WASh WATER FROM BUMP City WATER USED with power WASKER to Oil field Tools only. Discussed in Phone conversation with | |
| AND D. FOUST. AND M. TALOUICH (SUN Estimated Volume 1100 GALS cy Known Volume (to be entered by the op | co) 10m 9-5296 |
| SIGNATURE: Mala Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TEI | LEPHONE NO. 334-6/86 |
| APPROVED BY: APPROVED BY: APPROVED BY: TITLE: Geo! | / ' |



| FIELD HEAVY HAULIN |
|---|
| TO HEAV. |
| FIELD |
| " CERTIFICATE OF WASTE STATUS " |
| Originating Site: S- T- R- 1/4 1/4 County 55 State NM Physical Address if appropriate: #14 CR 5860 FARMINGTON |
| Source and description of waste: |
| City WATER USED to Clem tods - NO other |
| Lity WATER USED to Cleur tods - NO other
MATERIAL IS WAShED WITE This WATER OF ANY
OMER WASTE IS PUT IN SUMP - WATER GOES
THIS SEPERATOR FIRST. THIS WATER IS ONLY USED to CLEAN |
| OMER WASTE IS PUT IN SUMP - WATER GOES |
| THIN SEPERATOR FIRST. THIS LATER IS ONLY USED to CLEAN |
| oilfield tods |
| Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M. |
| Lacy Lais - GARY DAVIS representative |
| for Bowen took This |
| TO FOREN TOOKS THE |
| 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 futher certify that there has been no change in the process employed or |
| chemicals stored / used at the facility generating the waste since |
| |
| Signature buykar |
| Printed Name Gary Davis |
| Title PISTRICT MANAGER |
| Date 9/5/96 |

District I - (505) 393-6161 P. O. Box 1980 4 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 Circlet III - (505) 334-6178 Rio Brazos Road

<u>District IY</u> - (505) 827-7131

دےد, NM 87410

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

| RCRA Exempt: Non-Exempt: | 4. Generator AVECSON |
|---|---|
| Verbal Approval Received: Yes 🔟 No 🔲 | 5. Originating Site ANELSON YAR |
| 2. Management Facility Destination Sunco Disposate | 6. Transporter Sunco |
| 3. Address of Facility Operator 345 CR 3560 AZ+CC | 8. State N.M. |
| 7. Location of Material (Street Address or ULSTR) 1416 LA PLuta HWY | |
| 9. <u>Circle One</u> : | , |
| All requests for approval to accept oilfield exempt wastes will be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. B. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigned | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| Sump water | DEGEIVED
N. AUG 2 1 1996 |
| | OH CON. DIV.
Dist. 3 |
| Exempt status ver
Rocer Anderson Estimated Volume Bobbls cy Known Volume (to be entered by the op | erator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Management Pacility Authorized Agent TITLE: DISPOSAL | |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TEL | EPHONE NO |
| (This space for State Use) | |
| APPROVED BY: Deny B. Fount TITLE: Geolog | 15T DATE: 8/21/96 |
| APPROVED BY: Buch TITLE: Gen | Cogar DATE: 2/2//86 |

17499 (505) 327.0416 WATE

| | "CERTIFICATE OF WASTE STATUS" |
|--------------------|--|
| | A43 FAN |
| | |
| | 16 NO. BOX |
| | ING P.S |
| | W HAUL! |
| | LDHEAV. |
| OILFIE | |
| , 0 | " CERTIFICATE OF WASTE STATUS " |
| | |
|] | Originating Site: STR1/41/4CountyStatePhysical Address if appropriate: 14/6, LA PLATA HWY, FARMIN |
| | |
| • | |
| 2 | ource and description of waste: |
| | SUMP WASH WATER |
| · | |
| · <u>·</u> | |
| | |
| | |
| | |
| Ι | Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N.M. |
| | |
| Ţ | or DRESSER OIL TOOLS AKELSON |
| fo | One see a Toris Augus |
| 10 | DRESSER BIL 10020 / HELSON |
| | |
| | o hereby certify that according to the Resource Conservation and Recovery Act |
| 1 | that the above described waste is <u>V</u> Exempt |
| | Non-Exempt and that it has been identifie |
| as | s non hazardous by characteristic analysis or by product identification as requir |
| | |
| Т | he required documentation is hereto attached: |
| | |
| iC | |
| , - | |
| /! | heck the appropriate line(s): |
| | heck the appropriate line(s): |
| /- | heck the appropriate line(s): _MSDS Information sheet |
| /-
- | heck the appropriate line(s): _MSDS Information sheet _RCRA TCLP Analysis |
| /
_
_ | heck the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals Analysis |
| / -
-
-
- | heck the appropriate line(s): _MSDS Information sheet _RCRA TCLP Analysis _RCRA Metals Analysis _Corrosivity, Ignitability, Reactivity |
| / | heck the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityI futher certify that there has been no change in the process employed or |
| | heck the appropriate line(s): _MSDS Information sheet _RCRA TCLP Analysis _RCRA Metals Analysis _Corrosivity, Ignitability, Reactivity |
| | heck the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityI futher certify that there has been no change in the process employed or |
| | heck the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityI futher certify that there has been no change in the process employed or |
| Si | heck the appropriate line(s): MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityI futher certify that there has been no change in the process employed or hemicals stored / used at the facility generating the waste since |

District I - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 Printer III - (505) 334-6178 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-138 Originated 8/8/95

> Submit Original Plus 1 Copy to appropriate District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| 1. RCRA Exempt: Non-Exempt: | 4. Generator Bowen |
|---|--|
| Verbal Approval Received: Yes 🔀 No 🔲 | 5. Originating Site Bowen 4ARO |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500#345, AZHC NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) BOWEN YARD | |
| 9. <u>Circle One</u> : | |
| All requests for approval to accept oilfield exempt wastes will be accepted acceptance. B. All requests for approval to accept non-exempt wastes must be accepted and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| | 4 |
| City water used to clean Danhole Tools | STORED IN SUMP |
| | ~ |
| | RECEIVED TO THE PROPERTY OF TH |
| | DIL COIL DIV. |
| Estimated Volume Soo GAL 5 cy Known Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Mariagement Facility Authorized Agent TITLE: DISCHAFE Waste Management Facility Authorized Agent | MGC DATE: 12-17-97 |
| TYPE OR PRINT NAME: MICHAEL THOUSEN TEL | EPHONE NO. 505-334-6186 |
| | |
| (This space for State Use) | |
| APPROVED BY: Deny J. teny TITLE: Geol | 0915/ DATE: 12/17/97 |
| APPROVED BY: Errie Durch TITLE: Geo | lagrat DATE: 12/17/97 |

CERTIFICATE OF WASTE STATUS

| 1. Generator (Name): | 3. Location (Street Address &/or ULSTR): |
|---|--|
| Address: | |
| Daven Tools/Division | |
| 411 00 50/2 | |
| #14 CR 5860 | |
| | l l |
| Farmington, nm | |
| 2. Originating Site (Name): | 4. Destination Name: |
| | |
| | SINCO DISPOSAL |
| Shop Sump (TANK) | 30000 DISPOSALC |
| Shop Sump (TANK) | |
| - | |
| | |
| C.+ | |
| Source and Description of Waste | · used to clear Tools · No other was . with this water or any o ther wast. |
| 5. Source and Description of Waste 15 Was Real | with this water olding of ther wast. |
| in Sump. wall goes than Sepural | first. This water is only used to Clean o. |
| | , |
| -I Cary-Halleburton | representative for: |
| Bowen Tools / Division | do hereby certify |
| that according to the Resource Conservation and R | ecovery Act (RCRA) and Environmental Protection |
| Agency's July, 1988 regulatory determination, the | e above described waste is: (Check appropriate |
| classification) | |
| | |
| EXEMPT oilfield waste NO | N-EXEMPT oilfield waste which is non-hazardous by |
| | characteristic analysis or by production identification |
| | |
| | |
| | |
| For Non-exempt waste only the following documenta | tion is attached (check appropriate items): |
| | |
| MSDS Infor | mation |
| RCRA TCLI | P Analysis |
| Chain of Cus | stody , |
| Other (Descr | ription) |
| | |
| | |
| Name (Signature): Turny Turns Tr | |
| Name (Signature): Numy Nums Trust | |
| The state of the state of | |
| Printed Name: Sary Halliburtur | |
| | |
| Title: DISTRICT MANAGER | |
| | |
| 5 · (0)(0)(0) | |
| Date: 12 17 97 | |

Attach list of originating sites as appropriate.

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division PECFIVED

2040 South Pacheco Street
Santa Fe. New Mexico 87505
(505) 827-7131

DEC 01 1997

Originated 8/8/95
Submit Original

Form C-138

Submit Original Plus I Copy to appropriate District Office

Environmenta Bureau

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|---|--|
| 1. RCRA Exempt: Non-Exempt: 🔯 | 4. Generator Burlington Resources |
| Verbal Approval Received: Yes 🔲 No 🌠 | 5. Originating Site VAL VERBE Plant |
| 2. Management Facility Destination Suico DisposaL | 6. Transporter Junes Trucking |
| 3. Address of Facility Operator | 8. State New Mexico |
| 7. Location of Material (Street Address or ULSTR) Bloom Field, N.M. | |
| 9. Circle One: A. All requests for approval to accept olifield exempt wastes will be accepted acceptator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accept PROVE the material is not-hazardous and the Generator's certification of testing will be approved. | companied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| All transporters must certify the wastes delivered are only those consigne BRIEF DESCRIPTION OF MATERIAL: | |
| BRIEF DESCRIPTION OF MATERIAL: Spent Wash WATER FROM CLEANING PLATE AND AND AMINE REBOILERS | FRAME EXCHANGERS |
| DE TOLS | NOV 2 5 1997 IL CON. DOV. DIST. 3 |
| SIGNATURE: Hal Stone TITLE: Mana | |
| gvaste Management FacilityAuthorized Agent | LEPHONE NO. 334 - 6186 |
| APPROVED BY: Matern 2 This TITLE: England | 7 7 7 7 |

District 1. (505) 393-6161 P. O. Bex 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 District III - (505) 334-6178

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

| า | | Braz | | | |
|-------|-------|--------------|------|-----|-------|
| عد ہم | | | | | |
| Distr | ict I | Y - (| 505) | 827 | -7131 |

APPROVED BY:

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|---|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator Burlington Resources |
| Verbal Approval Received: Yes 🔲 No 🌠 | 5. Originating Site W. VERDE Plant |
| 2. Management Facility Destination Sunce DisposaL | 6. Transporter Sumes Trucking |
| 3. Address of Facility Operator | 8. State New Mexico |
| 7. Location of Material (Street Address or ULSTR) Bloom Field , N.M. | |
| 9. Circle One: | |
| A. All requests for approval to accept olifield exempt wastes will be accepted. Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigned | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| SpENT WASH WATER FROM CLEANING PLATE AND | FRAME EXCHANGERS |
| ម្រ | EGEIVED
NOV 2 5 1997
11, GOM. DIV.
DIST. 3 |
| Estimated Volume 120 Bbs cy Known Volume (to be entered by the open SIGNATURE: | DATE: 11-25-91 LEPHONE NO. 334-6186 |
| // / 0 | LEPHONE NO. <u>334 - 6186</u> |
| (This space for State Use) | |

TITLE:

DATE:

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and | Address: | 2. Destination Name: | |
|---|--------------------------------------|--|--------------|
| BURLINGTON I
3535 EAST 30th
FARMINGTON | STREET | Sunco Disposal | |
| 3. Originating Site (na | ne): | Location of the Waste (Street address &/or ULSTR): | |
| Val Verde Plant | | Section 14, Township 29N, Range 11W | |
| Attach list of originating sites a | | | ļ |
| 4. Source and Descripti | on of Waste: | | · |
| Spent wash water from | cleaning plate and frame exchange | rs and amine reboilers at Val Verde Plant. | |
| I, | Ed Hasely | representative for: | |
| | BURLINGTON RESOURCES | do hereby certify that, | |
| | | RCRA) and Environmental Protection scribed waste is: (check appropriate classification) | |
| Agency 8 July, 1988, leg | matory determination, the above de | SCRIDEG Waste Is: (check appropriate classification) | |
| EXEMPT oilfield | hazard | EXEMPT oilfield waste which is non-
lous by characteristic analysis or by product
fication | |
| and that nothing has been | added to the exempt or non-exem | pt non-hazardous waste defined above. | |
| For NON-EXEMPT was | ste only the following documentation | n is attached (check appropriate items): | |
| MSDS Informatio X RCRA Hazardous X Chain of Custody | Waste Analysis The | Other (description): re has been no change in the subject waste stream at the ity since the 3/5/97 sample. | IVE |
| Name (Original Signature): | En Hasely | NOV 2 5 | 1 997 |
| Title: | SR STAFF ENVIRONMENTAL | REPRESENTATIVE COM | DOU |
| Date: | 11/24/97 | | |
| | | and the same of th | |



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 #

TO: PO BOX 3376

FARMINGTON, NM

87499

: 9703041 : MOI-VAL VERDE WORK ID

: CONTO1 CLIENT CODE

DATE RECEIVED: 03/06/97

ATTN: SHAWN ADAMS

Page: 1

Lab ID: 9703041-01A Collected: 03/05/97 12:00:00

Sample ID: VALV-100 Matrix: LIQUID

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

* ab ID: 9703041-01B Collected: 03/05/97 12:00:00

.mple ID: VALV-101 Matrix: LIQUID

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

Lab ID: 9703041-01C Collected: 03/05/97 12:00:00

Sample ID: VALV-102/103 Matrix: LIOUID

| 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 | 3.515 | • | | |



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 |
|--------------------|--------|----------|-------|-----|--------------|----------|
| րH/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
TCLP (ICP) DIG/1311/3005
TCLP EXTRACTION/TCLP 1311
TCLP METALS/1311/SW8466010 | 1.00
03/09/97
03/06/97 | % (Percent)
N/A
N/A | | | | 627 17 44 |
| Arsenic, As Barium, Ba Cadmium, Cd Chromium, Cr Lead, Ph Mercury, Hg Sclenium, Se Silver, Ag TCLP(CVAA)Hg XT/SW846 7471 | ND
ND
ND
ND
ND
ND
ND
ND
03/10/97 | mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
Mg/L | 0.40
0.50
0.0050
0.020
0.050
0.0020
0.050
0.040 | 1.0
1.0
1.0
1.0
1.0
1.0
1.0 | 03/10/97
03/10/97
03/10/97
03/10/97
03/10/97
03/11/97
03/10/97
03/10/97 | M97180.97178 M97180.97178 M97180.97178 M97180.97178 M97180.97178 M97180.97178 M97180.97178 M97180.97178 |

Sample ID: 9703041-01F

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

Matrix: LIQUID

| TEST / METHOD | RESULT | UNITS | LIMIT | D_F | DATE
ANAL | BATCH_ID |
|---|----------|-------|--------|-----|--------------|----------|
| TCLP ZHE / TCLP 1311
ZHE/VOA/METHOD 1311/8240B | 03/06/97 | N/A | | | | |
| 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 | ınğ/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

| 1 | ASSAIGAI | | Chain of Custody Record | | | | | | | | | ALB | UQUEF | | RSON, N.E.
EW MEXICO 87*
5-8964 |
|---------------------------|---|-------------|---|----------------|--------------------------|-------------|-------------------------|-------------|---------|-------|----------|----------|---------------------------|-----------------------------------|---|
| +44+) | | L
RIES, | | Lab job no.: | | | | | | _ | EL PA | | 3EWOC
XAS 79
3-6000 | | 1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) \$70-1116 |
| Client COA | GERG
TRACT ENVIRONME | 1(15, I A | | _ Proje | ct Manager / Contact | - | J 127 17,1 | <u>4</u> `s | | _ | Cı | UDAD | 6 | 411 LOC | S ALANIS
AL UNO
JAHUA MEXICO 32320 |
| Address $\frac{D}{2}$ | BU 3376 | ··· | | _ Telep | hone No. [75] 3 | 25-11 | 18 | _ | / | 7 | | A | nalysis f | Bequired | |
| City / State / Zi | ip Filinization a | 1,11 8:74 | 194 | _ Fax N | o. ChriCen | (، | | _ | | \\ \f | //: | V | 7/ | 6/0 | 777 |
| Project Name | Number mot ust | 4-1105 | | _ Samp | lers: (Signature) | 1pm A | Luns | - / | | 3 | 14 | 4 | / , | : / /</td <td>Remerks</td> | Remerks |
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}// | |
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NUMBER | Field
Sample Number / Location | Date | Time | Sample
Type | Type / Size of Container | Temp | reservation
Chemical | V / | \$/ | 3/1 | 114 | 5/1 | 7 | / / | 11:10 112 |
| 1/-1 | VALV-100 | 3/6/197 | 12:00 | 116 | 8 07 gluss | | no | 1 7 | 4 | | | | | | Took Comple |
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| | VALV-102 | (1 | 11 | ,, | 4 x Co" Ambe | .~ | 7. | 1 | \perp | X | | | | | 11 |
| | VALV- 103 | 1, | ,, | ,, | 4 x 6" Amls | · <u>~</u> | 20 | 1 | \perp | | X | | | | 11 |
| 115 | VALU- 104 | ,, | 1. | ., | 7 x 5 44" Plan | 14,6 | 20 | 1 | | | > | | | | 11 |
| 1E | VALV- 105 | () | ١,, | ., | 3 x v 6" Plact | زد | no | | | | | X | | | 11 |
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| Company CAA+R | MIT L WILL SUCC | 1 | Company Ttil-Fy | | | | | | | 1_ | 1 | Co | п рапу | 71 | |
| Reason | , , , , , , , , , , , , , , , , , , , | JU R | leason Reason | | | | | | | | <u> </u> | | son | | |
| Method of Shipment | 11 1 2 | | Comments: After analysis, samples are to be: | | | | | | | | | | | | |
| Shipment No. | | ` \ | \$ \$ (11/11 Del T 3/12/97) Stored (30 days max) | | | | | | | | | | | | |
| Special Instructions | : | <u> </u> | Stored over 30 days (additional fee) | | | | | | | | | | | | |
| | | | Stigte Are analyse Lights thase only Returned to customer | | | | | | ner | | | | | | |
| | | | | - | COL | ÚFILI | • | | | | | | | | |

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

District IV - (505) 827-7131

c, NM 87410.

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: Non-Exempt: MAHANE Willing 97 | 4. Generator EL PASO Field Seevice |
| Verbal Approval Received: Yes 🔀 No 🔲 | 5. Originating Site KU+Z Plan + |
| 2. Management Facility Destination GUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500 # 345 AZHC, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) Kutz Plant | |
| 9. <u>Circle One</u> : | |
| All requests for approval to accept oilfield exempt wastes will be accepted acceptance; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted accept | companied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | ed for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| Cleanout of Dehyorator water | MSDS Attached |
| | CEIVED
NOV 2 4 1997 |
| | CON. DIV.
dist. 3 |
| Estimated Volume Sobols cy Known Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: MANAGEMENT Facility Authorized Agent TITLE: MANAGEMENT Facility Authorized Agent | DATE: 11-19-97 |
| TYPE OR PRINT NAME: MICHAEL THOUICH TE | LEPHONE NO. |
| (This space for State Use) | |
| APPROVED BY: Juseh TITLE: Ge | O DATE: 1/2/9-97 |
| APPROVED BY: Jemy B. Fout TITLE: GO! | 10915T DATE: 11/24-97 |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|---|
| EL PASO FIELD SERVICES | SUNCO DISPOSAL |
| PO BOX 4990 | 20//00 /13/03//2 |
| FARMINGTON, NM 8749
ATTN: SANDRA MILLER | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| KUTZ PLANT | SEC. 15 T. 29N R. 12W |
| · | SAN JUAN COUNTY, NM.
2 MI. NORTH OF HWY 64 ON CR 5569 |
| An alternative description | 2 mi. NORTH OF HWY 64 ON CR 5567 |
| Attach list of originating sites as appropriate 4. Source and Description of Waste | Ph. |
| DEHYDRATOR CONTACTOR WASH | WATER PEGEIVED NOV 2 4 1997 |
| | |
| 0 | DIF. 3 -100 |
| 1, SANDRA D. MILLER | representative for: |
| I, SANDRA D. MILLER (Print Name) FL PASO FIELD SERVICES | do hereby certify that, |
| according to the Resource Conservation and Recove 1988, regulatory determination, the above described | ry Act (RCRA) and Environmental Protection Agency's July, |
| | MPT oilfield waste which is non-hazardous by characteristic by product identification |
| and that nothing has been added to the exempt or no | n-exempt non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following documents of MSDS Information RCRA Hazardous Waste Analysis Chain of Custody | nentation is attached (check appropriate items): Other (description): |
| Name (Original Signature): Emply L) Mil Title: ENVIRONMENTAL MANAGER | le, |
| Title: ENVIRONMENTAL MANAGER | |
| Date: 11/19/39 | |

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:

i

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

4 (Na₃PO₄ · 12 H₂O) NaOH

FORMULA WEIGHT: 1560

SYNONYMS:

sodium orthophosphate dodecahydrate

CAS# & NAME:

10101-89-0

Phosphoric acid, trisodium salt, dodecahydrate

II. INGREDIENTS/SUMMARY OF HAZARDS

INGREDIENT(S)

CAS NUMBER

OSHA HAZARDOUS (H)/ NON-HAZARDOUS (NH)

PERCENT.

Trisodium phosphate dodecahydrate

10101-89-0

Н

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 | ИО |
| FIRE | ИО |
| SUDDEN RELEASE OF PRESSURE | МО |
| REACTIVE | МО |

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)

SOLUBILITY IN WATER [@ 25°C]:

11.8 (1% aqueous solution) 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:

- a) Evacuate residents who are downwind of fire.
- b) Prevent unauthorized entry to fire area.
- c) Persons who may have been exposed to contaminated smoke should be examined by a physician and treated appropriately.
- d) Dike area to prevent runoff and contamination of water sources.

Notify local authorities that firemen should:

a) Wear protective clothing and use self-contained breathing apparatus.

b) 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, 1997

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 hyperalimentary 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%

INHALATION

Treat shock. Treat pulmonary edema. Treat bacterial pneumonia with organism-specific chemotherapy. (3)

calcium gluconate by slow intravenous infusion, if necessary.

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 airborns 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.

MATERIAL SA Y DA

RHONE-POULENC BASIC CHE CALS CO.

PRODUCT NAME:

Page:

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TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

IX. REGULATORY STATUS

This product is listed on the TSCA inventory. 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

NA 9188 ID Number: 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:

Connecticut:

Florida:

Illinois:

Louisiana:

Massachusetts: New Jersey:

New York:

Pennsylvania:

Rhode Island:

Canada:

Not listed

Survey

Not listed

Chemical list

RTK, Spill RQ=5000 lb RTK, Spill RQ=100 lb

RTK, ID# 3044; Tax

Spill

RTK

Not listed

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.



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 (8) 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 | % YOLATILE, BY YOLUME | |
| Similar to Water | None | |
| EVAPORATION RATE | SOLUBILITY IN WATER | |
| Similar to Water | Complete | |

VIII - FIRST AID

<u>Skin:</u> 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.

Indestion: If the person is conscious, give large quantities of water to dilute product. Do NOT induce vomiting. Get medical attention immediately.

<u>Inhalation:</u> 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

P08 59

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.

| , 3 | | |
|--------------------------------------|--|--|
| 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) | | |
| | s, chlorine dioxide, phosphorus, ssium 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 | FLAMMABLE LIMITS IN AIR | |
| 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 AG | VATED BY EXPOSURE | | |
| | No known medical conditions aggravated by exposure | | |
| ACUTE TOXICITY | | | |

Bkin: May cause irritation.

Eyes: Liquid in the eye can cause severe irritation.

Ingestion: Ingestion can cause severe irritation and pain in mouth,
throat, esophagus and stomach.

Inhalation: Inhalation of solution mist can cause mild irritation.

É94 29

XI - ST PAGE 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.

ÇAS 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. C. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 Pi-trict III - (505) 334-6178 Rio Brazos Road n_-cc, NM 87410

District IV - (505) 827-7131

APPROVED BY

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 Čopy to appropriate District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator EL Paso field Service |
| Verbal Approval Received: Yes No 🗹 | 5. Originating Site Ballaco Plan + |
| 2. Management Facility Destination Sunco Disposal | 6. Transporter SUNCO |
| 3. Address of Facility Operator EAST of Mwy 44, CR 7425 | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) EPFS BALLARO PLANT | |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will be acc Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be acc PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | WONE have Fluid |
| WATER MIXED SOAP, WASH WATER | before the 1st of Dec 9 |
| | $\mathcal{M}_{i}\mathcal{Q}_{.}$ |
| IN\ | 邑[V邑]
2 1 1997 |
| | ON. DIV.
IST. 3 |
| $\alpha i = 1 / I$ | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Make Deland TITLE: Mamage Waste Management Facility Authorized Agent | |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TE | LEPHONE NO. <u>505-334-6186</u> |
| (This space for State Use) | |
| APPROVED BY: Demy J. Fint TITLE: GEO/a | pog ist DATE: 1/-24-97 |

TITLE: Denyth O+b-Inspector

DATE: 11-24-97

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|---|---|
| EL PASO FIELD SERVICES | Sunco DISPOSAL |
| Po Box 4990 | |
| FARMINGTON, NM 87499 ATTN: SANDRA MILLER | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| BALLARD PLANT | SEC. 26 T. 26 N R 9W |
| Jacusty Color | C. Juan County NA |
| | 7 MI. EAST OF HWY 44 ON CR 7425 |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste | DEC- |
| DEHYDRATOR CONTACTOR WASH 1 | NATER DEGETMEN |
| | |
| | NATER DEGETVED NOV 2 4 1997 |
| | OIL COM DOOR |
| | OUE COM DITTO |
| C | DIST. 3 |
| I, SANDRA D. MILLER | representative for: |
| EL PASO FIELD SERVICES | do hereby certify that, |
| | ry Act (RCRA) and Environmental Protection Agency's July, |
| 1988, regulatory determination, the above described | |
| / PV51PT 10.1 | · |
| | MPT oilfield waste which is non-hazardous by characteristic by product identification |
| anaiysis or | by product identification |
| and that nothing has been added to the exempt or no | n-exempt non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following documents | nentation is attached (check appropriate items): |
| MSDS Information | Other (description): |
| RCRA Hazardous Waste Analysis | |
| Chain of Custody | |
| | |
| | <i>1</i> 0 |
| Name (Original Signature): Simely 10 Mi | <u>lles</u> |
| 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:

 $4 (Na_3PO_4 \cdot 12 H_2O) NaOH$

FORMULA WEIGHT: 1560

SYNONYMS:

sodium orthophosphate dodecahydrate

CAS# & NAME:

10101-89-0

Phosphoric acid, trisodium salt, dodecahydrate

II. INGREDIENTS/SUMMARY OF HAZARDS

INGREDIENT(S)

Trisodium phosphate

CAS NUMBER

OSHA HAZARDOUS (H)/ NON-HAZARDOUS (NH)

PERCENT

dodecahydrate

10101-89-0

Н

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 | ИО |
| FIRE | Ю |
| SUDDEN RELEASE OF PRESSURE | ИО |
| REACTIVE | ОИ |

PRODUCT NAME:

Page:

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TRISODIUM PHOSPHATE, DODECAHYDRATE

Effective Date: MARCH 30, 1992

III. PHYSICAL DATA

MELTING POINT [°C (°F)]:

Loses water of hydration @ 77°C (170°F)

:Ha

11.8 (1% aqueous solution)
TER [@ 25°C]: 30g/100g saturated solution

SOLUBILITY IN WATER [@ 25°C]: 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 approprimaterial that is supplying fuel.

e. Use appropriate extinguishing media for

SPECIAL FIRE FIGHTING PROCEDURES:

Provide for the protection of employees and residents:

- a) Evacuate residents who are downwind of fire.
- b) Prevent unauthorized entry to fire area.
- c) Persons who may have been exposed to contaminated smoke should be examined by a physician and treated appropriately.
- d) Dike area to prevent runoff and contamination of water sources.

Notify local authorities that firemen should:

- a) Wear protective clothing and use self-contained breathing apparatus.
- b) 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) 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, ACCIH 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. 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.

RHONE-POULENC BASIC CH. CALS CO.

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.

<u>Inhalation</u>: 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 hyperalimentary 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.

MATERIAL SAFETY DATA SHEET

RHONE-POULENC BASIC CHL CALS 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):

DOT (more than RQ):

Proper shipping name:

Hazard Class:

ID Number:

Label:

Not regulated

Hazardous Substance, Solid, N.O.S.

ORM-E

NA 9188

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

Not listed

Section 313 Toxic Chemicals:

RQ = 5000 lb

Reportable Quantity (RQ) under US EPA CERCLA:

State/International Right-to-Know Regulations:

California:

Connecticut:

Florida:

Illinois:

Louisiana:

Massachusetts:

New Jersey:

New York:

Pennsylvania: Rhode Island:

Canada:

Not listed

Survey

Not listed

Chemical list

RTK, Spill RQ=5000 lb

RTK, Spill RQ=100 lb

RTK, ID# 3044; Tax

Spill

RTK

Not listed

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.



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 (8) 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 | % YOLATILE, BY YOLUME | | | | |
| Similar to Water | None | | | | |
| EVAPORATION RATE | SOLUBILITY IN WATER | | | | |
| Similar to Water | Complete | | | | |

VIII - FIRST AID

<u>Skin</u>: 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.

Indestion: If the person is conscious, give large quantities of water to dilute product. Do NOT induce vomiting. Get medical attention immediately.

<u>Inhalation:</u> 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

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 FLAMMABLE LIMITS IN AIR | | | | | | | | |
| EXTINGUISHING MEDIA N/A | | | | | | | | |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | | | | | | | | |
| N | one | | | | | | | |

VII - TOXICITY

EXPOSURE LIMITS

Sodium metasilicate ACGIH 2 mg/m³ Ceiling OSHA None

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

No known medical conditions aggravated by exposure

ACUTE TOXICITY

Bkin: May cause irritation.

Eyes: Liquid in the eye can cause severe irritation.

2019181899

<u>Indestion:</u> Ingestion can cause severe irritation and pain in mouth, throat, esophagus and stomach.

Inhalation: Inhalation of solution mist can cause mild irritation.

XI - SEORAGE AND HANDLING PRECALE ONS

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.

ÇAS 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 Critict III - (505) 334-6178 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-138 Originated 8/8/95

> Submit Original Plus 1 Copy to appropriate District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|---|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator WFS |
| Verbal Approval Received: Yes ☐ No ☒ | 5. Originating Site ELCEDED STA |
| 2. Management Facility Destination-SUNCO DISPOSA L | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500 [₩] 345 AZ LeC, MN | 8. State Nm |
| 7. Location of Material (Street Address or ULSTR) HW 64 Nm #100.5 | |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will be accept acceptance; one certificate per job. B. All requests for approval to accept non-exempt wastes must be acceptance. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | 4.4 |
| WHER TEG - DEA | |
| | RECEIVED
NOV 1 9 1997 |
| | OIL CON. DIV.
DIST. 3 |
| | |
| Estimated Volume 160 56/5 cy Known Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Management Facility Authorized Agent Waste Management Facility Authorized Agent | DATE: 11-19-97 |
| - · · · · · · · · · · · · · · · · · · · | LEPHONE NO. <u>505-334-6/86</u> |
| (This space for State Use) | |
| APPROVED BY: Saniel Durch TITLE: Geo | DATE: <u>//-/9-97</u> |
| APPROVED BY: Donny & Funt TITLE: Geold | 09/ST DATE: 11-21-97 |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|---|
| Williams Field Services | |
| Box 215 Bloom Field n.m | SUNCO SWD#1 |
| 8743 | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| El Cedno Comples | |
| Hwy 64 mm # 100,5
Blancom. m. 87412
Attach list of originating sites as appropriate | |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste Water TEG-DEA | |
| Wa = 1 + 8 + D = 17 | |
| | |
| | |
| | |
| | |
| 1, DRT 1. ALSUN | (Lead open.) representative for: |
| | |
| W. Hiams Field Senvis | do hereby certify that, bry Act (RCRA) and Environmental Protection Agency's July, |
| 1988, regulatory determination, the above described | · · · · · · · · · · · · · · · · · · · |
| | , |
| | MPT oilfield waste which is non-hazardous by characteristic r by product identification |
| and that nothing has been added to the exempt or no | on-exempt non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following documents of the following documents on the following documents of the following documents on the following documents of the following document | mentation is attached (check appropriate items): Other (description): |
| RCRA Hazardous Waste Analysis Chain of Custody | · · |
| 4 | |
| Name (Original Signature): | 7 |
| S A Company | |
| Title: Sead Oper. | |
| Date: 11-18-97 | |

District 1 - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 BII.S. First Artesia, NM 88210 Curlet III - (505) 334-6178 7 Rio Brazos Road -_ .c, 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

BECEIVED

Submit Original Plus 1 Copy to appropriate District Office

Originated 8/8/95

Rojanjo

NOV 1 9 1997

| | Environmental confi |
|--|--|
| REQUEST FOR APPROVAL TO ACCEPT | Oil Conservation Division SOLID WASTE |
| RCRA Exempt: Non-Exempt: | 4. Generator South TEX TREATER |
| Verbal Approval Received: Yes No 🗵 | 5. Originating Site ANTIER Plant |
| 2. Management Facility Destination SUNCO | 6. Transporter BUNCO |
| 3. Address of Facility Operator CR3500 # 345 AZ+CC, N.M. | 8. State Colorado |
| 7. Location of Material (Street Address or ULSTR) キー 32 ルルールル
5. 50c 1.5 | |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will be accept generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accept proved the material is not-hazardous and the Generator's certification listing or testing will be approved. | companied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | ed for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| Reboilee clemout Fluid | · · · · · · · · · · · · · · · · · · · |
| | DECEIVED AUG 1 2 1997 |
| Held for characteristic analysis | OIL CON. DIV. |
| Estimated Volume 120 BBLS cy Known Volume (to be entered by the of | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Management Fecility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TE | DATE: 8-12-97
ELEPHONE NO. 505-334-6186 |
| APPROVED BY: Marker O. J. T. TITLE: 11/14/9 | 07 Geologis DATE: 11/14/97 |

District I - (505) 393-6161 PND Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 Partict III - (505) 334-6178 Rio Brazos Road

District IV - (505) 827-7131

-L.c. NM 87410

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Street

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: Non-Exempt: X | 4. Generator South TEX TREATER |
| Verbal Approval Received: Yes 🔲 No 💹 | 5. Originating Site ANTIER Plant |
| 2. Management Facility Destination SUNCO | 6. Transporter BUNCO |
| 3. Address of Facility Operator CR3500 # 345 AZ+CC, N.M. | 8. State COLONADO |
| 7. Location of Material (Street Address or ULSTR) ちん 15 | ^, |
| 9. <u>Circle One</u> : | |
| A. All requests for approval to accept oilfield exempt wastes will be accepted. Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | companied by necessary chemical analysis to
on of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | |
| Reboiler ClEANOUT Fluid | The second secon |
| 11 1 5 in the analysis | DECEIVED N AUG 1 2 1997 OIL CON. DIV. DIST. 3 |
| Held For characteristic analysis | |
| Estimated Volume 120 BBC5 cy Known Volume (to be entered by the o | perator at the end of the haul) ———————————————————————————————————— |
| Waste Management FacilityAuthorized Agent | DATE: 8-12-97 ELEPHONE NO. 505-334-6186 |
| | |
| APPROVED BY: Demy & TITLE: GOOD | DATE: 11/14 |
| 0. | DAIE. 1911 |
| APPROVED BY:TITLE: | DATE: |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2 Destination Number |
|--|--|
| South Tex Tracters Andles Plant | 2. Destination Name: |
| South lex / Carels xillians | |
| PO. BOX 39 Aztec Nm 87410 | Sunco Disposal |
| , | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| Antles Plant | / =3 n / |
| Kintler / Tani | 7-32N
R-11 W See 15 |
| | 0-11 W See 1) |
| Attach list of originating sites as appropriate | / // " |
| 4. Source and Description of Waste | |
| | Reboiler Clean Out |
| 0, 0, 1, | Reboiler Clean Our |
| Plant Reboiles - | • |
| | |
| | |
| | |
| | |
| (Print Name) | representative for: do hereby certify that, ry Act (RCRA) and Environmental Protection Agency's July, |
| South-Tex Ticates | do hereby certify that. |
| according to the Resource Conservation and Recove | ry Act (RCRA) and Environmental Protection Agency's July, |
| 1988, regulatory determination, the above described | waste is: (Check appropriate classification) |
| EVENENT UCLI | |
| EXEMPT oilfield waste | MPT oilfield waste which is non-hazardous by characteristic r by product identification |
| anaiysis oi | by product identification |
| and that nothing has been added to the exempt or no | on-exempt non-hazardous waste defined above. |
| | |
| For NON-EXEMPT waste only the following documents of the second of the s | mentation is attached (check appropriate items): |
| MSDS Information | Other (description): |
| RCRA Hazardous Waste Analysis | |
| Chain of Custody | |
| | / / |
| | |
| Name (Original Signature): | |
| | |
| Title: Hank Munhael | |
| Date: 8-1097 | |
| Date | - |

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: W/volume DATE: 8/25/97

AGENCY: Southern Ute Indian Tribe

ADDRESS: P.O. Box 737, Ignacio, CO 81137

PHONE: (970) 563-0135

PECEIVED
NOV 1 4 1997
OUL COM. DOV.

2506 W. Main Street Farmington, New Mexico 87401

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.

lleams

Sincerety,

-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.

Sharon Williams

Organic Lab Supervisor

2506 W. Main Street

Client:

South-Tex Treaters

Farmington, New Mexico 87401

Project:

Antler Plant

Date Reported: 11/11/97

Sample ID:

Frac Tank

Date Sampled: 10/22/97

Laboratory ID: Sample Matrix: 0397G02481

Time Sampled: 11:54AM

Liquid

Date Received: 10/22/97

Condition:

Cool/Intact

| | Analytical | | | |
|----------------------|------------|-----|----------------|----|
| Parameter | Result | PQL | Units | |
| | | | | ~, |
| Total Releasable HCN | ND* | 10 | mg/Kg | |
| Total Releasable H2S | 11 | 10 | mg/Kg
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_



CHAIN OF CUSTODY RECORD

| Client/Project Name | - | | | 1 . | ct Location | Ω_1 | _ | | | | | | | | |
|-----------------------------------|---------------|--|----------|----------|------------------------------|-------------|---------------------|-----------------------|------------|-----------------|---|-----------------------|---------|----------------|--|
| SOUTH TEX 1 | CEATER | <u>es</u> | | HA | ITLER | PA | KIT | ANALYSES / PARAMETERS | | | | | | | |
| Sampler: (Signature) | The | mato | Chair | n of Cus | stody Tape N | lo. | : | % | | \bigvee | | | Rema | arks | ٠. |
| Sample No./ | Date | Time | Lab Nur | nber | | Matrix | : | No. of
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| FRAC TANK | 10-22-8 | 511:54AM |) | | WATE | 2 | | \ | 1 | | | | | | |
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| Relinquished by: (Signature) | <u> </u> | <u>' </u> | | | Date | Time | Received | by: (Sig | nature)/ | ' \. | _' | . 1 | · | Date | Time |
| W. Sance | , | | | | 11-22-77 | 12:49 | | ar | U/ | Lit | lear | MA | | Date 10/ 12/41 | 1249 |
| Relinquished by: (Signature) | | | | | Date | Time | Received | 1 | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | Date | Time |
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| Relinquished by: (Signature) | | | | | Date | Time | Received | by labo | ratory: (S | Signatur | e) | | | Date | Time |
| | | | ntar_N/ | Sunta | in Laho | ratorio | e Inc | | | | | | | | <u>. </u> |
| Inter-Mountain Laboratories, Inc. | | | | | | 5 Sac 2 | 1 FO PA | | | | | | | | |
| │ │ │ │ │ │ │ | | 1 Phillips Cire | | | West Main St
ngton, NM 87 | | 1160 Res
Bozeman | | | R | oute 3, | Box 256
Station, T | X 77845 | 01-50 | 1590 |
| Telephone (307) 672-89 | | phone (307) | | | none (505) 32 | | Telephone | | | | | | 76-8945 | : | |



2506 W. Main Street Farmington, New Mexico 87401

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.

Sharon Williams

Organic Analyst/IML-Farmington

Enclosure

xc: File

Inter Mountain Laboratories, Inc.

Client:

South-Tex Treaters

Farmington, New Mexico 87401

Project:

Antiers Plant

Date Reported: 09/10/97

Sample ID:

Frac Tank

Date Sampled: 09/02/97

Laboratory ID:

0397G01866

Time Sampled: 3:15pm

Sample Matrix:

Liquid

Condition:

Cool/intact

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.

Reviewed by

2506 W. Main Street Farmington, New Mexico 87401

Flash Point

Client:

South-Tex Treaters

Project:

Antiers Plant Frac Tank

Sample ID: Laboratory ID:

0397G01866

Sample Matrix:

Condition:

Liquid 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:



2506 W. Main Street Farmington, New Mexico 87401

Quality Control / Quality Assurance

Known Analysis FLASH POINT

Client:

South-Tex Treaters

Project:

Sample Matrix:

Antler Plant

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

| Laboratories, Inc. | | | | . ! | | | | • |
|--|---|---------------------------------------|----------------|------------------------------|-----------------------|---|---------|--------|
| Client/Project Name | | Project Location | / | 0/ 1 | A 1 | MALWORO / DADAR | ICTEDO | d, e |
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| Sampler: (Signature) | _. Cha | in of Custody Tape | No. | İ | | 1. 1 | Remarks | |
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| Relinquished by: (Signature) | • | Date | Time | Received by | laboratory: (Sign | ature) | . Date | e Time |
| and the second s | | | · <u>· · ·</u> | | · | · . | · . | |
| | Inter-M | ountain Lab | oratori | es Inc | | | | |
| ~ | | | · | | | П | | |
| 1633 Terra Avenue | 1701 Phillips Circle | 2506 West Main S | Street | ∟∎
1160 Researd | ch Drive | L∎
Route 3, Box 256 | 01- | 50025 |
| Sheridan, Wyoming 82801
Telephone (307) 672-8945 | Gillette, Wyoming 82716
Telephone (307) 682-8945 | Farmington, NM 8
Telephone (505) 3 | 37401 | Bozeman, Mo
Telephone (40 | ontana 59718 | College Station, TX 77
Telephone (409) 776-8 | | |



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

Sharon Williams

Organic Analyst/IML-Farmington

Enclosure

xc: File



CHAIN OF CUSTODY RECORD

| Client/Project Name | nu-1-1 | ex 1 | Proje | ect Location | Anxi | for Plans | 4 | | SANAL | YSES | / PAR | AMETERS | 3 | |
|--|----------------|--|--------------------------|--------------------------|---------------|---|----------------------|------------|----------|------------------------------------|--------------|---------------|----------|----------|
| Sampler: (Signature) | Say- | | Chain of Cu | stody Tape | | | / | interest | | | | Rema | arks | |
| Sample No./ | Date | Time | Lab Number | | Matrix | | No. of
Containers | TCLP metal | | | | | | |
| Frac Tank | 7/20/97 | 11:30 6 | 7 | | H20 |) | 2 | / | | | | | | |
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| Relinquished by: (Signature |) | | | Date | Time | Received by | r: (Sign | nature) | ^ | <u></u> | ' | | Date | Time |
| | Zh | | | 7/14/97 | 1:30/ | | oin | | 0 2 | men |) | | 7-10-9- | 1332 |
| Relinquished by: (Signature |) / | ** | | Date | Time | Received by | r: (Sigr | nature) | P | | | | Date | Time |
| | | | | | | | | | | | | | | |
| Relinquished by: (Signature | :) | | | Date | Time | Received by | labor | atory: (Si | gnature) |) | | | Date | Time |
| | | | nter-Mounta | ain Lab | oratorie | es. Inc. | | | | - | | | | <u> </u> |
| 1633 Terra Avenue
Sheridan, Wyoming 83
Telephone (307) 672-8 | 2801 Gillet | Phillips Circ
tte, Wyoming
phone (307) | cle 2506
g 82716 Farm | West Main Sington, NM 87 | treet
7401 | 1160 Resear
Bozeman, M
Telephone (4 | ontan | a 59718 | Col | ute 3, Bo
llege Sta
ephone (| ition, TX | | 01-48 | 3686 |

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 <u>Test Methods for Evaluating Solid Waste: Physical/Chemical Methods</u>, 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.

Sharon Williams Organics Analyst

2506 W. Main Street Farmington, New Mexico 87401

TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL CONCENTRATION

Client:

South-Tex Treaters

Project:

Antler Plant

Sample ID: Laboratory ID: Frac Tank 0397G01368

Sample Matrix:

Water

Date Reported:

08/01/97

Date Sampled:
Date Received:

07/10/97

Date Analyzed:

07/10/97 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 Byt

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 COMPOUNDS

1160 Research Drive Bozeman, Montana 59718

Client:

SOUTH-TEX TREATERS

Sample ID:

Frac Tank

Project ID: Lab ID:

Matrix:

Antler Plant

Water

B973661

0397G01368

Date Reported:

07/24/97

Date Sampled: Date Received: 07/10/97

Date Extracted:

07/11/97 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 Lim | nits |
| 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 W



TOXICITY CHARACTERISTIC LEACHING PROCEDURE HSL SEMI-VOLATILE COMPOUNDS

Client:

SOUTH-TEX TREATERS

Sample ID: Frac Tank

Project ID:

Antler Plant

Lab ID: Matrix: B973661

Water

0397G01368

Date Reported:

07/29/97

1160 Research Drive Bozeman, Montana 59718

Date Sampled:

07/10/97

Date Received:

07/11/97

Date Extracted: Date Analyzed:

07/17/97

| | | Date A | Analyzed: | 07/21/97 |
|--------------------------------------|--------|--------|---------------------|----------|
| Parameter | Result | PQL | Regulatory
Level | y 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 | O ## | | 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.

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 |
|------------|-----------------|-----------------|---------------------|--------|
| 1 arameter | ixesuic | ixesuit | Recovery | Office |
| 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 A

2506 W. Main Street Farmington, New Mexico 87401

Quality Control / Quality Assurance

Spike Analysis / Blank Analysis TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Client:

South-Tex Treaters

Date Reported:

08/01/97

Project:

Antler Plant

Date Analyzed:

07/25/97

Sample Matrix:

Water

Date Received:

07/10/97

Spike Analysis

| Parameter | Spike
Result
(mg/L) | Sample
Result
(mg/L) | Spike
Added
(mg/L) | Percent
Recovery |
|-----------|---------------------------|----------------------------|--------------------------|---------------------|
| Avannia | NI A | NIA | NIA | NIA |
| Arsenic | NA
2.15 | 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 AN



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 | لــــــــــــــــــــــــــــــــــــ |
| 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 P.D.

Reviewed_

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 | O | 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 Toluene-d8 Bromofluorobenzene | 116
99
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.

F.O.

Analyst

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

| | Spike | Sample | MS | MS | |
|-----------------------|--------|------------|------------|----------|---|
| | Added | Conc. | Conc. | Recovery | |
| Parameter | (mg/L) | (mg/L) | (mg/L) | (%) | |
| 1,4-Dichlorobenzene | 0.100 | 0.000 | 0.059 | 59 | , |
| 2,4,5-Trichlorophenol | 0.100 | 0.000 | 0.033 | 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 | 0.039 | 76 | • |
| Hexachlorobutadiene | 0.100 | 0.000 | 0.069 | 69 | |
| | 0.100 | | 0.063 | 63 | |
| Hexachloroethane | | 0.000 | | | |
| m,p-Cresol | 0.200 | 0.000 | 0.146 | 73
70 | |
| 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 | |
| | | SAMPLE PAR | | | |
| | Spike | MSD | MSD | | |
| | Added | Conc. | Recovery | RPD | |
| Parameter | (mg/L) | (mg/L) | (%) | (%) | |
| 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 | 6 5 | 3 | |
| m,p-Cresol | 0.200 | 0.148 | 74 | 1 | |
| Nitrobenzene | 0.200 | 0.074 | 74
74 | 3 | |
| o-Cresol | 0.100 | 0.074 | 74
70 | 3
7 | |
| Pentachlorophenol | 0.100 | 0.070 | 0 | 0 | |
| Pyridine | 0.100 | 0.066 | 66 | 5 | |
| i ynume | 0.100 | 0.000 | 00 | 3 | |

Analyst

Reviewed

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 |
|-------------------------------|--------|--------|--------------------|
| 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 |

1160 Research Drive Bozeman, Montana 59718

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 |
|-----------------------------|-----------------|-------|-------|
| ontinued | | | · |
| 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 | mģ/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/ |
| Naphthalene | ND | 0.01 | mg/ |
| Nitrobenzene | ND _. | 0.01 | mg/ |
| Pentachlorophenol | ND | 0.025 | mg/ |
| Phenanthrene | ND | 0.01 | mg/ |
| Phenol | ND | 0.01 | mg/ |
| Pyrene | ND | 0.01 | mg/ |
| | | | |

1160 Research Drive Bozeman, Montana 59718

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-Fluorophénol | 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)

Reviewed

Roger Anderso

Form C-138

Originated 8/8/95

District 1 - (505) 393-6161 P. O. Box 1980 Hebbs, NM 88241-1980 District II - (505) 748-1283 81 | S. First Artesia, NM 88210 P' trict III - (505) 334-6178 Rio Brazos Road r_...c, 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

BECEIVED

Submit Original Plus I Copy to appropriate

NOV 1 9 1997

District Office

| | CANALAN AND CONTRACTOR OF THE PARTY OF THE P |
|---|--|
| REQUEST FOR APPROVAL TO ACCEPT | SOLDEWASTEION DIVISION |
| 1. RCRA Exempt: Non-Exempt: X | 4. Generator WESKEN HALLING. |
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site watchase YALD |
| 2. Management Facility Destination SUNCO DISPOSAL SYSTEMS | 6. Transporter So WESKEM H41) |
| 3. Address of Facility Operator LR 3500 #345 AZHEC NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) | |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigned | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| GLYCOL, UNUSED Product | |
| | GEIVED
OV 1 4 1997
SONO. DOV. |
| Expiral by date. | () () () () () () () () () () |
| Estimated Volume 13 bots cy Known Volume (to be entered by the op | perator at the end of the haul) cy |
| SIGNATURE: Male Management Facility Authonized Agent TYPE OR PRINT NAME: MICHAEL TALOWICH TEL | DATE: 11-13-97 |
| APPROVED BY: Manter Mile Env. Geo 10 | 9915T DATE: 11/14/97 |

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

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 Čopy to appropriate District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WAS IE | |
|--|--|--|
| 1. RCRA Exempt: Non-Exempt: X | 4. Generator WESKEN HALLENC. | |
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site WARChouse YALD | |
| 2. Management Facility Destination SUNCO DISPOSAL SYSTEMS | 6. Transporter So WESKEM H41) | |
| 3. Address of Facility Operator LR 3500 #345 AZ+CC NM | 8. State NM | |
| 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. 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 | d for transport. | |
| BRIEF DESCRIPTION OF MATERIAL: | · · · · · · · · · · · · · · · · · · · | |
| GLYCOL, UNUSED Product | | |
| Expired by date. ©IL CONDUST. | 1VED
4 1997
N. DIV. | |
| Estimated Volume 13 6615 cy Known Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— | |
| | MGR DATE: 11-13-97 | |
| TYPE OR PRINT NAME: MICHAEL TALOVICH TEI | LEPHONE NO. <u>505-334-6186</u> | |
| (This space for State Use) | | |
| APPROVED BY: Demy D. Fant TITLE: Geolog | DATE: 11/14/97 | |
| APPROVED BY: | DATE: | |

CERTIFICATE OF WASTE STATUS

| 1. | Generator Name and Address: | 2. Destination Name: |
|---------------------|---|--|
| | WESKEM HALL INC. | SUNCO DISPOSAL |
| } | 15. RD 5860 | |
| | FARMINGTON NEW MEXICO 87401 | |
| 3. | Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| l | WESKEM HALL INC. | |
| ł | 15 RD 5850 | |
| | FARMINGTON NEW MEXICO 87401 | |
| ļ | Attach list of originating sites as appropriate | |
| 4. | Source and Description of Weste | |
| ł | ARROFROTH 65 FROTHER | 10 DRUMS. Expiral by date. |
| | POLYPROPYLENE GLYCOL | 10 DROMS. 1 MS1 014 10. |
| | POLYALKYLENE GLYCOL | |
| | • | |
| Į | | |
| L | | |
| | THOMAS A. NEWMAN. | and the state of t |
| ١, _ | (Print Name) | representative for: |
| | WESKEM HALL INC. | do hereby certify that |
| acc | ording to the Resource Conservation and Rec | covery Act (RCRA) and Environmental Protection Agency's July |
| 198 | 8, regulatory determination, the above descri | bed waste is: (Check appropriate classification) |
| | EXEMPT oilfield waste XXX NON-E | EXEMPT oilfield waste which is non-hazardous by characteristic |
| | | is or by product identification |
| | | |
| and | that nothing has been added to the exempt of | r non-exempt non-hazardous waste defined above. |
| | | |
| For | | ocumentation is attached (check appropriate items): |
| | MSDS Information RCRA Hazardous Waste Analysi | Other (description): |
| | Chain of Custody | а. |
| | | |
| | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| | | |
| | | |
| Nan | ne (Original Signature): <u>Thomas A.M.</u> | luman |
| Nan | ne (Original Signature): Thomas Q.70 | euman |
| Nan
Title | no (Original Signature): Thomas A.M. District Man | ewman |
| Nan
Title
Dat | o: November 12, 199 | euman
eyer |



MATERIAL SAFETY DATA

MSDS NO. 0304-03 DATE: 10/27/89

PRODUCT IDENTIFICATION PRODUCT NAME:

ARO KO

SYNONYMS:

Polypropylene glycol

CHEMICAL FAMILY:

Polyaikylene glycol

MOLECULAR FORMULA:

HO(C3H6O)nH

MOLECULAR WCT.:

Mixture

WARNING

NO WARNING STATEMENT

OSHA REGULATED COMPONENTS COMPONENT

CAS. NO.

%

TWA/CEILING

REFERENCE

No Permissible Exposure Umits (PEL/TLV) have been established by OSHA or ACCIH.

NFPA HAZARD RATING

Fire

Special

FIRE: Material that must be preheated

before ignition can occur.

Health 1

0 Reactivity

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

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.

FMERGENCY PHONE: 201/835-3100

AMERICAN CYANAMID COMPANY, 1 CYANAMID PLAZA, WAYNE, NEW JERSEY 07470

| FIRE AND EXPLOSION | FLASH POINT:
METHOD: | > 200 F (> 93.3)
Closed Cup |
|---|--|--|
| HAZARD
INFORMATION | 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 fire Use water to keep containers cool. Wear self-contained, positive pressure breathing apparatus. |
| REACTIVITY DATA | STABILITY:
CONDITIONS TO AVOID: | Stable
None known |
| | POLYMERIZATION:
CONDITIONS TO AVOID: | Will Not Occur
None known |
| | INCOMPATIBLE
MATERIALS: | Strong oxidizers; strong acids. |
| | HAZARDOUS
DECOMPOSITION
PRODUCTS: | Thermal decomposition or combustion may produce carbon monoxide and/or rarbon 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/H2O
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 CO
CASE MATERIAL IS di
RELEASED OR SPILLED: | over spills with some Inert absorbent; sweep up and place in a was sposal container. Flush area with water. |
| WASTE DISPOSAL | 42-20-20-00-00-00-00-00-00-00-00-00-00-00 | ordance with applicable governmental |
| SPECIAL
PRECAUTIONS | HANDLING AND None
STORAGE/OTHER: | |
| D.O.T. SHIPPING
INFORMATION | PROPER SHIPPING
NAME: | NOT APPLICABLE/NOT REGULATED |
| | HAZARD CLASS: | NOT APPLICABLE |
| : | UN/NA: | NOT APPLICABLE |
| A. | | |
| | | |
| e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de
La companya de la companya de la companya de la companya de la companya de la companya de la companya de la co | | The state of the s |
| • | of day | |

MSDS NO. 0304-03 PAGE 3 OF 3 AEROFROTH® 65 Frother **AZARDOUS** (Reportable Quant of Product) SUBSTÂNCES: NOT APPLICABLE D.O.T. LABEL REQUIRED: NOT APPLICABLE TSCA This product is manufactured in compliance with all provisions of the 'NFORMATION Toxic Substances Control Act, 15 U.S.C. ENVIRONMENTAL The following components are defined as toxic chemicals subject to reporting requirements of INFORMATION Section 313 of Title III and of 40 CFR 372 or subject to other EPA regulations. SARA TITLE III COMPONENT CAS. NO. % **RCRA** TPQ (lbs.) RQ (lbs.) \$313 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: Fered solely for your consideration, investigation and verification. Before using any product read its label.

A PARTIE DE LA COMPANIO DE LA COMPANIO DE LA PARTIE DE LA COMPANIO DEL COMPANIO DEL COMPANION DE LA COMPANION DE LA COMPANION DEL COMPANION DEL COMPANION DE LA COMPANION DEL COMPANION DE LA COMPANION DEL COMP

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District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
Protect III - (505) 334-6178
Rio Brazos Road
...c, 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 8/8/93

> Submit Original Plus I Copy to appropriate District Office

| REQUEST FOR APPROVAL TO | ACCEPT SOLID WASTE |
|-------------------------|--------------------|
|-------------------------|--------------------|

| 1. RCRA Exempt: Non-Exempt: 🔀 | 4. Generator Bullycolow Roccy proper |
|--|--|
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site Ound 336 |
| 2. Management Facility Destination SUNCO | 6. Transporter |
| 3. Address of Facility Operator CR 3500 4345 Azlec, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) Quin 336 well the | · · · · · · · · · · · · · · · · · · · |
| 9. Circle One: | A section of the sect |
| A. All requests for approval to accept oilfield exempt wastes will be accommon department of the common department of the | empanied by necessary chemical analysis to
n of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | |
| WATER, Hyprotest waste Frem Quinn And DECE NOV - | 100 P
5 1997
N. DOV. |
| Estimated Volume 400 6615 cy Known Volume (to be entered by the ope | erator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TAINICH TEL | DATE: 11-4-97 EPHONE NO. 505-334-6186 |
| APPROVED BY: Mation The TITLE: En Good | C/S/ DATE: 11/5/97 |
| | * ; |

District L (505) 393-6161 P. O. Nox 1980 Hobbs, NM 88241-1980 <u>District II</u> - (505) 748-1283 811 S. First Artesia, NM 88210 District III - (505) 334-6178 7 Rio Brazos Road مــدc, NM 87410 District IV - (505) 827-7131

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Street

Submit Original Plus 1 Copy.

Form C-138

Originated 8/8/95

to appropriate District Office

Santa Fe, New Mexico 87505 (505) 827-7131

| | SOLID WASTE |
|---|---|
| 1. RCRA Exempt: Non-Exempt: 🔀 | 4. Generator Bulington Resource |
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site OUND# 336 |
| 2. Management Facility Destination SUNCO | 6. Transporter UNCO |
| 3. Address of Facility Operator CR 3550 #345 Aztec, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) QUINN 336 wells the | |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. | companied by necessary chemical analysis to
on of origin. No waste classified hazardous by |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| | 11VED
5 1997
N. DIV.
1. 3 |
| SIGNATURE: Management FacilityAuthorized Agent TYPE OR PRINT NAME: MCMARL TALOUICM TE | , , |
| APPROVED BY: TITLE: GEO SE | 0915 DATE: 1/5/97 |

CERTIFICATE OF WASTE STATUS

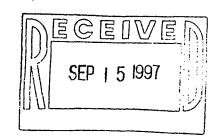
| Generator Name and Address: | 2. Destination Name: |
|--|---|
| BURLINGTON RESOURCES
3535 EAST 30th STREET
FARMINGTON, NM 87402 | Sunco Disposal |
| Originating Site (name): Quinn Pipeline Loop Project and the MB-20 Pipeline Loop Project Attach list of originating sites as appropriate. | Location of the Waste (Street address &/or ULSTR): Quinn #336 Well Site Unit Ltr. N, Section 17, Town 31N, Range 8W |
| Source and Description of Waste: | |
| Hydrotest water from the Quinn and MB-20 looping projects not produced water. | s. Note: Freshwater was used in the process |
| I, Craig A. BockBURLINGTON RESOURCES | representative for: |
| according to the Resource Conservation and Recovery Act (R Agency's July, 1988, regulatory determination, the above des | CRA) and Environmental Protection |
| | EXEMPT oilfield waste which is non-
ous by characteristic analysis or by product
cation |
| and that nothing has been added to the exempt or non-exemp | t non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following documentation | n is attached (check appropriate items): |
| MSDS Information ✓ RCRA Hazardous Waste Analysis ✓ Chain of Custody | Other (description): |
| Name (Original Signature): | |
| Title: ENVIRONMENTAL REPRESEN | TATIVE |
| Date: November 4, 1997 | |



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

Siok Hong Chen Project Manager



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 Ohen, Project Manager

Dato

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.



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

SAMPLE ID: Q336-1

PROJECT: BR Various Tasks

SITE:

SAMPLED BY: Philip Environmental

DATE SAMPLED: 08/28/97 14:30:00

DATE: 09/10/97

DATE RECEIVED: 09/03/97

PROJECT NO: 17664

MATRIX: WATER

| | ANALYTICAL D | ATA | | |
|---|--------------|---------|--------------------|-------|
| 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.



8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713)660-0901

DATE: 09/10/97

Certificate of Analysis No. H9-9709083-01

Phillips Environmental 4000 Monroe Road Farmington, NM 87401

ATTN: Robert Thompson

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

| | | · | | |
|---|-------------|----------|--------------------|-------|
| | ALYTICAL 1 | | 550000000 | |
| PARAMETER | | RESULTS | DETECTION
LIMIT | UNITS |
| Acid Digestion of TCLP Leachat
Method 3010A ***
Analyzed by: MM
Date: 09/04/97 | ce, ICP | 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 | a. | |
| 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.



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.





8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (7.13)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 DAT | A | | | |
|-----------------------|----------------|----------|-------|--------|--|
| PARAMETER | RESULTS | PQL* | UNITS | RL A | |
| 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 | % | LOWER | UPPER | |
| | SPIKED | RECOVERY | LIMIT | 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:



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 DAY | ra | | |
|-----------------------|----------------|------------|-------|--------|
| PARAMETER | RESULTS | PQL* | UNITS | RL A |
| Benzene | ND | 50 | ug/L | 500 |
| 2-Butanone | ИD | 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 | 5 0 | 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 | % | LOWER | UPPER |
| | SPIKED | RECOVERY | LIMIT | 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

ND - Not Detected

NA - Not Analyzed

▲ - Regulatory Limit. Reference Federal Register 55, 11862 (3/29/90), RCRA Toxicity Characteristic Final Rule.

COMMENTS:

QUALITY CONTROL DOCUMENTATION

Page 3

Data File: /chem1/m.i/m970904.b/m247k01.d

Report Date: 05-Sep-1997 10:49

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

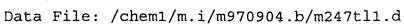
Quant Type: ISTD

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 |



Report Date: 04-Sep-1997 15:08

SPL Labs

RECOVERY REPORT

Client Name:

Client SDG: m970904

Sample Matrix: LIQUID

Fraction: VOA

Lab Smp Id: LCS

Operator: GT

Level: LOW Data Type: MS DATA

SampleType: METHSPIKE

SpikeList File: 8240water.spk

Quant Type: ISTD

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 |
|-------------------------------------|-----------------------|---------------------------|----------------|--------|
| <pre>\$ 19 1,2-Dichloroethane</pre> | 50 | 50 | 99.91 | 76-114 |
| \$ 32 Toluene-d8 | 50 | 51 | 102.47 | 88-110 |
| \$ 47 Bromofluorobenzene | 50 | 46 | 91.63 | 86-115 |

Page 3



8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 PHONE (713)660-0901

SPL Blank QC Report

page

Matrix: Aqueous Sample ID: BLANK

Reported on: 09/09/97 14:20 Analyzed on: 09/04/97 14:56

Analyst: GT

Batch: M970904113701

METHOD 8260 M247B01

| Compound | Result | Detection
Limit | Units |
|---|--|-----------------------------------|--|
| Vinyl Chloride 1,1-Dichloroethene 2-Butanone Chloroform 1,2-Dichloroethane Benzene Carbon Tetrachloride Trichloroethene Chlorobenzene | ND
ND
ND
ND
ND
ND
ND
ND | 10
5
20
5
5
5
5 | ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L |

Samples in Batch 9709083-01

Notes

ND - Not detected.

Page 3

Data File: /chem/h.i/h970905.b/h248k01.d

Report Date: 05-Sep-1997 11:06

SPL Labs

RECOVERY REPORT

Client Name:

Client SDG: h970905

Sample Matrix: LIQUID Lab Smp Id: 9709083-01BMS-TCLPS Fraction: SV

Level: LOW

Operator: LH

SampleType: MS

Data Type: MS DATA SpikeList File: tclp.spk

Quant Type: ISTD

Method File: /chem/h.i/h970905.b/h8270wQ.m

Misc Info: E247F2/H248S01/H248CC1

| 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 |
| | | | | l |

| 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 |



Data File: /chem/h.i/h970905.b/h247tl3.d

Report Date: 05-Sep-1997 10:21

SPL Houston Labs

RECOVERY REPORT

Client Name:

Sample Matrix: LIQUID

Lab Smp Id: LCS

Level: LOW

Data Type: MS DATA SpikeList File: tclp.spk

Client SDG: h970905

Fraction: SV

Operator: LH SampleType: MS

Quant Type: ISTD

Method File: /chem/h.i/h970905.b/h8270wQ.m

Misc Info: E247F2/H247B03/H248CC1

| 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 | , , | 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 |
| | | | | <u> </u> |

| 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 |



8880 INTERCHANGE DRIVE **HOUSTON, TEXAS 77054** PHONE (713)660-0901

page

1

SPL Blank QC Report

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 2-Fluorobiphenyl Terphenyl-d14 Phenol-d5 2-Fluorophenol 2,4,6-Tribromophenol | 79
 84
 100
 30
 42
 84 | 35-114 % Recovery
43-116 % Recovery
33-141 % Recovery
10-110 % Recovery
21-110 % Recovery
10-123 % Recovery |

Samples in Batch 9709083-01

Notes

ND - Not detected.

Matrix: TCLP Leachate - FILTER

Units: mg/L

HOUSTON LABORATORY

8880 INTERCHANGE DRIVE Analyston TEXAS 77054

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

| Opine - Opine Dupinette Results Work Order Opined. | | | | | | | | 0000 0 | | | |
|--|-----------------|--|--|---|--|---|--|--|--|---|--|
| Sample | Spike | Mati | ix Spike | e Matrix Spike Duplicate | | | QCL | imits | Spike | QC | |
| Result | Added | Result | Recover | <u> </u> | Result | Recovery | | % Re | covery | RPD % | Limits % |
| | | | | Π | | | Τ | | | | |
| ND | 2.0 | 1.714 | 86 | | 1.694 | 85 | Γ | 80 | 120 | 1.2 | 20.0 |
| 0.2237 | 1.0 | 0.980 | 76 | * | 0.952 | 73 | * | 80 | 120 | 3.8 | 20.0 |
| | | | | | | | Π | | | | |
| ND | 1.0 | 0.845 | 85 | | 0.826 | 83 | | 80 | 120 | 2.2 | 20.0 |
| | | | | П | | | | | | | |
| ND | 1.0 | 0.834 | 83 | П | 0.828 | 83 | | 80 | 120 | 0.8 | 20.0 |
| | | | | | | | Γ | | | | |
| | | | | П | | | | | | | |
| | | | | П | | | | | | | |
| ND | 1.0 | 0.855 | 86 | П | 0.845 | 85 | | 80 | 120 | 1.2 | 20.0 |
| | | | | | | | | | | | |
| ND | 2.0 | 1.728 | 86 | | 1.758 | 88 | · | 80 | 120 | 1.7 | 20.0 |
| | | | | | | | | | | | 1 |
| | | | | | | | | | | | |
| | ND 0.2237 ND ND | Sample Result Spike Added ND 2.0 0.2237 1.0 ND 1.0 ND 1.0 ND 1.0 | Sample Result Spike Added Mate Result ND 2.0 1.714 0.2237 1.0 0.980 ND 1.0 0.845 ND 1.0 0.834 ND 1.0 0.855 | Sample Result Spike Added Matrix Spike Result ND 2.0 1.714 86 0.2237 1.0 0.980 76 ND 1.0 0.845 85 ND 1.0 0.834 83 ND 1.0 0.855 86 | Sample Result Spike Added Matrix Spike Result Recovery ND 2.0 1.714 86 0.2237 1.0 0.980 76 * ND 1.0 0.845 85 ND 1.0 0.834 83 ND 1.0 0.855 86 | Sample Result Spike Added Matrix Spike Result Matrix Spike Result ND 2.0 1.714 86 1.694 0.2237 1.0 0.980 76 0.952 ND 1.0 0.845 85 0.826 ND 1.0 0.834 83 0.828 ND 1.0 0.855 86 0.845 | Sample Result Spike Added Matrix Spike Result Matrix Spike Result Matrix Spike Duplicate Result ND 2.0 1.714 86 1.694 85 0.2237 1.0 0.980 76 0.952 73 ND 1.0 0.845 85 0.826 83 ND 1.0 0.834 83 0.828 83 ND 1.0 0.855 86 0.845 85 | Sample Result Spike Added Matrix Spike Result Matrix Spike Result Matrix Spike Duplicate Result ND 2.0 1.714 86 1.694 85 0.2237 1.0 0.980 76 0.952 73 * ND 1.0 0.845 85 0.826 83 ND 1.0 0.834 83 0.828 83 ND 1.0 0.855 86 0.845 85 | Sample Result Spike Added Matrix Spike Result Matrix Spike Result Duplicate Recovery QC I Result ND 2.0 1.714 86 1.694 85 80 0.2237 1.0 0.980 76 0.952 73 80 ND 1.0 0.845 85 0.826 83 80 ND 1.0 0.834 83 0.828 83 80 ND 1.0 0.855 86 0.845 85 80 | Sample Result Spike Added Matrix Spike Result Matrix Spike Result Duplicate Recovery QC Limits Recovery ND 2.0 1.714 86 1.694 85 80 120 0.2237 1.0 0.980 76 0.952 73 80 120 ND 1.0 0.845 85 0.826 83 80 120 ND 1.0 0.834 83 0.828 83 80 120 ND 1.0 0.834 83 0.828 83 80 120 ND 1.0 0.855 86 0.845 85 80 120 | Sample Result Spike Added Matrix Spike Result Matrix Spike Duplicate Result QC Limits Recovery Spike RPD % ND 2.0 1.714 86 1.694 85 80 120 1.2 0.2237 1.0 0.980 76 0.952 73 80 120 3.8 ND 1.0 0.845 85 0.826 83 80 120 2.2 ND 1.0 0.834 83 0.828 83 80 120 0.8 ND 1.0 0.855 86 0.845 85 80 120 1.2 |

DIG 25/50

Checked: 9m 9 9 97

ICP Spectros py Method 6010 Quality Control

ICP Spectros

Matrix: TCLP Leachate - FILTER

Units: mg/L

HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TEXAS 77054 Analysone (713)660-0901

Date: 090997

Time: 0821

File Name: 090997C5

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 Orde | ers in Batch |
|------------|--------------|
| Work Order | Fractions |
| | |

97-09-097 01A

97-09-083 01A

Matrix Spike - Spike Duplicate Results Work Order Spiked: 9709097-01A

| Matrix Spik | <u>е - Spike Di</u> | upiicate Re | suits | | work Orde | r Spiked: 970 | 19097-01A | | |
|-------------|---------------------|-------------|--------|-----------|---------------------------|---------------|------------|-------|----------|
| | Sample | Spike | Mat | rix Spike | Matrix Spike Duplicate QC | | | Spike | QC |
| Element | Result | Added | Result | Recovery | Result | Recovery | % Recovery | RPD % | Limits % |
| Silver | ND | 1.0 | 0.964 | 96 | 0.942 | 94 | 80 120 | 2.3 | 20.0 |
| Arsenic | | | | | | | | | 1 |
| Barium | | | | | | | | | |
| Beryllium | | | | | | | | | |
| Cadmium | | | | | | | | | |
| Cobalt | | | | | | | | | |
| Chromium | | | | | | | | | |
| Copper | | | | | | | | | |
| Thallium | | | | | | | | | |
| Nickel | | | | | | | | | |
| Lead | | | | ÷ | | | | | |
| Antimony | | | | | | | | | |
| Selenium | | | | | | | | | |
| Vanadium | | | | | | | | | |
| Zinc | | | | | ļ | | | | |

DIG 25/50

Checked: 4 1097



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 | | 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

 $\star = MI$



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 | Method | Sample | Spike | Matr | ix Spike | | ix Spike
licate | RPD | | | C LIMITS
(dvisory) | |
|-------------|---------------|----------------|---------------|----------------|----------|----------------|--------------------|-----|------------|----|-----------------------|--|
| ID Number | Blank
ug/L | Result
ug/L | Added
ug/L | Result
ug/L | Recovery | Result
ug/L | Recovery
% | (%) | RPD
Max | 2 | 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 1D# 94-452-36-23 * = MI



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 | 7-846 1010 | |
| DATE: | 9-5-97 | # OF | SAMPLES: | 2 |
| UNITS: | DEG. F | | ANALYST: | T. Benz |
| | | , | | |
| SAMPLE I.D.'s IN | | | | |
| 9708827- | 02F, 97 | 09083-01 | ID . | |
| | | | | |
| | | | | |
| | | | | |
| CTANDADD | | | , | |
| STANDARD | } . | | | |
| | FLASH POINT | FLASHLPOINT | QA/QC | LIMITS |
| STANDARD | KNOWN | FOUND | UPPER | LOWER |
| para-XYLENE | 81 d e g. F | 80°F | 83 d e g. F | 79 deg. F |
| | | | | |
| | | | | |
| REPLICATES | ·
. · | · | | |
| | RESULT | DUPLICATE | DIFFERENCE | |
| SAMPLE I.D. | (#1) | (#2) | #1-#2 | QC LIMITS |
| 9708B27-02F | >210°F | >210°F | Ø | 54°F |
| | | M | | |
| | | | | |
| | | · | | |
| | | | | |
| REVIEWED BY: | Trust & | le Boranto | DATE: | 83/85/97 |

DATE:

APPROVED BY:



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 | PL Sample ID Original Sample Concentration pH_units | | RPD | RPD
Max. |
|---|---------------|---|------|-----|-------------|
| 5 | 9709083-01D | 8.42 | 8.42 | 0 | 1.0 |

-9709176

Samples in batch:

9709083-01D

9709110-01D

9709120-01B

9709131-01A

9709131-02A

COMMENTS:



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^{\cdot}

SAMPLE RECEIPT-CHECKLIST-

9709083 Exals son



Chain of Custody Record

4000 Monroe Road Farmington, NM 87401

(505) 326-2262 Phone (505) 326-2388 FAX

coc Serial No. C 2123

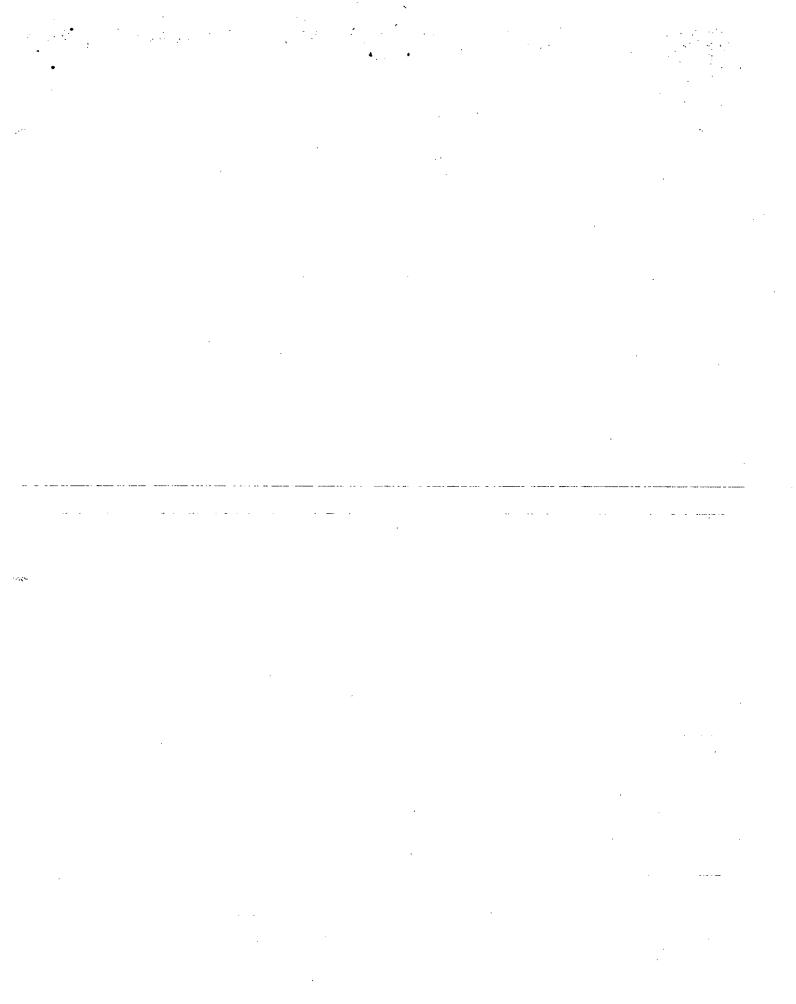
| Project Name BR VARIOUS TASKS Project Number 1710104 Phase Task 8 Samplers ROBERT THOMPSON Laboratory Name SP1 Location FARMINGTON Sample Number (and depth) Date Tim Q336-1 8:28 97 143 | Total Number o | Total Number of Okr Villa St. Villa | BUTY PACTUTY OPENSAL PRODUCT XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | | Comments
BUINN#336 FRACTIONK | |
|---|----------------|---|--|-------------|---------------------------------|--|
| | | | | | | |
| | | | | | | |
| Relinquished by: | | | Received By: | Date | | |
| Signature | 9.28.97 | Time | Time Signature | | Time 4:15 | |
| 100er Nampon 8.28.7 | | 1614 John Torres | | 1 581 4 | 9/28/97 4:18 | |
| | | | Jun 1245 | 9/3/97 | 1330 | |
| Samples Iced: ☒ Yes ☐ No | Carrier: | | | Airbill No. | | |
| Preservatives (ONLY for Water Samples) Cyanide Sodium hyroxide (NaOH) Voiatile Organic Analysis Shipping and Lab Notes: Metals Nitric acid (HNO3) TPH (418.1) Sulfuric acid (H2SO4) Other (Specify) Other (Specify) | | | | | | |

SPL Houston Environmental Laboratory

Sample Login Checklist

| Dat | te: 9/3/97 | (330 | | |
|----------|--------------------------------------|----------------------------|---------|-----------|
| SPI | L Sample ID: | | | |
| | 9709083 | | | |
| | | | Yes | <u>No</u> |
| <u>l</u> | Chain-of-Custody (COC) form is p | resent. | | |
| 2 | COC is properly completed. | | / | |
| 3 | If no, Non-Conformance Workshee | et has been completed. | | |
| 4 | Custody seals are present on the sh | ipping container. | | |
| 5 | 5 If yes, custody seals are intact. | | | |
| 6 | 6 All samples are tagged or labeled. | | | |
| 7 | If no, Non-Conformance Workshee | et has been completed. | | |
| 8 | Sample containers arrived intact | | | |
| 9 | Temperature of samples upon arriv | al: | Ho. | C |
| 10 | Method of sample delivery to SPL: | SPL Delivery | | |
| ! | | Client Delivery | | |
| | | FedEx Delivery (airbill #) | 204217: | 2683 |
| i
· | · | Other: | | |
| 11 | Method of sample disposal: | SPL Disposal | / | / |
| | | HOLD | | |
| • | | Return to Client | | |

| Name: | \wedge | Date: | |
|-------|----------|--------|-----|
| h | NAMS | 9/3/97 | ; . |



Dissiper I - (505) 393-6161 PO Bar 1980 Hobbs, NM 88241-1980 Diagrica II - (505) 748-1283 811 S. First Artesia, NM 88210 Pirtict III - (505) 334-6178 Rio Brazos Road -_..c. NM 87410 District TV - (505) 827-7131

The Thirty of State of Automotive

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division

2040 South Pacheco Street Santa Fe. New Mexico 87505 (505) 827-7131

Submit Original Plus I Copy to appropriate District Office

Originated 8/8/95

Royer Anderson Form C-138

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|--|
| 1. RCRA Exempt: Non-Exempt: 🔀 | 4. Generator WESTWAY FABILITY IN |
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site Gd, Rights County N |
| 2. Management Facility Destination SUNCO | 6. Transporter SUNTO |
| 3. Address of Facility Operator CR 3500 #345 ACTEC , NM | 8. State JM |
| 7. Location of Material (Street Address or ULSTR) Mile Port 146 Hiway 64 | |
| 9. Circle One: | The state of the s |
| A. All requests for approval to accept oilfield exempt wastes will be accepted and acceptator; one certificate per job. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| AND Motor OIL, DECEIVED NOV - 5 1997 | unts of Diesal Fuel |
| OIL COM. DIV.
DIF. 3 | |
| Estimated Volume 12066/1 cy Known Volume (to be entered by the op | erator at the end of the haul)cy 🤻 |
| SIGNATURE: Maste Management Pacifity Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOVICH TEL | DATE: 11- 4-97 |
| APPROVED BY: Marting O'lles TITLE: Env 6 ce | OG 15 DATE: 11/5/97 JOSES DATE: 11/7/97 |
| | Service Servic |

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 C, 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

| 2. Management Facility Destination Sunco 3. Address of Facility Operator & 3500 # 345 Aztec , NM 8. State NM 7. Location of Material (Street Address or ULSTR) Mile foot 146 Hiway # 80 Ruba County NM 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport. BRIEF DESCRIPTION OF MATERIAL: Creek water Contaminated with Small Amounts of Diesal Fuel AND Motor of (, DEGEIVED) NOV - 5 1997 | RCRA Exempt: Non-Exempt: | 4. Generator WESTWAY FREIGHT IN |
|--|--|--|
| 2. Management Facility Operator CR 3500 #345 AZTEC NM 8. State NM 7. Location of Material (Street Address or ULSTR) MIR OST 146 HUMB H ROBAL COUNTY WAS BURNED COUNTY WAS BUR | Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site MILERST 146 HILLY |
| 3. Address of Facility Operator CR 3500 # 345 AZTEC INM 7. Location of Material (Street Address or ULSTR) Mile for 146 11 11 11 11 11 11 11 11 11 11 11 11 11 | 2. Management Facility Destination Sunco | |
| 9. Circle One: A. All requests for approval to accept olifield 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 DIRSAL FUEL AND Motore of C, DECEIVED WILL DIVID DIVID SIGNATURE: Wastes Kranagament Acceptable Authorized Agent TITLE: MER. DATE: 11- Y-97 TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Derivating Authorized Agent TITLE: Geologist Date: 11/5/77 | 3. Address of Facility Operator CR 3500 #345 AZTEC, NM | |
| A. All requests for approval to accept olifield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. 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 WASE CONTAMINATED WITH SMALL AMOUNTS OF DIESAL FUEL AND MOSTOR OF CONTAMINATED WITH SMALL AMOUNTS OF DIESAL FUEL AND MOSTOR OF CONTAMINATED WITH SMALL AMOUNTS OF DIESAL FUEL AND MOSTOR OF CONTAMINATED WITH SMALL AMOUNTS OF DIESAL FUEL Estimated Volume 120 bblc cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Waste Management Facility Julinotized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TELEPHONE NO. 505 - 334-6/86 (This space for State Use) APPROVED BY: DETAIL SMALL | 7. Location of Material (Street Address or ULSTR) Mile for 146 Hiway 64 | ~ |
| Generator; one certificate per job. 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 5 mail amounts of Diesal Fuel and 5 mail amounts of Diesal Fuel a | 9. <u>Circle One</u> : | |
| BRIEF DESCRIPTION OF MATERIAL: Creek water Contaminated with small amounts of Diesal Fuel AND Motor of C, DECEIVED NOV - 5 1997 Signature: Management Facility Authorized Agent Type OR PRINT NAME: MICHAEL TALOUICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Deriving Scientific Contamination of the State Use) APPROVED BY: Deriving Scientific Contaminated Scient State Use) APPROVED BY: Deriving Scientific Contamination of the State Use) | Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be accepted and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to n of origin. No waste classified hazardous by |
| Estimated Volume 120 bblc cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Waste Management inchiny Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Derry Be Detailed With the space of the spa | | a for transport. |
| Estimated Volume 120 66/C cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Masse Management Pacificy Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505 - 334-6186 (This space for State Use) APPROVED BY: Derny Box Telephone Date: 11/5/97 | | . • |
| Estimated Volume 12066 cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Management Actinization Agent TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Denny G. Lewittle: G-60/05/15 T DATE: 11/5/97 | CIEEK WATER CONTAMINATED with small pro | with at Diani D |
| Estimated Volume 120 bblc cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Maste Management facility Authorized Agent TITLE: Mbc DATE: 11-4-97 TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Derry G. Derry TITLE: Geologist DATE: 11/5/97 | | |
| Estimated Volume 120 bbl cy Known Volume (to be entered by the operator at the end of the haul) cy SIGNATURE: Marie Management Pacility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Derny G. LewnTitle: G-60/05/15 T DATE: 11/5/97 | | |
| SIGNATURE: Maste Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Denny G. Leinfille: G-E0/0515 T DATE: 11/5/97 | Dist. 3 | V. |
| TYPE OR PRINT NAME: MICHAEL TALOVICH TELEPHONE NO. 505-334-6186 (This space for State Use) APPROVED BY: Denny G. Lemfitte: G-ED/0515 DATE: 11/5/97 | Estimated Volume 12066/C cy Known Volume (to be entered by the op | erator at the end of the haul) — cy |
| (This space for State Use) APPROVED BY: Demy Ge DemyTITLE: G-ED/0915 T DATE: 11/5/97 | Waste Management Pacility Authorized Agent | |
| APPROVED BY: Demy Ge Lemfitte: Geologist DATE: 11/5/97 | TYPE OR PRINT NAME: MICHAEL TALOVICH TEL | EPHONE NO. 505-334-6186 |
| | (This space for State Use) | |
| APPROVED BY: TITLE: DATE: | APPROVED BY: Denny Ge Lemptitle: G-00/6 | 0915 DATE: 11/5/97 |
| | APPROVED BY: TITLE: | DATE: |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|--|
| Westway Freightlines | Sunco Disposal |
| 7270 Dahlia | |
| Commerce City, Co 80022 | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| Mile Post 146 Highway 64, Rio Riba County | , New Mexico |
| | |
| Attach list of originating sites as apprepriate | |
| 4. Source and Description of Waste | |
| Creek Water contaminated by a small amour | et of diesel fuel and motor oilse |
| resulting from a tractor trailer highway | accident and subsequent spill |
| resulting from a craceof craffer magning, | |
| | |
| | |
| | |
| I, Phillip C. Nobis Tierra Environmenta | 11 Company as Agent representative for: |
| (Print Name) | |
| West Way Freight Lines according to the Resource Conservation and Recove 1988, regulatory determination, the above described | do hereby certify that, ery Act (RCRA) and Environmental Protection Agency's July, waste is: (Check appropriate classification) |
| EVENET UP II VVV | |
| | MPT pitied waste which is non-hazardous by characteristic r by product identification |
| | r by product identification |
| analysis o | r by product identification on-exempt non-hazardous waste defined above. |
| analysis of and that nothing has been added to the exempt or not for NON-EXEMPT waste only the following document of MSDS information MSDS information EXEMPT waste only the following document of the | r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| analysis of and that nothing has been added to the exempt or not for NON-EXEMPT waste only the following document of MSDS information MSDS information EXEMPT waste only the following document of the | r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not analysis of Non-EXEMPT waste only the following documents of MSDS Information MSDS Information EXEMPT Waste Only the following documents of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt or not analysis of the exempt | on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| analysis of and that nothing has been added to the exempt or not for NON-EXEMPT waste only the following document of MSDS information MSDS information RCRA Hazardous Waste Analysis Chain of Custody | on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not an added to the exempt or not an added to the exempt or not added to the exempt or | on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |



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 Sendler

Stacy VV. Septdler

Environmental Scientist/Laboratory Manager

enc.

ewa/2W2

04074/04074-03.I10/wpd

ENVIROTECH LABS

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client: Sample ID: Tierra Environmental Sludge Pond #1

Project #: Date Reported: 04074 10-22-97

Lab ID#: Sample Matrix: C336 Soil Cool Date Sampled:
Date Received:

10-20-97 10-20-97

Preservative: Condition:

Cool & Intact

Date Analyzed: Chain of Custody: 10-22-97 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

Analyst

Review Stacy W Sendler

ENVIROTECH LABS

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 |

| | Concentration | Detection
Limit | Regulatory
Limits |
|----------------------|---------------|--------------------|----------------------|
| Parameter | (mg/L) | (mg/L) | (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 Queen

Review Locy W Sandler



EPA METHOD 8040 PHENOLS

| Client: | Tierra Environmental | Project #: | 04074 |
|--------------------|----------------------|---------------------|------------------|
| Sample ID: | Sludge Pond #1 | Date Reported: | 10-30-9 7 |
| Laboratory Number: | C336 | Date Sampled: | 10-20-9 7 |
| Chain of Custody: | 5535 | Date Received: | 10-20-97 |
| Sample Matrix: | Sludge | Date Extracted: | 10-2 1-97 |
| 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-Cresoi | 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:

iviernod 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Golid

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

Itacy W. dendler

ENVIROTECH LABS

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: | Ç336 | 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: | TÇLP |

| Parameter | Concentration
(mg/L) | Det.
Llmit
(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

Stacy W Sendler

Regulatory

ENVIROTECH LABS

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: | Studge | Date Analyzed: | 10-31-97 |
| Preservative: | Cool | Date Extracted: | 10-21-97 |
| Condition: | Cool & Intact | Analysis Needed: | TCLP metals |

Det.

| Parameter | Concentration
(mg/L) | Limit
(mg/L) | Level
(mg/L) |
|-----------|-------------------------|-----------------|-----------------|
| Arsenic | 0.003 | 0.001 | 5.00 |
| Barlum | 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 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:

U.S. Hwy 64 NM 145.

Deun L. Clarecan

Review

tacy W Sendler

CHAIN OF CUSTODY RECORD.

| Client/Project Name | | | Project Location | | | | | | | | | | |
|-----------------------------------|----------|---------|--|------------|---------------------------------------|----------------------|-----------|------|---------|----------------|--|----------|-------|
| Tierra ENV. (Sampler: (Signature) | Co. To | | Dulce Ne | 1 40 | 1. 146 Hs | 64 | | | ANALYSI | 5/PAHAM | IETERS | | |
| Sampler: (Signature) | 1 | | Chain of Custody Tape I | No. | | 7 | | | | | | Remarks | |
| 2/1// | | | 04 | 477 | | of
ners | 10 | | | | | | |
| Sample No./ | Sample | Sample | | | Sample | No. of
Containers | 5108 | | | | | | · |
| Identification | Date | Time | Lab Number | , | Matrix | | اطا | | | | | | |
| 100501 | 10/22/27 | 12'00. | C211 | < | oil | ı | | | | | | | |
| Www-1 | 10/23/17 | 12.00 | C364
C365 | | | | | · | | | | | |
| Www-1 | 10/23/97 | 12:00pm | C365 | <u>ا</u> ا | later | | | | | | | | |
| | | | programme and section of the section | | | | | | | | | | |
| | | , | | | | | | | | } | | | |
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| | | | UE | 25 | | | | | | | | | |
| | | | <u> </u> | NOY 1 | 4 1997. | , | | | | | | | |
| | | | | (GO) | N. DIV | S | | | | | | | |
| | | | | DIS | i. 3 | | | | | | | | |
| | | | | | ····· | | | | | - | | | |
| | | | <u></u> | | · · · · · · · · · · · · · · · · · · · | | | | | <u> </u> | | | |
| elinquished by: (Signature) | 1/ | | | Date | | leceived by: (S | ignature) | • | , 1 | | | Date | Time |
| 7 11/1 | / | | // | 7/24/97 | 10:35A | _/_/h | Not | W. | Davit | <u> </u> | | 10/24/97 | 10:33 |
| Hetthquished by: (Signature) | | | / | , | R | leceived by: (S | ignature) | | | | | | |
| | | | | <u>-</u> | | | | | | | · · · · · · · · · · · · · · · · · · · | | |
| Relinquished by: (Signature) | | | | | R | leceived by: (S | ignature) | | | | | | |
| | | | | | | | | · ·- | | | | | |

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 81.1 S. First Artesia, NM 88210 Protect III - (505) 334-6178 Rio Brazos Road

District IV - (505) 827-7131

APPROVED BY

__.cc, NM 87410

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: Non-Exempt: | 4. Generator WFS | | | |
| Verbal Approval Received: Yes 🔀 No 🔲 | 5. Originating Site Esperanza | | | |
| 2. Management Facility Destination らいい | 6. Transporter SUNCO | | | |
| 3. Address of Facility Operator CR 3500 # 345 AZ+CC NM | 8. State NM | | | |
| 7. Location of Material (Street Address or ULSTR) | | | | |
| 9. Circle One: | | | | |
| All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. 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 consigne | d for transport. | | | |
| BRIEF DESCRIPTION OF MATERIAL: TIG, DEA AND WATER EX | empt Plant Huis | | | |
| | DECEIVED
OCI 2 1 1997
OIL GON. DIV. | | | |
| | DIST. 3 | | | |
| - | cy | | | |
| Waste Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL / ALOVICH TE | | | | |
| THE ON PRINT NAME: THE COURT OF THE | LEFRONE NO. | | | |
| | | | | |
| (This space for State Use) | 107 | | | |

TITLE:

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|--|
| Williams Field Services | |
| | SUNCO SWD#1 |
| · | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| Esperanza Treating Pla | ent |
| mm 100,5 45 64 60ber | nador n.m. |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste | |
| TI6-DEA-H20 | |
| 1 6 - 11 5 A 5 A 20 | , |
| | |
| | |
| | |
| | |
| Williams Field Services | representative for: |
| (Print Name) | |
| Williams Field Services | do hereby certify that |
| according to the Resource Conservation and Recove
1988, regulatory determination, the above described | ry Act (RCRA) and Environmental Protection Agency's July |
| 1900, regulatory determination, the above described | waste is. (Check appropriate classification) |
| X EXEMPT oilfield waste NON-EXE | MPT oilfield waste which is non-hazardous by characteristic |
| | r by product identification |
| . I do a collège has been added as about some | and the second s |
| and that nothing has been added to the exempt or no | on-exempt non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following documents | mentation is attached (check appropriate items): |
| MSDS Information | Other (description): |
| RCRA Hazardous Waste Analysis | |
| Chain of Custody | • |
| | |
| | |
| Name (Original Signature): | |
| | |
| Title: SR. PUNN'T SPER. | |
| Date: 10/19/97 | |

Koyer Howlers

District 1 - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District 11 - (505) 748-1283 811 S. First Artesia, NM 88210 Trict III - (505) 334-6178 Rio Brazos Road

District IV - (505) 827-7131

/_ ...c, NM 87410

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: Non-Exempt: X | 4. Generator CO45+AL CHOMICAL |
|---|--|
| Verbal Approval Received: Yes 🔲 No 🐹 | 5. Originating Site YARD |
| 2. Management Facility Destination SUNCO | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500 #345 42+CC, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) COSTAL WARD | |
| 9. Circle One: | |
| A. All requests for approval to accept oiffield exempt wastes will be accommodated; one certificate per job. All requests for approval to accept non-exempt wastes must be accomproved the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | ompanied by necessary chemical analysis to n of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | pine. Your also when it is so promoted |
| | DEGETAE! |
| WASH WATER MIXED WITH UNUSED | chenieals UCT 1 6 1997 |
| | OIL COM. DIV
BIST. 3 |
| Note MSDS sheets a couple of | + These are |
| OSHA Hazardous | |
| Estimated Volume 240 bb/3 cy Known Volume (to be entered by the ope | erator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Musite Management Facility Authorized Agent | el DATE: 10-16-97 |
| | EPHONE NO. 505-334-6186 |
| (This space for State Use) | |
| APPROVED BY: Demy S. Fount TITLE: Geolo | 90 IST DATE: 10/16/97 |
| APPROVED BY: Martym Mile TITLE: Env Go | cologis 1 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

District IV - (505) 827-7131

c, NM 87410.

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: Non-Exempt: | 4. Generator (OASTAL CHEMICAL) |
|---|---|
| Verbal Approval Received: Yes 🔲 No 🔀 | 5. Originating Site LARD |
| 2. Management Facility Destination 5000 | 6. Transporter Sunco |
| 3. Address of Facility Operator CR 3500 #345 AZ+CC, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) COSTAL CHEM. YARD | |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will be accommodated Generator; one certificate per job. (B.) All requests for approval to accept non-exempt wastes must be accomproved the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigned | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| WASH WATER MIXED WITH UNUSED | chenients |
| | PECEIVED OCT 1 6 1997 OUL COM. DUV. DUST. 3 |
| Estimated Volume 240 66/3 cy Known Volume (to be entered by the op | erator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Management Facility Authorized Agent Waste Management Facility Authorized Agent | DATE: 10-16-97 |
| TYPE OR PRINT NAME: MICHAEL TALOUTEM TEL | |
| (This space for State Use) | |
| APPROVED BY: Demy & Four TITLE: (Fe) 10 | G15 DATE: 19/16/9) |
| APPROVED BY: TITLE: | DATE: |
| | |

CERTIFICATE OF WASTE STATUS

| Generator Name and Address: | 2. Destination Name: |
|--|--|
| Coastal Chemical Co Inc | Sunco Disposal System |
| #10 CR 5911 | 345 RD 3500 |
| Farmington NM 87401 | Aztec NM 87410 |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| | Coastal Chemical Co Inc
#10 CR 5911
Farmington NM 87401 |
| | raimington wir over |
| Attach list of originating sites as appropriate 4. Source and Description of Waste | |
| Rinse water from pump, Hoses a chemicals. All chemicals rins | nd tanks used to deliver virgin ed out are virgin/unused chemicals. lamine, Glycol (TEG & EG), Antifreeze. |
| | Seek Seek |
| | |
| | |
| I, Michael Reams | representative for: |
| (Print Name) | |
| Coastal Chemical Co., Inc | do hereby certify that, |
| | ry Act (RCRA) and Environmental Protection Agency's July, |
| 1988, regulatory determination, the above described | Waste Is: (Check appropriate classification) |
| | MPT oilfield waste which is non-hazardous by characteristic r by product identification |
| and that nothing has been added to the exempt or no | on-exempt non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following docur X MSDS Information RCRA Hazardous Waste Analysis Chain of Custody | mentation is attached (check appropriate items): Other (description): |
| · ^ | |
| Name (Original Signature): Muchael Ween | i |
| | |
| Title: | Managar |



Dow U.S.A.

Material Safety Data Sheet

The Dow Chemical Company Midland, Michigan 48674

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:

1764

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



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

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

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 esophagoscopic 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

Product Code: 55520 Page: R-1

Product Name: METHYLDIETHANOLAMINE

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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

1768

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

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

TERIAL BAFETY DATA BHEET TRIETHYLENE BLYCOL

HM18 HEALTH 1 . HMIB FLAMMARILITY 1 HMIB REACTIVITY HMIB PERSONAL PROTECTION 뾰쁙칚쁞흢꺆퉵꾶쟄놵궦믔콢깶굔깓깓꿦쟨됁퍞혦ভκ컽켵퀳쎠剌뼲놵믮퓛뫢늗퍠뉌排휀찞삟쀥쁙삗홵륁ū뱮잾삤둮ի헸홵멦볬찞뀰쯗둮훳쁈펟뜶ą돢곮뉱츱쿅뉱츱굒똳귾휶 똆룺힊쁙븕밲몆K점교회도교획러건건디건간검ແ왔댐Z端팙묫꼭찍확점프로성험뱀진합크림교급급급및유학학학원대표한고드림을등급및당당당당점속면행된모표모든드등급등 PRUD. CAS # 112-27-6 送 너 있지 않는 나는 사람들의 다른 나는 사람들이 다른 사람들이 되었다. 그 나는 사람들이 다른 사람들이 다른 사람들이 되었다. 그 가는 것 같은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같 APPEARANCE/ODOR...... Clear, colorless, viscous liquid with slight odor. BPECIFIC GRAVITY (H20=1). i.i @ 77 Deg. F., 25/25 Deg.C

SECTION 1 - IDENTIFICATION

DISTRIBUTED BY..... COASTAL CHEMICAL COMPANY, INC

P.D. BUX 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 DOM CHEMICAL

TEXACO .

OXY-PETROCHEMICAL .

TRADE NAME..... TRIETHYLENE GLYCOL

CHEMICAL FAMILY..... POLYETHYLENE BLYCOL

CAS NUMBER..... 112-27-5 CHEMICAL FORMULA..... C6H14O4

SECTION 11 - HAZARDOUS INGREDIENTS

ZARDOUS COMPONENTS X

TLV (Unit=)

TRIETHYLENE GLYCOL

99

None

Established

BECTION III - PHYBICAL DATA

FREEZING POINT (F)..... -7 Deg. C., 19 Deg. F.

VAPOR PRESSURE (inm Hu)... (1 min

VAPOR DENSITY (Air=1)... 5.2, air = 1

BOLUBILITY IN H20...... Completely soluble in all proportions

PH..... N/D

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... 350 Dag. 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).

'NUSUAL FIRE HAZARD..... Containers may explode from internal pressure if

المرج والمواج والمستواط المرافي والمنافي والمرافي والمرافي والمرافي والمرافي والمرافي المرافي المرافي والمرافي
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 mide.

ITERIAL BAFETY DATA BHEE TRIETHYLENE GLYCOL

BECTION V - HEALTH HAZARD DATA

RESHOLD LIMIT VALUE.... Recommended 5 MG/M3 based on oil mist.

ROUTED OF ENTRY.

INHALATION? Irritant

NO

BKIN7 INGESTION?
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 NU

NTD7 NO

IARC MONDGRAPH8?

DSHA REGULATET

OVER EXPOSURE EFFECTS Bkin 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 shows. Get medical attention. Wash clothing before reuse. If wallowed. 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 oxvoun. 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 first Smoke, Carbon dioxide, & Carbon Honoxide.

HAZARDOUS POLYMERIZATION. Will not occur

POLYMERIZATION AVOID.... None

BECTION VII - BPILL OR LEAK PROCEDURE

只要我们的证明,我们们可以是是这种的证明的的,我们就是我们的的,我们就是我们的的,我们就是我们的的,我们们的,我们们的,我们们们们的,我们们们们的,我们们们们的 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 1 AWS.

BECTION VIII - BPECIAL PROTECTION

RESPIRATORY PROTECTION... When ventilation is not adducate, use of NIOSH approved organic vapor has cartridge respirator is recommended.

ENTILATION Required in closed areas

.CHANICAL EXHAUST..... Required in closed areas

LUCAL EXHAUST..... Desired

PROTECTIVE GLOVEB..... Wear impervious gloves

EYE PROTECTION....... Use chemical goggles or full face shield.

DTHER PROTECTIVE

EQUIPMENT..... Chemical type apron recommended

HANDLE 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

먹혀웹캠블턴 아래의학교병회위역경한학문문학교교회학학교육자원경전투환적학원교육대학원적중영경환학교육국경경원원회원급합원원등교육학자학원관교교수등급학교문문

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 all action shown in Section V. Use with adequate

ventilation.

Ventilation.

HAZARD CLASS..... Not Regulated

DOT BHIPPING NAME..... Triethylene Blycol

REPORTABLE QUANTITY (RQ). None

UN NUMBER..... None

NA #..... None

PACKARENO SIZE...... N/A

EPA SUDDEN RELEASE OF

PRESSURE..... NO

CERCLA RO VALUE..... None

EPA HATARD WASTE #..... None

CLEANAIR..... Yes Section 111

CLEAN NATER.......... No

FOOT MOTES N/A - not applicable N/D - no data available (- mans less than) - means greater than App. - approximate Est. - estimated

PREPARED BY:.......... Glen White, B.I.B., 817-560-4631

HERIAL BAFETY DATA BHEET

THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMER ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE FURNATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US AND IS BELIEVED IN THE 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 SHEE. TRIETHLYLENE GLYCOL REPROCESSED

1 - HMIS HEALTH

. HMIS FLAMMABILITY HMIS REACTIVITY HMIS PERSONAL PROTECTION R _______ 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..... TRIETHLYLENE GLYCOL REPROCESSED CHEMICAL FAMILY..... POLYETHYLENE GLYCOL CAS NUMBER.... 112-27-6 CHEMICAL FORMULA..... C6H14O4 SECTION II - HAZARDOUS INGREDIENTS TLV (Units). PROD. CAS # TRIETHYLENE 98 None 112-27-6 Established GLYCOL 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 H20..... Completely soluble in all proportions APPEARANCE/ODOR..... Light amber color, viscous liquid with slight order. SPECIFIC GRAVITY (H20=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 SHEE. TRIETHLYLENE 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 MO

NTE?

MΟ

IARC MONOGRAPHS?

DSHA REGULATED

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

.:ATERIAL SAFETY DATA SHEET TRIETHLYLENE GLYCOL REPROCESSED

HANDLING AND STORAGE.... Store away from oxidizers or materials bearing a yellow "DOT" label. Keep out of sun and away from

heat. Clear 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 REACTIVITY........ NO

EPA SUDDEN RELEASE OF

PRESSURE.....

CERCLA RQ VALUE..... None

SARA TPQ..... 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 \rightarrow - means greater than

NΩ

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 Water

CAS# 007732-18-5

90 to 100% 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)
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MATERIAL SAFETY DATA SHEET

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE Product Code: 29451

Effective Date: 06/30/94 Date Printed: 07/25/95 MSD: 002850

PAGE: 2

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 esophagoscopic 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)

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MATERIAL SAFETY DATA SHEET

PAGE: 3

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

Product Code: 29451

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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.

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)

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MATERIAL SAFETY DATA SHEET

PAGE: 4

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

Product Code: 29451

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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 spashes. Eye wash fountain should be located in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT VAPOR PRESSURE

: 306-324F, 152-162C

VAPUK PKESSUKE

: <2.5 mmHg @ 20C

VAPOR DENSITY

: 2.6

SOLUBILITY IN WATER

: Complete

SPECIFIC GRAVITY

: 0.93-0.94 @ 20/200

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)

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MATERIAL SAFETY DATA SHEET

PAGE: 5

Product: GAS/SPEC (R) CS-PLUS SOLVENT ADDITIVE
Product Code: 29451

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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 DATA SAFETY 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): AMOUNT (%w/w) **COMPONENTS:**

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.



Material Safety Data Sheet

The Dow Chemical Company Midland, Michigan 48574

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

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

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 extneded 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 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

(Continued on page 3)

PAGE: 3

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

Product Code: 13693

Effective Date: 06/30/94 Date Printed: 01/10/95

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 scenarics, not spills). See also "storage and handing" 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 Trademak of The Dow Chemical Company

PAGE: 4

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 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 : Aminewodor

10. STABILITY AND REACTIVITY

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

(Continued on page 5)

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

Product Code: 13693

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Effective Date: 06/30/94 Date Printed: 01/10/95

MSD: 003430

PAGE: 5

Land Milester L

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.

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. Chemcial 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)

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)

1958

PAGE: 7

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

Product Code: 13693

fffective 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 37.80 and 93.30

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:

_ _ _ _ _

3959

CAS #

(W\wseta) TRUOMA

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)

--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 Lurther Information.

ETHYLENE GLYCOL

| | • | 1
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0
B | HMIS
HMIS | HEALTH FLAMMABILITY REACTIVITY PERSONAL PROTECTION |
|--|---|---|--------------|--|
| ======================================= | | IDENTIFICAT | | |
| ======================================= | ======================================= | | | |
| DISTRIBUTED BY | (318) 893-3862 | 2 | | |
| EMERGENCY PHONE NUMBER EFFECTIVE DATE MANUFACTURER'S NAME | 2/06/1996 | | EC (800) | 424-9300 |
| TRADE NAME | GLYCOL
107-21-1 | DL
 | | |
| | ION II - HAZI | ARDOUS INGRE | DIENTS | |
| HAZARDCUS COMPONENTS | | TLV (Units) | | PROD. CAS # |
| HAZARDOUS COMPONENTS | 6 | TLV (UNICS) | | PROD. CAS # |
| | 100% ACGIH | _ | | 107-21-1 |
| 2 | SECTION III - | PHYSICAL DA | TA | |
| FREEZING POINT (F) VAPOR PRESSURE (mm Hg) VAPOR DENSITY (Air=1) SOLUBILITY IN H20 APPEARANCE/ODOR SPECIFIC GRAVITY (H20=1). PH | 9 DEG F
0.12 MMHG @ 25
2.14
COMPLETELY MIS
COLORLESS LIQU
1.1155 @ 20/20 | 5 C
SCIBLE
JID; PRACTIC | | |
| ======================================= | ======================================= | | ======= | |
| SECTION | IV - FIRE ANI | EXPLOSION | HAZARD DA | ATA |
| FLASH POINTLOWER FLAME LIMITHIGHER FLAME LIMITEXTINGUISH MEDIAUNUSUAL FIRE HAZARD | 247 DEG F
N/D
N/D
Water fog or s
(CO2). | spray, Foam,
oroach fire
ce ,fumes, m | Dry Powo | der, Carbon Dioxide |

ETHYLENE GLYCOL

_______ SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE.... 50 PPM BASED ON ETHYLENE GLYCOL

ROUTES OF ENTRY

INHALATION?

INHALATION? SKIN? INGESTION:
IRRITANT, POSSIBLY Not expected to Ingestion of very cause significant large amounts

SKIN?

health hazard

INGESTION?

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?

NO

IARC MONOGRAPHS?

OSHA - REGULATED

OVER EXPOSURE EFFECTS.... Skin irritation develops slowly after contact. Eye irritation develops immediately upon contact. Symptoms of overexposure: headache, fatique, 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

ZARDOUS POLYMERIZATION. Will not occur

JLYMERIZATION AVOID.... None

ETHYLENE GLYCOL

| ====================================== | ON VII - SPILL OR LEAK PROCEDURE |
|---|--|
| | |
| | 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. |
| | ======================================= |
| | CTION 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 | |
| LOCAL EXHAUST | |
| PROTECTIVE GLOVES | |
| EYE PROTECTION | |
| OTHER PROTECTIVE | |
| EQUIPMENT | Chemical type apron recommended |
| | The open services of the servi |
| | ======================================= |
| S | ECTION IX - SPECIAL HANDLING |
| | |
| | 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. |
| 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 |
| 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. 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. Drums - NOT REGULATED |
| HANDLING AND STORAGE PRECAUTIONARY MEASURES | 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. 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. Drums - NOT REGULATED Bulk - Class 9 Drum - Ethylene Glycol Bulk - Other regulated substances, liquid, n.o.s. |
| HANDLING AND STORAGE PRECAUTIONARY MEASURES HAZARD CLASS DOT SHIPPING NAME REPORTABLE QUANTITY (RQ). UN NUMBER | 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. 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. Drums - NOT REGULATED Bulk - Class 9 Drum - Ethylene Glycol Bulk - Other regulated substances, liquid, n.o.s. (ethylene glycol) 5,000 pounds None |
| HANDLING AND STORAGE PRECAUTIONARY MEASURES HAZARD CLASS DOT SHIPPING NAME REPORTABLE QUANTITY (RQ). UN NUMBER | 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. 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. Drums - NOT REGULATED Bulk - Class 9 Drum - Ethylene Glycol Bulk - Other regulated substances, liquid, n.o.s. (ethylene glycol) 5,000 pounds None Drums - None; Bulk - NA3082 |
| HANDLING AND STORAGE PRECAUTIONARY MEASURES HAZARD CLASS DOT SHIPPING NAME REPORTABLE QUANTITY (RQ). UN NUMBER NA # | 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. 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. Drums - NOT REGULATED Bulk - Class 9 Drum - Ethylene Glycol Bulk - Other regulated substances, liquid, n.o.s. (ethylene glycol) 5,000 pounds None Drums - None; Bulk - NA3082 N/A |
| HANDLING AND STORAGE PRECAUTIONARY MEASURES HAZARD CLASS DOT SHIPPING NAME REPORTABLE QUANTITY (RQ). UN NUMBER NA # | 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. 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. Drums - NOT REGULATED Bulk - Class 9 Drum - Ethylene Glycol Bulk - Other regulated substances, liquid, n.o.s. (ethylene glycol) 5,000 pounds None Drums - None; Bulk - NA3082 |

ETHYLENE GLYCOL

| EPA ACUTE | YES
NO
NO |
|--|---|
| CERCLA RQ VALUE | 5,000 pounds |
| SARA TPQSARA RQSECTION 313 | |
| EPA HAZARD WASTE # CLEANAIR CLEAN WATER | Yes, Section 111 and 1990 Amendments |
| FOOT NOTES N/A - not app
< - means less than >
App approximate Est | |
| PREPARED BY: | Joe Hudman, Coastal Chemical Co., Inc. 713-477-6675 |

IS 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.

COASTALGUARD 100 ANTIFREEZE/COOLANT

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| , | SECTION I | - IDENTIF | ICATION | | |
| ======================================= | ========== | ======== | ====== | ===== | === |
| DISTRIBUTED BY | . COASTAL CHE | • | INC. | ¥2° | |
| EMERGENCY PHONE NUMBER | . CHEMTREC (80 | | 0 | , | |
| EFFECTIVE DATE | · · · · · · · · · · · · · · · · · · · | | | | |
| MANUFACTURER'S NAME | | • | | | |
| TRADE NAME | | | | | |
| CHEMICAL FAMILY | | | YCOL SOI | LUTION | I |
| CAS NUMBER | | | | | ¥ |
| CHEMICAL FORMULA | . Blended Prod | duct | | | |
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| | | | | | === |
| 2.30. | CION II - HI | AZARDOUS I | | | |
| HAZARDOUS COMPONENTS | % | TLV (Un | | | === |
| | | | | | |
| ETHYLENE GLYCOL | 95 % ACG | TH CEILING | 50ppm | | |
| | | | | | |
| | SECTION III | ייים בבבבביים בבביים בביים בביים ביים ב | ======
1. הארים | :===== | === |
| i. | | | ====== | | |
| FREEZING POINT (F) | APPROX. 22 I | DEG F | | | |
| VAPOR PRESSURE (mm Hg) | | | | | |
| VAPOR DENSITY (Air=1) | | | | | |
| SOLUBILITY IN H20 | | ATSCIBLE 1 | • | * | |
| APPEARANCE/ODOR | | | אריידר <i>ו</i> י | V.T.T. | שחם |
| SPECIFIC GRAVITY (H20=1). | | | · · CACIICE | ס זוויי | DOM |
| PH | | . | | | |
| | | | | | |
| | | ======= | ====== | ===== | === |
| SECTION | | ND EXPLOS | | | |
| DIAGU POTEM | | | | :===== | === |
| FLASH POINT | | DEG F | | | |
| LOWER FLAME LIMIT | | | | | |
| HIGHER FLAME LIMIT | | _ | <u></u> | | |
| EXTINGUISH MEDIA | Water fog or (CO2). | spray, Fo | oam, Dry | r Powd | er, |
| UNUSUAL FIRE HAZARD | | Approach f | ire from | ເພດພາ | nd |
| | breathing sm | | | | |
| | downwind sid | le. | -, | VU | L 1 |
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| ======================================= | | | | | === |
| | | HEALTH HAZ | | | |
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100%

1c. 713-477-6675

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SSIST OUR CUSTOMERS REGULATIONS. THE AND IS BELIEVED OR IMPLIED BY THE IN THE EXCLUSIVE

COASTALGUARD 100 ANTIFREEZE/COOLANT ·

THRESHOLD LIMIT VALUE.... 50 PPM BASED ON ETHYLENE GLYCOL

ROUTES OF ENTRY

INHALATION?

IRRITANT, POSSIBLY Not expected to

NARCOTIC

SKIN?

cause significant

health hazard

INGESTION?

Ingestion of very

large amounts

could

cause serious injury, or even

death.

HEALTH HAZARDS..... ACUTE: Vapors may be irritating to eyes, or mucous membranes. Avoid inhalation or eye contact. CHRONIC: Kidney and liver damage possible. May cause

reproductive disorders.

CARCINOGENICITY МО

NTP? NO

IARC MONOGRAPHS?

OSHA REGULATED

OVER EXPOSURE EFFECTS.... Skin irritation develops slowly after contact. Eye

irritation develops immediately upon contact.

Symptoms of overexposure: headache, fatique, nausea,

down throat. Never give anything by mouth to an

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

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

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. |
| : | |
| SEC | TION VIII - SPECIAL PROTECTION |
| RESPIRATORY PROTECTION VENTILATION | When ventilation is not adequate, use of NIOSH approved organic vapor/acid gas cartridge respirator is recommended. Required in closed areas |
| MECHANICAL EXHAUST | |
| PROTECTIVE GLOVES | |
| EYE PROTECTIONOTHER PROTECTIVE | Use chemical goggles or full face shield. |
| EQUIPMENT | Chemical type apron recommended |
| | |
| | CTION IX - SPECIAL HANDLING |
| | Store away from oxidizers or materials bearing a |
| PRECAUTIONARY MEASURES | yellow "DOT" label. Keep out of sun and away from heat. Clean up leaks immediately to prevent soil or water contamination. 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 | |
| DOT SHIPPING NAME | |
| REPORTABLE QUANTITY (RQ). | |
| UN NUMBER | |
| PACKAGING SIZE | Drums - None; Bulk - NA3082
N/A |
| ======================================= | |
| | SECTION X - REGULATORY |
| | |
| | |
| EPA ACUTE | YES |
| EPA ACUTE EPA CHRONIC EPA IGNITABILITY | YES
YES |

EPA REACTIVITY..... NO

COASTALGUARD 100 ANTIFREEZE/COOLANT

EPA SUDDEN RELEASE OF

| PRESSURE | NO |
|--|--|
| CERCLA RQ VALUE | 5000 pound for ethylene glycol |
| SARA TPQSARA RQSECTION 313 | |
| EPA HAZARD WASTE # CLEANAIR | Yes, Section 111 Volatile Organic Compounds & Section 112 Statutory Air Pollutants (1990 Amendments) |
| FOOT NOTES N/A - not app
< - means less than >
App approximate Est | |
| 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: DIETHANGLAMINE LOW FREEZING GRADE

Product Code: 21106

Effective Date: 03/01/96

Date Printed: 04/27/96

MSU: 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

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

The first of the f * 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

PAGE: 2

Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21196

Effective Date: 0 /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). Hear: 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 esophagscopic 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

PAGE: 3

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 LINITS

LFL: Not determined. UFL: Not determined.

HAZARDOUS COMBUSTION PRODUCTS:

EXTINGUISHING MIDIA: Water fog, alcohol foam, CO2, dry chemical.

FIRE FIGHTING HISTRUCTIONS: Not available.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear self-contained, possitive-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 shevel into suitable containers. Do not use sawdust, wood chips or other cullulo ic 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 autoignition 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)
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PAGE: 4

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 trief 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 FEL 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 chamical 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)
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Product: DIETHANOLAMINE LOW FREEZING GRADE

Product Code: 21166

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 diethano; amine).

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 patition coefficient (log Kow) is -1.43. Henry's Law Constant (H) is 5.351-14 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

PAGE: 6

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

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Product: DIETHAN LAMINE 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

LIST CAS NUMBER

DIETHANOLAMINE

2334

000111-42-2 NJ3 PA1 PA3

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PAl=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)

PAGE: 8

Product: DIETHANGLAMINE 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

859

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.

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The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, is Made. Consult The Dow Chemical Company
For Further Information.

Roger Archerson

DATE: 10/15/9

District J. (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 1" trict III - (505) 334-6178

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division RECEIVED

Santa Fe, New Mexico 87505

Submit Original Plus 1 Copy Πœ

Form C-138

Originated 8/8/95

| 2 1 5 1997 To appropriate to appropriate to |
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| DATE: 10-6-97
NO. 505-334-6/84 |
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District I: (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 Pirtict III - (505) 334-6178 Rio Brazos Road

District IV - (505) 827-7131

THE BUTCH AND THE RECOLD THE PROPERTY OF THE P

در, NM 87410

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 AC | CEPT SOLID WASTE |
|--|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator ₩ F S |
| Verbal Approval Received: Yes 🔲 No 🗹 | 5. Originating Site Plant Ponds |
| 2. Management Facility Destination SUNCO DIS POSA L | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500 #345 AZ+eC, No | m 8. State NM |
| 7. Location of Material (Street Address or ULSTR) MILAGRO Pla | nt |
| 9. Circle One: | |
| A. All requests for approval to accept oilfield exempt wastes will Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must PROVE the material is not-hazardous and the Generator's cellisting or testing will be approved. All transporters must certify the wastes delivered are only those contents. | be accompanied by necessary chemical analysis to rtification of origin. No waste classified hazardous by |
| | orisigned for transport. |
| BRIEF DESCRIPTION OF MATERIAL: WASTEWATER PRON ENAP PONDS CONTAIN | ins stormwater with |
| Amounts of Amine + glucol | The second secon |
| primition of AMINE + giuco | |
| Need good copies of analysis for
Final approval, | DECEIVED OCT - 6 1997 OUL COIN. DUV. DUST. 3 |
| Estimated Volume 200,000 GACS cy Known Volume (to be entered by | by the operator at the end of the haul) ———————————————————————————————————— |
| Waste Management FacilityAuthorized Agent | DATE: 10-6-97 |
| TYPE OR PRINT NAME: MICHAEL TA COUICH | TELEPHONE NO. 505-334-6/86 |
| (This space for State Use) | |
| APPROVED BY: Denny Cy. Land TITLE: G | eologist DATE: 10/10/97 |
| APPROVED BY: TITLE: | DATE: |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: | i |
|--|---|----------|
| Williams Field Services Company | Sunco Disposal | |
| 895 Chipeta Way | | |
| Sout lake City, UT 84158 | | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR) | : } |
| Milagro Plant | 192 County Road 4900 | , |
| The same of the sa | Bloomfield, NM 87413 | |
| Attach list of originating sites as appropriate | - 0 , | · |
| 4. Source and Description of Waste | | |
| wastewater from evaporation por | nds at natural gas | · |
| beament plant. | | |
| 1000000 | | |
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| " The Cartes | representative for: | |
| 1, Ingrid Deblau (Print Name) | | u ébat |
| Williams held Services Compa | do hereby certif | |
| Williams held Services Compa | do hereby certifery Act (RCRA) and Environmental Protection Agency | |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste | do hereby certifery Act (RCRA) and Environmental Protection Agency | 's July, |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste | do hereby certifery Act (RCRA) and Environmental Protection Agency waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by character by product identification | 's July, |
| according to the Resource Conservation and Redov 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXE analysis of | do hereby certifery Act (RCRA) and Environmental Protection Agency waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by character by product identification on-exempt non-hazardous waste defined above. | 's July, |
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QWAL LABORATORIES, INC.

2911 ROTARY TERRACE, PFQ TTSBURG, KS 66762/(316)232-1970

REFERENCE #:

9710022

LABORATORY REPORT:

SENT WILLIAMS FIELD SERVICES OF COMMON DIVIDATE REPORTED: 295 CHIPETA WAY, 2G1

DIST. 3

DATE COLLECTED: DATE RECEIVED:

10/03/97 09/30/97

SALT LAKE CITY, UT 84158

INGRID DEKLAU

P.O. #:

10/01/97

PROJECT: MILAGRO EVAP PONDS

Sample ID: NORTH POND

Sample Matrix: WATER

Sample Date Collected: 09/30/97

| TEST | M | ЕТНО | D | RESULT | UNITS | DL | ANALYZED | ву |
|-------------------------|-------|------|------|---------|-----------------|--------|----------|-----|
| 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 | t 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 | t MG/L | 0.0002 | 10/02/97 | MS2 |
| LEAD, TOTAL | SW | 846 | 6010 | 0.51 | $\mathtt{MG/L}$ | 0.10 | 10/01/97 | MS |
| SELENIUM, TOTAL | | | 7740 | <0.05 | t MG/L | 0.05 | 10/01/97 | AC |
| SEMIVOLATILES | SW | 846 | 8270 | | | | | |
| ACENAPTHENE | | | | ND | UG/L | 100 | 10/02/97 | DN |
| ACENAPHTHYLENE | | | | ND | UG/L | 100 | 10/02/97 | DN |
| PRANTHRACENE | | | | 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)M | ETH! | ANE | | ND | UG/L | 100 | 10/02/97 | DN |
| BIS (2-CHLOROETHYL) ET | HER | | | ND | UG/L | 100 | 10/02/97 | DN |
| BIS(2-CHLOROISOPROPY | L) E? | THER | | ND | UG/L | 100 | 10/02/97 | DN |
| BIS(2-ETHYLHEXYL)PHT | | | | ND | UG/L | 100 | 10/02/97 | DN |
| 4-BROMOPHENYL PHENYL | ETI | HER | | ND | UG/L | 100 | 10/02/97 | DN |
| BUTYL BENZYL PHTHALA | ΓE | | | ND | UG/L | 100 | , , | |
| 4-CHLOROANILINE | | | | ND | UG/L | 200 | 10/02/97 | DN |
| 4-CHLORO-3-METHYLPHE | NOL | | | 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 PHENY | L ET | THER | | ND | UG/L | 100 | 10/02/97 | DN |
| CHRYSENE | | | | ND | UG/L | 100 | 10/02/97 | |
| DIBENZ (A, H) ANTHRACEN | E | | | 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 |

Sample ID: NORTH POND
Sample Date Collected: 09/30/97 Sample Matrix: WATER

| 1 2 27000 0000 | | | 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 | |
| 3,3'-DICHLOROBENZIDI | INE | 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 | |
| ISOPHORONE | | ND | UG/L | 100 | 10/02/97 | DN |
| DI-N-BUTYLPHTHALATE | | ND | UG/L | 100 | 10/02/97 | |
| 4,6-DINITRO-2-METHYI | LPHENOL | ND | UG/L | 500 | 10/02/97 | |
| 2,4-DINITROPHENOL | | ND | UG/L | 500 | 10/02/97 | |
| 2,4-DINITROTOLUENE | | ND | UG/L | 100 | 10/02/97 | |
| 2,6-DINITROTOLUENE | | ND | UG/L | 100 | 10/02/97 | |
| DI-N-OCTYLPHTHALATE | | ND | UG/L | 100 | 10/02/97 | |
| 1,2-DIPHENYL HYDRAZI | INE | ND | UG/L | 100 | 10/02/97 | |
| FLUORANTHENE | | ND | UG/L | 100 | 10/02/97 | |
| FLUORENE | | ND | UG/L | 100 | 10/02/97 | |
| HEXACHLOROBENZENE | | ND | UG/L | 100 | • • | |
| HEXACHLOROBUTADIENE | | ND | UG/L | 100 | | |
| HEXACHLOROCYCLOPENTA | ADIENE | ND | UG/L | 100 | • • | |
| HEXACHLOROETHANE | | ND | UG/L | 100 | 10/02/97 | |
| INDENO(1,2,3-CD)PYRE | ENE | ND | UG/L | 100 | 10/02/97 | |
| 2-METHYLNAPHTHALENE | | ND | UG/L | 100 | 10/02/97 | |
| 2-METHYLPHENOL | | ND | UG/L | 100 | 10/02/97 | |
| 4-METHYLPHENOL | | ND | UG/L | 100 | 10/02/97 | |
| NAPHTHALENE | | ND | UG/L | 100 | 10/02/97 | |
| 2-NITROANILINE | | ND | UG/L | 500 | 10/02/97 | |
| 3-NITROANILINE | | ND | UG/L | 500 | 10/02/97 | |
| 4-NITROANILINE | | ND | UG/L | 500 | 10/02/97 | |
| NITROBENZENE | | ND | UG/L | 100 | 10/02/97 | |
| 2-NITROPHENOL | | ND | UG/L | 500 | 10/02/97 | |
| 4-NITROPHENOL | /T 3 M/T NIT | ND | UG/L | 500 | 10/02/97 | |
| N-NITROSO-DI-N-PROPY | | ND
ND | UG/L | 100 | 10/02/97 | |
| N-NITROSODIPHENYLAMI
N-NITROSODIMETHYLAMI | • • | ND
ND | UG/L
UG/L | 100
100 | 10/02/97
10/02/97 | |
| PENTACHLOROPHENOL | INE | ND | UG/L | 500 | | |
| PHENATHRENE | | ND | UG/L | 100 | • • | |
| PHENOL | | ND | UG/L | 100 | | |
| PYRENE | | ND | UG/L | 100 | • • | |
| 1,2,4-TRICHLOROBENZE | ENE | ND | UG/L | 100 | • • | |
| 2,4,5-TRICHLOROPHENO | | ND | UG/L | 100 | • • | |
| 2,4,6-TRICHLOROPHENC | | ND | UG/L | 100 | 10/02/97 | |
| 2-FLUOROBIPHENYL (SUF | | 44.7 | 150 | 10 | | |
| NITROBENZENE-D8 (SUF | • | 37.9 | 150 | 10 | | |
| 2-FLUOROPHENOL (SUR) | -/ | 24.0 | 150 | 10 | | |
| 2,4,6-TRIBROMOPHENOL | (SUR) | 23.7 | 150 | 10 | | |
| TERPHENYL-D14 (SUR) | (3) | 63.3 | 150 | 10 | | |
| PHENOL-D5 (SUR) | | 12.0 | 150 | 10 | | |

Sample ID: NORTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

| | | RESULT | UNITS | DL | | ANALYZED | BY |
|-----------------------|--------------|--------|--------|----|-----|----------|----|
| VOLATILE ORGANICS | SW 846 8260 | | | | | | |
| BENZENE | | ND | UG/L | 3 | .0 | 10/01/97 | EG |
| BROMOBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| BROMOCHLOROMETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| BROMODICHLOROMETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| BROMOFORM | | ND | UG/L | | .0 | 10/01/97 | |
| BROMOMETHANE | | ND | UG/L | | . 0 | 10/01/97 | |
| n-BUTYLBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| sec-BUTYLBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| tert-BUTYLBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| CARBON TETRACHLORIDE | | ND | UG/L | | .0 | 10/01/97 | |
| CHLOROBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| CHLOROETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| CHLOROFORM | | ND | UG/L | | .0 | 10/01/97 | |
| CHLOROMETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| 2-CHLOROTOLUENE | | ND | UG/L | | .0 | 10/01/97 | |
| 4-CHLOROTOLUENE | | ND | UG/L | | .0 | 10/01/97 | |
| DIBROMOCHLOROMETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,2-DIBROMO-3-CHLOROF | PROPANE | ND | UG/L | | .0 | 10/01/97 | |
| 1,2-DIBROMOETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| DIBROMOETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,2-DICHLOROBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,3-DICHLOROBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,4-DICHLOROBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| DICHLORODIFLUOROMETHA | NE | ND | UG/L | | .0 | 10/01/97 | |
| 1, 1-DICHLOROETHANE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,2-DICHLOROETHANE | | ND | UG/L | | .0 | • • | |
| 1,1-DICHLOROETHENE | | ND | UG/L | | .0 | 10/01/97 | |
| cis-1,2-DICHLOROETHEN | ΙE | ND | UG/L | | .0 | • • | |
| trans-1,2-DICHLOROETH | | ND | UG/L | | .0 | 10/01/97 | |
| 1,2-DICHLOROPROPANE | | ND | UG/L | | .0 | • | |
| 1,3-DICHLOROPROPANE | | ND | UG/L | | .0 | 10/01/97 | |
| 2,2-DICHLOROPROPANE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,1-DICHLOROPROPENE | | ND | UG/L | | .0 | | |
| ETHYLBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| HEXACHLOROBUTADIENE | | ND | UG/L | | .0 | 10/01/97 | |
| ISOPROPYLBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| p-ISOPROPYLTOLUENE | | ND | UG/L | | .0 | 10/01/97 | |
| METHYLENE CHLORIDE | | ND | UG/L | | .0 | 10/01/97 | |
| NAPHTHALENE | | ND | UG/L | | .0 | 10/01/97 | |
| n-PROPYLBENZENE | | ND | UG/L | | .0 | 10/01/97 | |
| STYRENE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,1,1,2-TETRACHLOROET | HANE | ND | UG/L | | . 0 | 10/01/97 | |
| 1,1,2,2-TETRACHLOROET | | ND | UG/L | | .0 | 10/01/97 | |
| TETRACHLOROETHENE | - | ND | UG/L | | .0 | 10/01/97 | |
| TOLUENE | | ND | UG/L | | .0 | 10/01/97 | |
| 1,2,3-TRICHLOROBENZEN | Æ | ND | . UG/L | | .0 | 10/01/97 | |
| | | • • • | | | | | |

Sample ID: NORTH POND

Sample Date Collected: 09/30/97

Sample Matrix: WATER

| TEST | METHOD | RESULT | UNITS | DL | | ANALYZED | вч |
|--------------------------|--------|--------|-------|----|-----|----------|----|
| 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 | |
| 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 (S | SUR) | 105 | 125 | | 75 | | |
| TOLUENE-d8 (SUR) | • | 98 | 125 | | 75 | | |
| 4-BROMOFLUOROBENZENE (SU | JR) | 89 | 125 | | 75 | | |

Sample ID: SOUTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

| BENZIDINE ND UG/L 5000 10/02/97 BENZO(A) ANTHRACENE ND UG/L 1000 10/02/97 BENZO(B) FLUORANTHENE ND UG/L 1000 10/02/97 BENZO(K) FLUORANTHENE ND UG/L 1000 10/02/97 BENZOIC ACID ND UG/L 5000 10/02/97 BENZO(G,H,I) PERYLENE ND UG/L 1000 10/02/97 BENZYL ALCOHOL ND UG/L 1000 10/02/97 BIS (2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS (2-CHLOROETHYL) ETHER ND UG/L 1000 10/02/97 BIS (2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS (2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 | TEST | M | ЕТНОІ |) | RESULT | UNITS | DL | ANALYZED | BY |
|--|---|-----|-------|----------|----------|-----------------|------|----------|----|
| BARIUM, TOTAL SW 846 6010 0.080 MG/L 0.05 10/03/97 CADMIUM, TOTAL SW 846 6010 <0.05 MG/L 0.05 10/01/97 CHROMIUM, TOTAL SW 846 6010 32.1 MG/L 0.10 10/01/97 MERCURY, TOTAL SW 846 6010 0.95 MG/L 0.0002 10/02/97 LEAD, TOTAL SW 846 6010 0.95 MG/L 0.10 10/01/97 SELENIUM, TOTAL SW 846 7740 <0.05 MG/L 0.05 10/01/97 SEMIVOLATILES SW 846 8270 ACENAPTHENE ND UG/L 1000 10/02/97 ACENAPHTHYLENE ND UG/L 1000 10/02/97 ANTHRACENE ND UG/L 1000 10/02/97 BENZO (A) ANTHRACENE ND UG/L 1000 10/02/97 BENZO (B) FLUORANTHENE ND UG/L 1000 10/02/97 BENZO (K) FLUORANTHENE ND UG/L 1000 10/02/97 BENZO (CA) PYRENE ND UG/L 1000 10/02/97 BENZO (CA) PYRENE ND UG/L 1000 10/02/97 BENZO (A) PYRENE ND | SILVER, TOTAL | SW | 846 | 6010 | <0.10 | MG/L | 0.10 | 10/02/97 | MS |
| CADMIUM, TOTAL SW 846 6010 | \ | SW | 846 | 7060 | | MG/L | 0.05 | 10/02/97 | AC |
| CHROMIUM, TOTAL SW 846 6010 32.1 MG/L 0.10 10/01/97 MERCURY, TOTAL SW 846 7470 <0.0002 MG/L 0.0002 10/02/97 LEAD, TOTAL SW 846 6010 0.95 MG/L 0.10 10/01/97 SELENIUM, TOTAL SW 846 6010 0.95 MG/L 0.05 10/01/97 SELENIUM, TOTAL SW 846 7740 <0.05 MG/L 0.05 10/01/97 SELENIUM, TOTAL SW 846 7740 <0.05 MG/L 0.05 10/01/97 SELENIUM, TOTAL SW 846 8270 | BÂRIUM, TOTAL | | | | | • | | • • | |
| MERCURY, TOTAL SW 846 7470 <0.0002 MG/L 0.0002 10/02/97 LEAD, TOTAL SW 846 6010 0.95 MG/L 0.10 10/01/97 SELENIUM, TOTAL SW 846 7740 <0.05 | · · · · · · · · · · · · · · · · · · · | | | | | • | | • • | |
| LEAD, TOTAL SW 846 6010 0.95 MG/L 0.10 10/01/97 SELENIUM, TOTAL SW 846 7740 <0.05 | ▼ | | | | | • | | • | |
| SELENIUM, TOTAL SW 846 7740 <0.05 MG/L 0.05 10/01/97 SEMIVOLATILES SW 846 8270 ND UG/L 1000 10/02/97 ACENAPHTHENE ND UG/L 1000 10/02/97 ANTHRACENE ND UG/L 1000 10/02/97 BENZO(A) ANTHRACENE ND UG/L 5000 10/02/97 BENZO(B) FLUORANTHENE ND UG/L 1000 10/02/97 BENZO(K) FLUORANTHENE ND UG/L 1000 10/02/97 BENZOIC ACID ND UG/L 1000 10/02/97 BENZO(G,H,I) PERYLENE ND UG/L 1000 10/02/97 BENZO(A) PYRENE ND UG/L 1000 10/02/97 BENZO(A) PYRENE ND UG/L 1000 10/02/97 BENZOLA ALCOHOL ND UG/L 1000 10/02/97 BENZOLA BENZYL ALCOHOL ND UG/L 1000 10/02/97 BIS (2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS (2-CHLOROETHYL) ETHER ND UG/L 10 | | | | | | • | | • • | |
| SEMIVOLATILES SW 846 8270 | • | | | | | • | | • • | |
| ACENAPTHENE ACENAPHTHYLENE ACENAPHTHYLENE ND UG/L ND UG/L 1000 10/02/97 ANTHRACENE ND UG/L ENZIDINE ND UG/L BENZOINE ND UG/L S000 10/02/97 BENZO(A)ANTHRACENE ND UG/L BENZO(B)FLUORANTHENE ND BENZO(K)FLUORANTHENE ND UG/L BENZOIC ACID ND UG/L D000 10/02/97 BIS(2-CHLOROETHOXY)METHANE ND UG/L BIS(2-CHLOROETHYL)ETHER ND UG/L BIS(2-CHLOROISOPROPYL)ETHER ND UG/L BIS(2-ETHYLHEXYL)PHTHALATE ND UG/L BUG/L | | | | <0.05 | $\mathtt{MG/L}$ | 0.05 | 10/01/97 | AC |
| ACENAPHTHYLENE AND UG/L ANTHRACENE ND UG/L 1000 10/02/97 BENZIDINE ND UG/L BENZO(A) ANTHRACENE ND UG/L BENZO(B) FLUORANTHENE ND UG/L BENZO(K) FLUORANTHENE ND UG/L BENZO(C, H, I) PERYLENE ND UG/L BENZO(A) PYRENE ND UG/L BENZYL ALCOHOL BENZYL ALCOHOL ND UG/L BIS(2-CHLOROETHOXY) METHANE ND UG/L BIS(2-CHLOROETHYL) ETHER ND UG/L BIS(2-EHLOROISOPROPYL) ETHER ND UG/L BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L DUG/L DU | | SW | 846 | 8270 | | | | | |
| ANTHRACENE BENZIDINE BENZO(A) ANTHRACENE BENZO(B) FLUORANTHENE BENZO(K) FLUORANTHENE BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) ACID BENZO(C) | | | | | | | | | |
| BENZIDINE ND UG/L 5000 10/02/97 BENZO(A) ANTHRACENE ND UG/L 1000 10/02/97 BENZO(B) FLUORANTHENE ND UG/L 1000 10/02/97 BENZO(K) FLUORANTHENE ND UG/L 1000 10/02/97 BENZOIC ACID ND UG/L 5000 10/02/97 BENZO(G,H,I) PERYLENE ND UG/L 1000 10/02/97 BENZO(A) PYRENE ND UG/L 1000 10/02/97 BENZYL ALCOHOL ND UG/L 1000 10/02/97 BIS(2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS(2-CHLOROETHYL) ETHER ND UG/L 1000 10/02/97 BIS(2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/0 | | | | | | | | • • | |
| BENZO(A) ANTHRACENE ND UG/L 1000 10/02/97 BENZO(B) FLUORANTHENE ND UG/L 1000 10/02/97 BENZO(K) FLUORANTHENE ND UG/L 1000 10/02/97 BENZOIC ACID ND UG/L 5000 10/02/97 BENZO(G,H,I) PERYLENE ND UG/L 1000 10/02/97 BENZYL ALCOHOL ND UG/L 1000 10/02/97 BIS(2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS(2-CHLOROETHYL) ETHER ND UG/L 1000 10/02/97 BIS(2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | | | | | | • | | • • | |
| BENZO (B) FLUORANTHENE ND UG/L 1000 10/02/97 BENZO (K) FLUORANTHENE ND UG/L 1000 10/02/97 BENZOIC ACID ND UG/L 5000 10/02/97 BENZO (G, H, I) PERYLENE ND UG/L 1000 10/02/97 BENZO (A) PYRENE ND UG/L 1000 10/02/97 BENZYL ALCOHOL ND UG/L 2000 10/02/97 BIS (2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS (2-CHLOROETHYL) ETHER ND UG/L 1000 10/02/97 BIS (2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS (2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | | | | | | • | | • | |
| BENZO(K) FLUORANTHENE ND UG/L 1000 10/02/97 BENZOIC ACID ND UG/L 5000 10/02/97 BENZO(G,H,I) PERYLENE ND UG/L 1000 10/02/97 BENZO(A) PYRENE ND UG/L 1000 10/02/97 BENZYL ALCOHOL ND UG/L 2000 10/02/97 BESS(2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS (2-CHLOROETHYL) ETHER ND UG/L 1000 10/02/97 BIS (2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS (2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | • • | | | | | • | | | |
| BENZOIC ACID ND UG/L 5000 10/02/97 BENZO(G,H,I)PERYLENE ND UG/L 1000 10/02/97 BENZO(A)PYRENE ND UG/L 1000 10/02/97 BENZYL ALCOHOL ND UG/L 2000 10/02/97 BIS(2-CHLOROETHOXY)METHANE ND UG/L 1000 10/02/97 BIS(2-CHLOROETHYL)ETHER ND UG/L 1000 10/02/97 BIS(2-CHLOROISOPROPYL)ETHER ND UG/L 1000 10/02/97 BIS(2-ETHYLHEXYL)PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | • | | | | | • | | , , | |
| BENZO(G,H,I) PERYLENE ND UG/L 1000 10/02/97 BENZO(A) PYRENE ND UG/L 1000 10/02/97 BENZYL ALCOHOL ND UG/L 2000 10/02/97 BIS(2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS(2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | | 3 | | | | • | | • • | |
| BENZO(A) PYRENE | BENZOIC ACID | | | | | • | | | |
| BENZYL ALCOHOL ND UG/L 2000 10/02/97 BIS(2-CHLOROETHOXY) METHANE ND UG/L 1000 10/02/97 BIS(2-CHLOROETHYL) ETHER ND UG/L 1000 10/02/97 BIS(2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | BENZO (G, H, I) PERYLENE | ; | | | | • | | | |
| BTS (2-CHLOROETHOXY) METHANE BIS (2-CHLOROETHYL) ETHER BIS (2-CHLOROISOPROPYL) ETHER BIS (2-CHLOROISOPROPYL) ETHER BIS (2-ETHYLHEXYL) PHTHALATE A-BROMOPHENYL PHENYL ETHER BUTYL BENZYL PHTHALATE A-CHLOROANILINE A-CHLORO-3-METHYLPHENOL ND UG/L 1000 10/02/97 1000 10/02/97 1000 10/02/97 1000 10/02/97 | | | | | | • | | | |
| BIS(2-CHLOROETHYL) ETHER ND UG/L 1000 10/02/97 BIS(2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | Diningin Miconon | | | | | • | | • • | |
| BIS(2-CHLOROISOPROPYL) ETHER ND UG/L 1000 10/02/97 BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | | | ANE | | | • | | | |
| BIS(2-ETHYLHEXYL) PHTHALATE ND UG/L 1000 10/02/97 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | | | | | | | | • • | |
| 4-BROMOPHENYL PHENYL ETHER ND UG/L 1000 10/02/97 BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | · · · · · · · · · · · · · · · · · · · | • | | | | • | | • | |
| BUTYL BENZYL PHTHALATE ND UG/L 1000 10/02/97 4-CHLOROANILINE ND UG/L 2000 10/02/97 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | · · · · · · · · · · · · · · · · · · · | | | | | • | | | |
| 4-CHLOROANILINE ND UG/L 2000 10/02/97
4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | | | HER | | | • | | | |
| 4-CHLORO-3-METHYLPHENOL ND UG/L 2000 10/02/97 | | ΥE | | | | • | | • • | |
| | | | | | | • | | | |
| | 4-CHLORO-3-METHYLPHE
2-CHLORONAPHTHALENE | NOL | | | ND
ND | UG/L | 1000 | 10/02/97 | |

Sample ID: SOUTH POND Sample Date Collected:

09/30/97

| TEST | METHOD | RESULT | UNITS | DL | • | ANALYZED | BY |
|---|----------|--------|-------|----|-----|----------|-----|
| 2-CHLOROPHENOL | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 4-CHLOROPHENYL PHEN | YL ETHER | ND | UG/L | 10 | 000 | | |
| CHRYSENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| DIBENZ(A,H)ANTHRACE | NE | ND | UG/L | 10 | 000 | 10/02/97 | DN. |
| DIBENZOFURAN | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 1,2-DICHLOROBENZENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 1,3-DICHLOROBENZENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 1,4-DICHLOROBENZENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 3,3'-DICHLOROBENZID | INE | ND | UG/L | 20 | 000 | 10/02/97 | DN |
| 2,4-DICHLOROPHENOL | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| DIETHYL PHTHALATE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 2,4-DIMETHYLPHENOL | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| **DIMETHYLPHATHALATE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| ISOPHORONE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| DI-N-BUTYLPHTHALATE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 4,6-DINITRO-2-METHY | LPHENOL | ND | UG/L | 5(| 000 | 10/02/97 | DN |
| 2,4-DINITROPHENOL | | ND | UG/L | 5(| 000 | 10/02/97 | DN |
| 2,4-DINITROTOLUENE | | ND | UG/L | 10 | 000 | | |
| 2,6-DINITROTOLUENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| DI-N-OCTYLPHTHALATE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 1,2-DIPHENYL HYDRAZ | INE | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| FLUORANTHENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| FLUORENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| HEXACHLOROBENZENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| HEXACHLOROBUTADIENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| HEXACHLOROCYCLOPENT. | ADIENE | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| HEXACHLOROETHANE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| INDENO(1,2,3-CD)PYR | ENE | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 2-METHYLNAPHTHALENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 2-METHYLPHENOL | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 4-METHYLPHENOL | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| NAPHTHALENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 2-NITROANILINE | | ND | UG/L | 50 | 000 | 10/02/97 | DN |
| 3-NITROANILINE | | ND | UG/L | 50 | 000 | 10/02/97 | DN |
| 4-NITROANILINE | | ND | UG/L | 50 | 000 | | |
| NITROBENZENE | | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| 2-NITROPHENOL | | ND | UG/L | 50 | 00 | 10/02/97 | DN |
| 4-NITROPHENOL | | ND | UG/L | 50 | 000 | 10/02/97 | DN |
| N-NITROSO-DI-N-PROP | YLAMINE | ND | UG/L | 10 | 000 | 10/02/97 | DN |
| N-NITROSODIPHENYLAM | INE(1) | ND | UG/L | | 000 | | |
| N-NITROSODIMETHYLAM | INE | ND | UG/L | 10 | 00 | 10/02/97 | DN |
| PENTACHLOROPHENOL | • | ND | UG/L | 50 | 00 | | |
| PHENATHRENE | | ND | UG/L | | 00 | • | |
| PHENOL | | ND | UG/L | | 00 | | |
| PYRENE | | ND | UG/L | 10 | 00 | 10/02/97 | DN |
| 1,2,4-TRICHLOROBENZ | ENE | ND | UG/L | 10 | 00 | 10/02/97 | DN |
| 2,4,5-TRICHLOROPHEN | OL | ND | UG/L | 10 | 00 | 10/02/97 | DN |
| 2,4,6-TRICHLOROPHEN | OL | ND | UG/L | 10 | 00 | 10/02/97 | DN |
| 4 1 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | • | | | • | |

Sample Matrix: WATER

Sample ID: SOUTH POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

| 2-FLUOROBIPHENYL (SUR) 42.7 150 NITROBENZENE-D8 (SUR) 42.6 150 2-FLUOROPHENOL (SUR) 2.80 Q 150 2,4,6-TRIBROMOPHENOL (SUR) 23.7 150 TERPHENYL-D14 (SUR) 58.7 150 PHENOL-D5 (SUR) 0 Q 150 VOLATILE ORGANICS SW 846 8260 ND UG/L BENZENE ND UG/L BROMOBENZENE ND UG/L BROMOCHLOROMETHANE ND UG/L BROMOFORM ND UG/L BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 10
10
10
10
10
3.0
3.0
3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
|--|---|--|----------------|
| 2-FLUOROPHENOL (SUR) 2,4,6-TRIBROMOPHENOL (SUR) 23.7 TERPHENYL-D14 (SUR) PHENOL-D5 (SUR) VOLATILE ORGANICS BENZENE BROMOBENZENE BROMOCHLOROMETHANE BROMODICHLOROMETHANE BROMOFORM BROMOFORM BROMOFORM BROMOMETHANE BROMOMETHANE BROMOMETHANE BROMOMETHANE BROMOMETHANE BROMOFORM BROMOMETHANE BROMOFORM BROMOMETHANE BROMOFORM BROMOMETHANE BROMOFORM BROMOMETHANE BROMOFORM BROMOMETHANE BROMOFORM BROMOMETHANE BROMOFORM BROMOMETHANE BROMOFORM BROMOMETHANE | 10
10
10
3.0
3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| 2,4,6-TRIBROMOPHENOL (SUR) 23.7 150 TERPHENYL-D14 (SUR) 58.7 150 PHENOL-D5 (SUR) 0 Q 150 VOLATILE ORGANICS SW 846 8260 | 10
10
3.0
3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| TERPHENYL-D14 (SUR) 58.7 150 PHENOL-D5 (SUR) 0 Q 150 VOLATILE ORGANICS SW 846 8260 BENZENE ND UG/L BROMOBENZENE ND UG/L BROMOCHLOROMETHANE ND UG/L BROMOFORM ND UG/L BROMOFORM ND UG/L BROMOMETHANE ND UG/L CARBON TETRACHLORIDE ND UG/L UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L | 10
10
3.0
3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| PHENOL-D5 (SUR) VOLATILE ORGANICS BENZENE BENZENE BROMOBENZENE BROMOCHLOROMETHANE BROMODICHLOROMETHANE BROMOFORM BROMOFORM BROMOMETHANE ND UG/L BROMOMETHANE ND UG/L DROMOMETHANE ND UG/L DROMOMETHANE ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L | 3.0
3.0
3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| PHENOL-D5 (SUR) VOLATILE ORGANICS BENZENE BENZENE BROMOBENZENE BROMOCHLOROMETHANE BROMODICHLOROMETHANE BROMOFORM BROMOFORM BROMOMETHANE ND UG/L BROMOMETHANE ND UG/L DROMOMETHANE ND UG/L DROMOMETHANE ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L ND UG/L | 3.0
3.0
3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| BENZENE ND UG/L BROMOBENZENE ND UG/L BROMOCHLOROMETHANE ND UG/L BROMOFORM ND UG/L BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| BROMOBENZENE ND UG/L BROMOCHLOROMETHANE ND UG/L BROMODICHLOROMETHANE ND UG/L BROMOFORM ND UG/L BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| BROMOBENZENE ND UG/L BROMOCHLOROMETHANE ND UG/L BROMOFORM ND UG/L BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 3.0
3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97
10/01/97 | EG
EG
EG |
| BROMOCHLOROMETHANE ND UG/L BROMODICHLOROMETHANE ND UG/L BROMOFORM ND UG/L BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 3.0
3.0
3.0
3.0 | 10/01/97
10/01/97
10/01/97 | EG
EG |
| BROMODICHLOROMETHANE ND UG/L BROMOFORM ND UG/L BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 3.0
3.0
3.0
3.0 | 10/01/97
10/01/97 | EG |
| BROMOFORM ND UG/L BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 3.0
3.0
3.0 | 10/01/97 | |
| BROMOMETHANE ND UG/L n-BUTYLBENZENE ND UG/L sec-BUTYLBENZENE ND UG/L tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | 3.0
3.0 | | r.t. |
| n-BUTYLBENZENENDUG/Lsec-BUTYLBENZENENDUG/Ltert-BUTYLBENZENENDUG/LCARBON TETRACHLORIDENDUG/L | 3.0 | | |
| sec-BUTYLBENZENENDUG/Ltert-BUTYLBENZENENDUG/LCARBON TETRACHLORIDENDUG/L | | 10/01/97 | |
| tert-BUTYLBENZENE ND UG/L CARBON TETRACHLORIDE ND UG/L | J. U | • • | |
| CARBON TETRACHLORIDE ND UG/L | 3.0 | | |
| • | 3.0 | | |
| CHLOROBENZENE ND UG/L | 3.0 | , , | |
| CHLOROETHANE ND UG/L | 3.0 | • • | |
| CHLOROFORM ND UG/L | 3.0 | | |
| CHLOROMETHANE ND UG/L | 3.0 | • | |
| 2÷CHLOROTOLUENE ND UG/L | 3.0 | • | |
| 4-CHLOROTOLUENE ND UG/L | 3.0 | • • | |
| DIBROMOCHLOROMETHANE ND UG/L | 3.0 | • • | |
| 1,2-DIBROMO-3-CHLOROPROPANE ND UG/L | 3.0 | , , | |
| 1,2-DIBROMOETHANE ND UG/L | 3.0 | | |
| DIBROMOETHANE ND UG/L | 3.0 | 10/01/97 | |
| 1,2-DICHLOROBENZENE ND UG/L | 3.0 | 10/01/97 | |
| 1,3-DICHLOROBENZENE ND UG/L | 3.0 | 10/01/97 | |
| 1,4-DICHLOROBENZENE ND UG/L | 3.0 | 10/01/97 | |
| DICHLORODIFLUOROMETHANE ND UG/L | 3.0 | 10/01/97 | |
| 1,1-DICHLOROETHANE ND UG/L | 3.0 | | |
| 1,2-DICHLOROETHANE ND UG/L | 3.0 | 10/01/97 | |
| 1,1-DICHLOROETHENE ND UG/L | 3.0 | • | |
| cis-1,2-DICHLOROETHENE ND UG/L | 3.0 | 10/01/97 | |
| trans-1,2-DICHLOROETHENE ND UG/L | 3.0 | | |
| 1,2-DICHLOROPROPANE ND UG/L | 3.0 | | |
| 1,3-DICHLOROPROPANE ND UG/L | 3.0 | | |
| 2,2-DICHLOROPROPANE ND UG/L | 3.0 | 10/01/97 | |
| 1,1-DICHLOROPROPENE ND UG/L | 3.0 | 10/01/97 | |
| ETHYLBENZENE ND UG/L | 3.0 | 10/01/97 | |
| HEXACHLOROBUTADIENE ND UG/L | 3.0 | 10/01/97 | |
| ISOPROPYLBENZENE ND UG/L | 3.0 | 10/01/97 | |
| p-ISOPROPYLTOLUENE ND UG/L | 3.0 | 10/01/97 | |
| METHYLENE CHLORIDE ND UG/L | 3.0 | 10/01/97 | |
| • | 3.0 | • | |
| · | 3.0 | 10/01/97
10/01/97 | |
| n-PROPYLBENZENE ND UG/L | | 10/01/97 | |
| STYRENE ND UG/L | 3.0 | TO/OT/9/ | حاند |

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 | * | |
| 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 | • • | |
| 1,3,5-TRIMETHYLBENZENE | ND | UG/L | 3.0 | | |
| VINYL CHLORIDE | ND | UG/L | 3.0 | • | |
| TOTAL XYLENES | ND | UG/L | 3.0 | | |
| 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 | ME | ETHOI |) | 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 | t MG/L | 0.05 | 10/03/97 | AC |
| CADMIUM, TOTAL | SW | 846 | 6010 | <0.05 | t MG/L | 0.05 | 10/01/97 | MS |
| CHROMIUM, TOTAL | SW | 846 | 6010 | 75.5 | $\mathtt{MG/L}$ | 0.10 | 10/01/97 | MS |
| MERCURY, TOTAL | SW | 846 | 7470 | <0.0002 | $\mathtt{MG/L}$ | 0.0002 | 10/02/97 | MS |
| LEAD, TOTAL | SW | 846 | 6010 | <0.10 | t MG/L | 0.10 | 10/01/97 | MS |
| SELENIUM, TOTAL | SW | 846 | 7740 | <0.005 | t 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 | |
| ANTHRACENE | | | | ND | UG/L | 1000 | 10/02/97 | |
| BENZIDINE | | | | ИD | UG/L | 5000 | 10/02/97 | |
| BENZO (A) ANTHRACENE | | | | ND | UG/L | 1000 | 10/02/97 | |
| BENZO (B) FLUORANTHE | | | | ИD | UG/L | 1000 | 10/02/97 | |
| BENZO(K) FLUORANTHE | NE | | | ND | UG/L | 1000 | 10/02/97 | |
| BENZOIC ACID | | | | ND | UG/L | 5000 | 10/02/97 | |
| BENZO(G,H,I)PERYLE | NE | | | ND | UG/L | 1000 | 10/02/97 | |
| BENZO (A) PYRENE | | | | ND | UG/L | 1000 | 10/02/97 | |
| BENZYL ALCOHOL | | | | ND | UG/L | 2000 | 10/02/97 | |
| BIS(2-CHLOROETHOXY |) METHA | ME | | ND | UG/L | 1000 | 10/02/97 | |
| BIS(2-CHLOROETHYL) | ETHER | | | ND | UG/L | 1000 | 10/02/97 | |
| BIS(2~CHLOROISOPRO | PYL) EI | THER | | 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-ETHYLHEXY | L) PHTHALATE | ND | UG/L | 1000 | 10/02/97 | DN |
| 4-BROMOPHENYL P | | ND | UG/L | 1000 | | |
| BUTYL BENZYL PH | | ND | UG/L | 1000 | • | |
| 4-CHLOROANILINE | | ND | UG/L | 2000 | • • | |
| 4-CHLORO-3-METH | | ND | UG/L | 2000 | • • | |
| 2-CHLORONAPHTHA | | ND | UG/L | 1000 | | |
| 2-CHLOROPHENOL | | ND | UG/L | 1000 | • • | |
| 4-CHLOROPHENYL | PHENYL ETHER | ND | UG/L | 1000 | • • | |
| CHRYSENE | | ND | UG/L | 1000 | • • | |
| DIBENZ (A, H) ANTH | RACENE | ND | UG/L | 1000 | • • | |
| DIBENZOFURAN | | ND | UG/L | 1000 | | |
| 1,2-DICHLOROBEN | ZENE | ND | UG/L | 1000 | | |
| 1,3-DICHLOROBEN | ZENE | ND | UG/L | 1000 | • | |
| 1,4-DICHLOROBEN | ZENE | ND | ŬĠ/L | 1000 | | |
| 3,3'-DICHLOROBE | NZIDINE | ND | UG/L | 2000 | • • | |
| 2,4-DICHLOROPHE | | ND | UG/L | 1000 | | |
| DIETHYL PHTHALA | | ND | UG/L | 1000 | | |
| 2,4-DIMETHYLPHE | | ND | UG/L | 1000 | | |
| DIMETHYLPHATHAL | | ND | UG/L | 1000 | | |
| ISOPHORONE | | ND | UG/L | 1000 | | |
| DI-N-BUTYLPHTHA | LATE | ND | UG/L | 1000 | | |
| 4,6-DINITRO-2-M | | ND | UG/L | 5000 | • • | |
| 2,4-DINITROPHEN | | ND | UG/L | 5000 | • | |
| 2,4-DINITROTOLU | | ND | UG/L | 1000 | | |
| 2,6-DINITROTOLU | | ND | UG/L | 1000 | | |
| DI-N-OCTYLPHTHA | | ND | UG/L | 1000 | | |
| 1,2-DIPHENYL HY | | ND | UG/L | 1000 | | |
| FLUORANTHENE | | ND | UG/L | 1000 | • • | |
| FLUORENE | | ND | UG/L | 1000 | | |
| HEXACHLOROBENZE | NE | ND | UG/L | 1000 | • • | |
| HEXACHLOROBUTAD | | ND | UG/L | 1000 | • | |
| HEXACHLOROCYCLO | | ND | UG/L | 1000 | • • | |
| HEXACHLOROETHAN | | ND | UG/L | 1000 | · · | |
| INDENO(1,2,3-CD | | ND | UG/L | 1000 | • • | |
| 2-METHYLNAPHTHA | | ND | UG/L | 1000 | 10/02/97 | DN |
| 2-METHYLPHENOL | | ND | UG/L | 1000 | | |
| 4-METHYLPHENOL | | ND | UG/L | 1000 | 10/02/97 | |
| NAPHTHALENE | | ND | UG/L | 1000 | 10/02/97 | |
| 2-NITROANILINE | | ND | UG/L | 5000 | 10/02/97 | |
| 3-NITROANILINE | | ND | UG/L | 5000 | 10/02/97 | |
| 4-NITROANILINE | | ND | UG/L | 5000 | 10/02/97 | |
| 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 | |
| N-NITROSODIPHEN | | ND | UG/L | 1000 | 10/02/97 | |
| N-NITROSODIMETH | , , | ND | UG/L | 1000 | • • | |
| PENTACHLOROPHEN | | ND | UG/L | 5000 | 10/02/97 | |
| | | | • | | | |

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 (S | UR) | 25.4 | 150 | | 10 | | |
| TERPHENYL-D14 (SUR) | • | 61.7 | 150 | | 10 | | |
| PHENOL-D5 (SUR) | | 1.10 Q | 150 | | 10 | | |
| VOLATILE ORGANICS S | W 846 8260 | | | | | | |
| BENZENE | | ND | UG/L | | 3.0 | 10/01/97 | EG |
| BROMOBENZENE | | ND | UG/L | | 3.0 | • • | |
| BROMOCHLOROMETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| BROMODICHLOROMETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| BROMOFORM | | ND | UG/L | | 3.0 | 10/01/97 | |
| BROMOMETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| n-BUTYLBENZENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| sec-BUTYLBENZENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| tert-BUTYLBENZENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| CARBON TETRACHLORIDE | | ND | UG/L | | 3.0 | 10/01/97 | |
| CHLOROBENZENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| CHLOROETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| CHLOROFORM | | ND | UG/L | | 3.0 | 10/01/97 | |
| CHLOROMETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 2-CHLOROTOLUENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 4-CHLOROTOLUENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| DIBROMOCHLOROMETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 1,2-DIBROMO-3-CHLOROPRO | PANE | ND | UG/L | | 3.0 | 10/01/97 | |
| 1,2-DIBROMOETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| DIBROMOETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 172-DICHLOROBENZENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 1/3-DICHLOROBENZENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 1/4 DICHLOROBENZENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| DICHLORODIFLUOROMETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 1, 1-DICHLOROETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 1,2-DICHLOROETHANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 1,1-DICHLOROETHENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| cis-1,2-DICHLOROETHENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| trans-1,2-DICHLOROETHEN | F | ND | UG/L | | 3.0 | 10/01/97 | |
| • | ٥ | ND | UG/L | | 3.0 | 10/01/97 | |
| 1,2~DICHLOROPROPANE | | ND | UG/L | | 3.0 | 10/01/97 | |
| 1,3~DICHLOROPROPANE | | ND
ND | - | | | • • | |
| 2,2~DICHLOROPROPANE | | | UG/L | | 3.0 | 10/01/97 | |
| 1,1-DICHLOROPROPENE | | ND | UG/L | | 3.0 | 10/01/97 | |
| ETHYLBENZENE
HEXACHLOROBUTADIENE | | ND
ND | UG/L
UG/L | | 3.0
3.0 | 10/01/97
10/01/97 | |
| | | | | | | | |

Sample ID: WEST POND
Sample Date Collected: 09/30/97

Sample Matrix: WATER

| TEST METHOD | RESULT | UNITS | DL | ANALYZED | ВУ |
|-----------------------------|--------|-------|-----|----------|----|
| ISOPROPYLBENZENE | ND | UG/L | 3.0 | 10/01/97 | EG |
| p-ISOPROPYLTOLUENE | ND- | UG/L | 3.0 | • • • | 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 | ΕG |
| 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 | ΕC |
| TRICHLOROFLUOROMETHANE | ND | UG/L | 3.0 | 10/01/97 | EC |
| 1,2,3-TRICHLOROPROPANE | ND | UG/L | 3.0 | , , | |
| 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 | EC |
| 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

William.

APPROVED BY:

TERRY KOESTER LABORATORY DIRECTOR

REFERENCE #: 9710022 PAGE: 10

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: 4 Phone # WILLIAMS FIELD SERVICES Attention: TNGRID DEKLAU | 13 TURNAROUND TIME REQUESTED (Additional Charges Ma Standard 72 Hours 48 Hours 24 Hours Note - Please contact lab for availability of priority service. | |
|---|---|---|
| Ompany Name: (4) Phone # (4) Phone # (4) Phone # (5) Attention: TNGRID DEKLAU Address: 295 City PETA WALL (4) Fax #: (5) SALT LAKE City, Ut (6) City, State, Zip Code (7) Project Name of Number (6) Project Name of Name of Number (6) Project Name of Number (6) Project Name of Name of | 801-584-1760 @ ANALYSIS REQUE (Write Tests Here) | ST |
| 2 Project Name or Number 5 Purcha | se Order #: | |
| MILAGRO EVAP PONDS | 36/2 | |
| | npling Personnel (print name) | REMARKS |
| Minion reston 1 | INDI PRESTON WITH INDIVIDUAL | (If special detection |
| 6 Sample Date Time 8 8 9 10 | Method (I)Sample (Served Matrix | limits are required please note below.) |
| | Method (I) Sample Matrix HO A J. So Sind See Constitution of the | |
| NORTH-PONTY30 V2 | | |
| South POND 4/30 V 2 | | |
| NEST PW09/30 V2 | | |
| NORTHPONE Rober | | |
| South Pontison 1 | | |
| VILEST POND /3477 | | |
| | | |
| | | |
| (1) Rehighished By: // Meston Parky Jim | Send Report to. | |
| Received By: Date: Time | Company WILLIAMS FIELD SERVICES (if different form report address) Company | |
| Relinquished By: Date Time | Attn: TNGRID DEKLAU Attn: Address: Address: | |
| Received By: Date Time | City/State: 541 LAKE CITC// (17 City/State: | |
| Relinquished By: Date Time | Fax: COISEYANIOO Fax: | |
| Received By: Date Time | *FAILURE TO COMPLETE THIS FORM MAY DELAY LABORATOR | RY 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**

| ① Company Name: <u>Williams Field Services</u> Attention: Ingrid Deklau | | 801-584-6543 | | ESTED (Additional Charges May Apply) 48 Hours |
|---|----------------------|--|------------------------------------|---|
| Address: 295 Chipeta Way (2G1) Salt Lake City, Ut. 84 City, State, Zip Code | (4) Fax #: | 801-584-7760 | [®] ANALY | SIS REQUEST (Write Tests Here) |
| ② Project Name or Number Milagro Evap POnds mpling Personnel Signature(s) | - | oling Personnel (print name) | METALS | REMARKS |
| 6 Sample Date Time 8 8 9 1.D. | | ndy Preston Method Served Matrix Voil Preston Soul Sample Matrix Other Other Other | K('KH | (If special detection limits are required please note below.) |
| NORTHUND Pates | 1 | | X
X
X | PRESECUE on Site FOR EACH CONTAINER |
| | | | | |
| Rederved-By: Relinquished By: | Date Time Date Time | Send Report to: Company Williams Fiel Attn: Ingrid Deklau Address: 295 Chipeta W | (if display Company (2G1) Addr | Invoice to: fferent form report address) pany ess: |
| Received By: Relinquished By: | Date Time Date Time | City/State: Salt Lake Cit
Phone: 801-584-6543
Fax: 801-584-7760 | Phon | State:e: |
| Received By: | Date Time | *FAILURE TO COMPL | ETE THIS FORM MAY | DELAY LABORATORY RESULTS. |

District I - (505) 393-6161 P. O. Bcz 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210 r: trict III - (505) 334-6178 Rio Brazos Road

District IV - (505) 827-7131

A_JC. NM 87410

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 Čopv to appropriate District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|--|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator Williams Field Seau |
| Verbal Approval Received: Yes No No | 5. Originating Site P/AW√ |
| 2. Management Facility Destination SUNCO DISPOSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500#345 AZ+ec Nm | 8. State $\mathcal{W}_{\mathcal{M}}$ |
| 7. Location of Material (Street Address or ULSTR) ESPERANZA Plant | |
| 9. <u>Circle One</u> : | |
| A. All requests for approval to accept oilfield exempt wastes will be accept acceptance; one certificate per job. B. All requests for approval to accept non-exempt wastes must be acceptance. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | and the second s |
| TIGIDEA, RAIN WATER | DECEIVED
IN SEP 2 5 1997
OIL CON. DIV.
DIST. 33 |
| SIGNATURE: Maste Management Facility Authorized Agent TITLE: DIS POSAL | DATE: 9-24-97 LEPHONE NO. 505-334-6/86 |
| (This space for State Use) | |
| APPROVED BY: Denny B. Found TITLE: Geold | 09 15 T DATE: 9/25/97 |



CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|--|
| Williams Field Services | |
| · . | SUNCO SWD#1 |
| Eobernodor n.m. | / |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| | 01 4 |
| Esperanza Treating 1 | Plant |
| | |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste | |
| TIG, DEA, Rain Wate | p1 |
| 1 20 DEAJNAIN WOIL | |
| | |
| \mathcal{J} | |
| | ger and a second of the second |
| No. of the state o | A Particular of the Control of the C |
| 1, DANNY F. CROS | representative for: |
| (Print Name) | representative for. |
| Williams Field Service | do hereby certify that, |
| | |
| according to the Resource Conservation and Recover | ery Act (RCRA) and Environmental Protection Agency's July, |
| | ery Act (RCRA) and Environmental Protection Agency's July, |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described | ery Act (RCRA) and Environmental Protection Agency's July, waste is: (Check appropriate classification) |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXE | bry Act (RCRA) and Environmental Protection Agency's July, waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste | bry Act (RCRA) and Environmental Protection Agency's July, waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXE analysis of and that nothing has been added to the exempt or not not to the exempt or not not to the exempt or not not to the exempt or not not to the exempt or not not to the exempt or not not to the exempt or not not to the exempt or not to the exempt | bry Act (RCRA) and Environmental Protection Agency's July, waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXE analysis of and that nothing has been added to the exempt or not not not not not not not not not not | bry Act (RCRA) and Environmental Protection Agency's July, waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or nothing has been added to the following documents of the followin | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not analysis of the NON-EXEMPT waste only the following documents of the MSDS Information | bry Act (RCRA) and Environmental Protection Agency's July, waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or nothing has been added to the following documents of the followin | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |
| according to the Resource Conservation and Recove 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not have a second of the following document of the matter of the second of the following document of the f | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not have the NON-EXEMPT waste only the following documents of the NON-EXEMPT waste only the following documents of the RCRA Hazardous Waste Analysis | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not analysis of the notation and Recoverage analysis of the following documents of the notation and Recoverage and Recoverage analysis of the following documents of the notation and Recoverage and Recoverage analysis of the following documents of the follow | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |
| according to the Resource Conservation and Recove 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not have a second of the following document of the matter of the second of the following document of the f | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not analysis of the NON-EXEMPT waste only the following documents of the exempt or not analysis of the exempt of the ex | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not analysis of the following documents o | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not analysis of the NON-EXEMPT waste only the following documents of the exempt or not analysis of the exempt of the exem | MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): |

District I - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First

Artesia, NM 88210
Prict III - (505) 334-6178
Rio Brazos Road
Roc, 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: Non-Exempt: Denny Foust | 4. Generator Williams Field Service |
| Verbal Approval Received: Yes No No | 5. Originating Site Esperanza Flant |
| 2. Management Facility Destination SUNCO | 6. Transporter SUNCO |
| 3. Address of Facility Operator Cl 3500 #345, AZ+ec NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) | · . |
| 9. <u>Circle One</u> : | |
| All requests for approval to accept oilfield exempt wastes will be accepted. B. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | ompanied by necessary chemical analysis to n of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | ioi danoport. |
| Delonized water, Amine water | |
| | DEGETVED SEP 1 8 1997 |
| | OIL CON. DIV. |
| Estimated Volume 16066/s cy Known Volume (to be entered by the op | erator at the end of the haul) cy |
| SIGNATURE: Maste Management Pacility Authorized Agent TITLE: MGR | DATE: 9-17-97 |
| TYPE OR PRINT NAME: MICHAEL TALOVICH TEL | EPHONE NO. 505-334-618C |
| (This space for State Use) | |
| APPROVED BY: Deny & Fait TITLE: Geolo | 915T DATE: 9/19/97 |

CERTIFICATE OF WASTE STATUS

| Generator Name and Address: | 2. Destination Name: |
|---|---|
| Williams Field Services | Charles Chile Mar. |
| Esperanzo Treating Plant | Sunco SUD,#1 |
| Gobernador n.m. | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| Esperanza Treating Plant | - Woste Water Tank |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste | |
| TIG , DEA, Water | |
| | |
| 1 | • |
| | |
| | 1 to some analysis for |
| (Print Name) | representative for: |
| Williams Field Senvices according to the Resource Conservation and Recove 1988, regulatory determination, the above described | do hereby certify that
ary Act (RCRA) and Environmental Protection Agency's July
waste is: (Check appropriate classification) |
| | MPT oilfield waste which is non-hazardous by characteristic or by product identification |
| and that nothing has been added to the exempt or no | on-exempt non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following documents of MSDS Information RCRA Hazardous Waste Analysis Chain of Custody | mentation is attached (check appropriate items): Other (description): |
| Name (Original Signature): | |
| Title: SR. PLANT COER. 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

Rio Brazos Road

District IV - (505) 827-7131

ر NM 87410 مدردر NM 87410

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: Non-Exempt: | 4. Generator Bowen Tools |
|---|--|
| Verbal Approval Received: Yes 🔀 No 🔲 | 5. Originating Site Bowen 4 4 PD |
| 2. Management Facility Destination GUNCO | 6. Transporter SUNCO |
| 3. Address of Facility Operator #345 CR 3500, AZ+CC | 8. State NM |
| 7. Location of Material (Street Address or ULSTR)#14 CR 5860 | ^ , |
| 9. <u>Circle One</u> : | |
| All requests for approval to accept oilfield exempt wastes will be accepted and accept one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | ompanied by necessary chemical analysis to n of origin. No waste classified hazardons by |
| BRIEF DESCRIPTION OF MATERIAL: | OIL COM. DIV. |
| WASH WATER FROM SUMP | DIST. 3 |
| City water USED with power washer to | o clean bown hole |
| oilfield tools only. | |
| DISCUSSED IN Phone ConvERSAtion W | • |
| AND D. FOUST AND M. TALOVICH (SUNCO) | 10 Am 9-5-96 |
| Estimated Volume 1000 GALS cy Known Volume (to be entered by the op | erator at the end of the haul) — cy |
| SIGNATURE: Mulad Color TITLE: DISPOSA Waste Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOUICH TEL | LMGR DATE: 8-28-97
EPHONE NO. 505-334-6186 |
| | |
| (This space for State Use) | |
| APPROVED BY: Denny S. Four TITLE: Geolo | 0915/ DATE: 8/29/97 |
| APPROVED BY: Erico Thurch TITLE: Geal | DATE: 3/29/97 |
| • | , |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|--|
| | |
| Dower Tools Division | Sunco Disposal |
| #14 CR 5860 | |
| Farmington inm | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| Shop Sump (TANK) | Bowen YARD |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste | |
| City water used to clean t | ools - no other material is |
| washed with this water o | or any other waste is put in Sump |
| | irst. This water is only used to |
| Clean oilfield tools | |
| 1, Gary Hallibutton | representative for: |
| (Print Name) Code Tools - Division according to the Resource Conservation and Recove 1988, regulatory determination, the above described | ry Act (RCRA) and Environmental Protection Agency's July, |
| | VIPT oilfield waste which is non-hazardous by characteristic r by product identification |
| | |
| and that nothing has been added to the exempt or no | n-exempt non-hazardous waste defined above. |
| For NON-EXEMPT waste only the following document of MSDS Information RCRA Hazardous Waste Analysis Chain of Custody | |
| For NON-EXEMPT waste only the following documents of MSDS Information RCRA Hazardous Waste Analysis Chain of Custody Name (Original Signature): | mentation is attached (check appropriate items): |
| For NON-EXEMPT waste only the following documents of MSDS Information RCRA Hazardous Waste Analysis Chain of Custody | mentation is attached (check appropriate items): |

District I - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283 811 S. First Artesia, NM 88210

Rio Brazos Road

<u>District IV</u> - (505) 827-7131

~_.c, NM 87410

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

| HEQUEST FUR APPROVAL TO ACCEPT | SOLID WAS IE |
|---|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator WF5 |
| Verbal Approval Received: Yes Mo W | 5. Originating Site Lybeook Haw + |
| 2. Management Facility Destination SUNCO | 6. Transporter 3000 |
| 3. Address of Facility Operator CR 3500 #345-4Z4CC, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) HCR 17 Nm | ^ , |
| 9. <u>Circle One</u> : | |
| All requests for approval to accept oilfield exempt wastes will be acc Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be acc PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | |
| Pipeline Deip Storage Tank water Estimated Volume 506015 cy Known Volume (to be entered by the op | DECEIVED AUG 2 0 1997 OIL COING DIVG DISTIG 33 |
| SIGNATURE: Management Facility Authorized Agent TITLE: Monagement Facility Authorized Agent | · • |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TEI | LEPHONE NO. 505 - 334 - 6186 |
| (This space for State Use) | |
| APPROVED BY: Demy 12. Frank TITLE: (Feolo | DS/ST DATE: 8/21/97 |
| APPROVED BY: Title: | DATE |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address; | 2. Destination Name: |
|---|--|
| Williams Field Services/Lybrook Plant | Suneo |
| HCR 17, Box 360 | |
| HCR 17, Box 360
Cuby N.M. 87013 | |
| 2 Originating Site Iname) | Location of the Waste (Street address &/or ULSTR): |
| Dogie Compressor Station | 90 K Vapor Recovery blow Down Pit |
| J = 1 | 7 |
| | |
| Attach list of originating sites as appropriate | |
| 4. Source and Description of Waste | , |
| Pinaline Drin Gasoline Stora | e Tank Clean out Sludge/Water. |
| The like out out out of | Je min citalo de J |
| Water Disposal only | |
| | |
| • | |
| | |
| 1, Kick D. Flippen | representative for: |
| Vrb-i Na | Tepresentative for. |
| Williams Field Services | do hereby certify that, |
| | ry Act (RCRA) and Environmental Protection Agency's July, |
| 1988, regulatory determination, the above described | waste is: (Check appropriate classification) |
| EXEMPT oilfield waste NON-EXEM | APT oilfield waste which is non-hazardous by characteristic |
| | by product identification |
| • | • |
| and that nothing has been added to the exempt or no | n-exempt non-hazardous waste defined above. |
| E BIORI EVERADT | |
| For NON-EXEMPT waste only the following documents of the MSDS Information | nentation is attached (check appropriate items): Other (description): |
| RCRA Hazardous Waste Analysis | Other (description). |
| Chain of Custody | |
| | |
| | |
| Name (Original Signature): | 40 |
| Dead of the state | |
| Title: PSM Coordinator (Lea) | |
| The Colombia | |
| Date: 8/19/97 | |

Strict I - (505) 393-6161

). Box 1986 *
bbs, NM 88241-1980

strict II - (505) 748-1283

1 S. First
csia, NM 88210

trict III - (505) 334-6178

Rio Brazos Road
.cc, NM 87410

(This space for State Use)

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

Roger Huda son Form C-138 Originated 8/8/95

> Submit Original Plus 1 Copy to appropriate District Office

| SOLID WASTE |
|---|
| #ARM WOTON Chemient 4. Generator DISTRIBUTERS |
| 5. Originating Site YARD |
| 6. Transporter SUNCO |
| 8. State NM |
| |
| |
| ed for transport. If the Plant DECEIVE AUG - 7 1997 |
| ECEIVEDOIL CON. DI
AUG - 4 1997 |
| OIL CON. DIV.
DIST. 3 |
| operator at the end of the haul) ———————————————————————————————————— |
| DATE: 8-4-97 |
| ELEPHONE NO. 505-334-6186 |
| |

Strict I - (505) 393-6161

). Box 1980
bbs, VM 88241-1980
strict II - (505) 748-1283

). S. First
csia, NM 88210
trict III - (505) 334-6178

). Rio Brazos Road
cc, NM 87410
strict IY - (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 I Copy to appropriate District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|---|--|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator DISTRIBUTERS |
| Verbal Approval Received: Yes ☐ No ☑ | 5. Originating Site YALD |
| 2. Management Facility Destination SUNCO | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500 #345 AZTEC NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) UALD | |
| 9. <u>Circle One</u> : | |
| A. All requests for approval to accept oilfield exempt wastes will be acc
Generator; one certificate per job. All requests for approval to accept non-exempt wastes must be acc
PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | d for transport. |
| BRIEF DESCRIPTION OF MATERIAL: | The same and the s |
| WASTE WATER FROM SOOIUM BISUI | fite Plant |
| DECINAUS - | 宣[V 宣]
4 1997 |
| 00 100
100 | M. DIV.
T. 3 |
| | |
| Estimated Volume Solds cy Known Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Melael John TITLE: MANAGE Waste Management Facility Authorized Agent | |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TE | LEPHONE NO. 505-334-6186 |
| (This space for State Use) | 41 |
| APPROVED BY: Demyos. Fount TITLE: G-CO | 10915 DATE: 8/4/97 |
| APPROVED BY: | DATE: |

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|--|
| FARMINGTON Chemical Dist | Surco Disposal plant. |
| I THE CONTROL OF THE | |
| hini | |
| 3. Originating Site (name): | Location of the Waste (Street address &/or ULSTR): |
| Saemington. | 3911 Monroe Rd |
| farmington.
Chemical Dist | |
| | Farmington n. M. 7401 |
| Attach list of originating sites as appropriate | 7 |
| 4. Source and Description of Waste | er. Sodium Bisulfite. Plant. |
| Waste WATER GOVEN JE | Sic. Ossilani Statiffic. Philos |
| | |
| | |
| | |
| | the state of the s |
| 1. Debbie Byrd | and a second section of the second |
| " DEDDLE DYTA | representative for: |
| (Print Name) | |
| tarmington Chemical Distri | |
| according to the Resource Conservation and Recover | ery Act (RCRA) and Environmental Protection Agency's July |
| Tarmington Chemical Distri | ery Act (RCRA) and Environmental Protection Agency's July |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described | ery Act (RCRA) and Environmental Protection Agency's July waste is: (Check appropriate classification) |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXE | ery Act (RCRA) and Environmental Protection Agency's July |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Recover 1988, regulatory determination, the above described analysis of the Recover 1988, regulatory determination, the above described analysis of the Recover 1988, regulatory determination and Recover 1988, regulatory deter | ery Act (RCRA) and Environmental Protection Agency's July waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXE | ery Act (RCRA) and Environmental Protection Agency's July waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Resource Conservation and Recover 1988, regulatory determination, the above described analysis of the Recover 1988, regulatory determination, the above described analysis of the Recover 1988, regulatory determination, the above described analysis of the Recover 1988, regulatory determination and Recover 1988, regulatory deter | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not make the model of the exempt of the MSDS Information | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not make the control of the cont | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not make the model of the exempt of the MSDS Information | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not make the control of the cont | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not analysis of the NON-EXEMPT waste only the following documents of the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NO | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not analysis of the RCRA Hazardous Waste Analysis Chain of Custody Name (Original Signature): | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not and that nothing has been added to the exempt or not analysis of the RCRA Hazardous Waste Analysis Chain of Custody Name (Original Signature): | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |
| according to the Resource Conservation and Recover 1988, regulatory determination, the above described EXEMPT oilfield waste NON-EXEMPT analysis of and that nothing has been added to the exempt or not analysis of the NON-EXEMPT waste only the following documents of the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NON-EXEMPT waste only the NO | waste is: (Check appropriate classification) MPT oilfield waste which is non-hazardous by characteristic r by product identification on-exempt non-hazardous waste defined above. mentation is attached (check appropriate items): Other (description): |

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-I". 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. Sexdler

Environmental Scientist/Laboratory Manager

. W Sendler

enc.

SWS/sws/04074-03.lb6/wpd

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SUSPECTED HAZARDOUS WASTE ANALYSIS

Client: Tierra Environmental Project #: 04074-03 Sample ID: 97026-1 07-22-97 Date Reported: Lab ID#: B675 Date Sampled: 07-17-97 Sample Matrix: Date Received: 07-17-97 Soil Preservative: Date Analyzed: 07-21-97 Cool 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

tacy W Sendler



EPA METHODS 8010/8020 AROMATIC / HALOGENATED VOLATILE ORGANICS

| Client: | Tierra Environmental | Project #: | 04074-03 |
|--------------------|----------------------|---------------------|----------|
| Sample ID: | 97026-l | 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 |

| | | Detection | Regulatory |
|----------------------|---------------|-----------|------------|
| | Concentration | Limit | Limits |
| Parameter | (mg/L) | (mg/L) | (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 Commence of Commence of the Commence o

Stary W. dendlar
Review



EPA METHOD 8040 PHENOLS

| 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

Stacy W Sendler



EPA Method 8090 Nitroaromatics and Cyclic Ketones TCLP Base/Neutral 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: | 07-24-97 |
| 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 Gjeren

Stacy W Sendler



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 |
| | | Det. | Regulatory |
| | Concentration | Limit | Level |
| Parameter | (mg/L) | (mg/L) | (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.

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QUALITY ASSURANCE / QUALITY CONTROL DOCUMENTATION



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 |

| | | Detection | Regulatory |
|----------------------|---------------|-----------|------------|
| | Concentration | Limit | Limits |
| Parameter | (mg/L) | (mg/L) | (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.

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Review



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 |

| | | Detection | Regulatory |
|----------------------|---------------|-----------|------------|
| | Concentration | Limit | Limits |
| Parameter | (mg/L) | (mg/L) | (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 |
| Tetrachioroethene | 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 Quest

Stacy W Lendler



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 |

| Duplicate | | | | |
|----------------------|--------|--------|-----------|------------|
| | Sample | Sample | Detection | |
| | Result | Result | Limits | Percent |
| Parameter | (mg/L) | (mg/L) | (mg/L) | 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

Stacy W Sendler



EPA METHODS 8010/8020 AROMATIC / HALOGENATED VOLATILE ORGANICS QUALITY ASSURANCE REPORT

| Client: | QA/QC | Project #: | N/A |
|---------------------|--------------|-----------------|----------|
| Sample ID: | Matrix Spike | 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) | 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.

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Stacy W Sendler.
Review



EPA METHOD 8040 PHENOLS Quality Assurance Report

luality 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 | , | Detection | Regulatory |
|-----------------------|---|-----------|------------|
| Darameter | Concentration | Limit | Limit |
| Parameter | (mg/L) | (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.

Dew L. Gester Analyst Stacy W Sendler
Review



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.

Alexa di Generalia di Analyst

Stary W Sendler



EPA METHOD 8040 PHENOLS Quality Assurance Report

Analysis Requested:

TCLP

| 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 |

| 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.

Alen L. Greece

Stacy W Sendler



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 |

| | | Det. | Regulatory |
|---------------------|---------------|--------|------------|
| | Concentration | Limit | Limit |
| Parameter | (mg/L) | (mg/L) | (mg/L) |
| Pyridine | ND | 0.020 | 5.0 |
| Hexachloroethane | NĎ | 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.

Dem L. Cessen

Stacy W dender



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 |

| | | Det. | Regulatory |
|---------------------|---------------|--------|------------|
| | Concentration | Limit | Limit |
| Parameter | (mg/L) | (mg/L) | (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, Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, | | |
| | • | matics and Cyclic Ketones, SW-8 | |
| Note: | Regulatory Limits base | ed on 40 CFR part 261 Subpart C | Section 261.24, July 1, 1992. |

Comments: QA/QC for sample B675, B676, B686 and B690.

Analyst Leven L. Cycleson

Stay W Sendler.
Review



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 |

| | Sample | Duplicate | |
|-----------|--------|-----------|------------|
| | Result | Result | Percent |
| Parameter | (mg/L) | (mg/L) | 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 %

tacy W Sendler

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.

Review

Analyst



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 |

| | Spike
Added | Sample
Result | Spiked Sample
Result | Percent |
|-----------|----------------|------------------|-------------------------|----------|
| Parameter | (mg/L) | (mg/L) | (mg/L) | 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: | | A 1 D 01 |
|-------------------------------|-----------|--------------------|
| ILIA/LIC ACCENTANCE L'HITERIA | Daramatar | Acceptance Pange V |
| Tando noceptance chiena. | Parameter | Acceptance Range % |
| | | |

TCLP Metals

80 - 120 %

tacy W Sendler

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

Remarks

| CHAIN OF CUSTODY RECO | КIJ | Ì |
|-----------------------|-----|---|
|-----------------------|-----|---|

: Client/Project*Name Project Location ANALYSIS/PARAMETERS Sampler: (Signature) Chain of Custody Tape No. 04074-03 Sample No./ Sample Sample Sample Lab Number Identification Date Time Matrix 97026-100 SOLL

Relinquishe gnaturej Date

7-17-97 151

Time

Received by: (Signature)

Date

7-179

Time

51

Relinquished by: (Signature)

eceived 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, Nif. 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
Protect III - (505) 334-6178
Rio Brazos Road
C. c., NM 87410

District IV - (505) 827-7131

New Mexico Energy Lerals and Natural Resources Leartment 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: Non-Exempt: X | 4. Generator Bounzville |
|--|--|
| Verbal Approval Received: Yes 🔲 No 🏹 | 5. Originating Site Folleefon Fed#9 |
| 2. Management Facility Destination SUNCO | 6. Transporter SUNCO PRUCKING |
| 3. Address of Facility Operator CR 9500 #345 Az+ec, NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) らいる。アンファン・ファン・ファン・ファン・ファン・ファン・ファン・ファン・ファン・ファン | |
| 9. <u>Circle One</u> : | |
| A. All requests for approval to accept oilfield exempt wastes will be accepted acceptance; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted accepted accepted accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigned | |
| BRIEF DESCRIPTION OF MATERIAL:
3% KCL WATER LEFT OVER FROM FROM FROM FROM FROM FROM FROM FRO | etc job DECETVED AUG - 7 1997 |
| Environmental bureau
Oil Conservation Division | OUL COMO DUVO |
| 7661 Z - DUA | DECEIVE |
| BECEINED | 11 AUG - 4 1997 |
| | OIL COM. DIV. |
| Estimated Volume 220 6615 cy Known Volume (to be entered by the op | erator at the end of the haul) cy |
| SIGNATURE: Mchael Del TITLE: MANAGE | DATE: 8-4-97 |
| Waste Management FacilityAuthorized Agent TYPE OR PRINT NAME: MICHAEL TALDUICH TEL | EPHONE NO. 505-334-6186 |
| | 3 |
| (This space for State Use) | م |
| APPROVED BY: Deny & Jany TITLE: Geolog | DATE: 8/4/97 |
| APPROVED BY: Martyns gold TITLE: En G | Eologish DATE: 8/5-/97 |

District I - (505) 393-6161
P. G. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
Pirtict III - (505) 334-6178
Rio Brazos Road
C. C. 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: Non-Exempt: X | 4. Generator Bouneville |
|--|---|
| Verbal Approval Received: Yes 🔲 No 🏹 | 5. Originating Site Folleefon Fed#9 |
| 2. Management Facility Destination SUNCO | 6. Transporter SUNCOTRUCKING |
| 3. Address of Facility Operator CR3500 #345 Az+ec , NM | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) らいって 13,T・27 N,R II W | |
| 9. <u>Circle One</u> : | |
| A. All requests for approval to accept oilfield exempt wastes will be accommon Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accommon PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. | ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| All transporters must certify the wastes delivered are only those consigned BRIEF DESCRIPTION OF MATERIAL: | d for transport. |
| 370 KCL WATER LEFT OVER FROM FROM FROM FROM FROM FROM FROM FRO | CEIVED GON. DIV. DIST. 3 |
| Estimated Volume 220 6615 cy Known Volume (to be entered by the op | |
| SIGNATURE: Mchae James TITLE: MANAE Waste Management Facility Authorized Agent | DATE: 8-4-97 |
| TYPE OR PRINT NAME: MICHAEL TALOUICH TEL | EPHONE NO. <u>505-334-6186</u> |
| (This space for State Use) | |
| APPROVED BY: TITLE: | DATE:′ |
| APPROVED BY: TITLE: | DATE: |

CERTIFICATE OF WASTE STATUS

| I Alan Merrill | /representative |
|--|---|
| for Bonneville Fuels | Corporadia |
| 1660 Lincoln, Suite 180 | |
| do hereby certify that according to | the Resource Conservation and Recovery Act |
| that the above described waste is as non hazardous by characteristic | Exempt Non-Exempt and that it has been identified analysis or by product identification as required. |
| Originating Site: S- 13 T-27N R | R-1110 1/4 510 1/4 510 County San Tuan State MM |
| 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, React Exempt | tivity |
| I futher certify that there has been regenerating the waste since | no change in the waste stream at the facility |
| Signature Alci L. M | Merry II |
| Title Eparations & Date 7/24/97 | Kýlheer . |

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

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)

VAPOR PRESSURE (mm Ha.)

VAPOR DENSITY (AIR-1)

SOLUBILITY IN WATER

APPEARANCE AND ODOR

pН

Sublines @ 2732

N/A

N/A

25% @ 68°F

White crystals or granules, odorless

7 at 1%

MELTING POINT (°F)
SPECIFIC GRAVITY (H20-1)

PERCENT VOLATILE EVAPORATION RATE

N/A N/A

1423 1.98

OTHER

FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT (METHOD USED)

NOT COMBUSTIBLE

FLAMMABLE LIMITS

LEL N/A

EXTINGUISHING MEDIA
SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS

N/A

NONE

HEATLH INFORMATION

THRESHOLD LIMIT VALUE:

NONE ESTABLISHED. OHSA total nuisance dust limit of 15 mg/m³ and a respirable faction of 5 mg/m³. The ACGIH nuisance dust TLV of 10 mg/m³ for the 8 hour time

weighted average applies.

^ Y> → DIDJ275451

NO. 565

203

EFFECTS OF OVEREXPOSURE EYE-Irritant, SKIN-Slightly irritating. INHALATION-Irritates trached and upper breathing passages. INGESTION-Large doses and cause G.I. irritation, purging, weakness and circulatory disturbances. Low toxicity. (Toxicity LDSO 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 | X | UNSTABLE
STABLE | CONDITIONS TO AVOID | NONE |
|-------------------------------------|---|-----------------------------|--|------|
| INCOMPATABILITY (
HAZARDOUS DECO | | , – | ids-can cause release of toxic chloride gasses.
e | |
| HAZARDOUS
POLYMERIZATION | X | 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 falth, SUCH INFORMATION. IS EXPRESSLY GIVEN WITHOUT ANY WARRANTY (EXPRESS O IMPLIED) OF ANY GUARANTEE OF ITS ACURACY OR SUFFICIENCY and is taken at the user's sole risk. User is solely responsible for determining the subtability 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 initinge or violate valid patents, licenses and/or copyright.

<u>ct.</u>I - (505) 393-6161 30x 1980 . , NM 88347-1980 Ct 1 (505) 748-1283 1, NM 88210 CLIII - (505) 334-6178 Rio Brazos Road NM 87410

New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division

2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

AUG - 4 1997

Submit Original Plus I Copy to appropriate District Office

er Avaerson

Form C-138

Originated 8/8/95

| ary - (505) 827-7131 | |
|---|--|
| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
| RCRA Exempt: Non-Exempt: X | 4. Generator Williams Field |
| Verbal Approval Received: Yes 🔲 No 🔲 | 5. Originating Site Compressor |
| . Management Facility Destination Sunco DISPOSA L | 6. Transporter รูปNCo |
| Address of Facility Operator CR 3500 , AZ te C , NM | 8. State NM |
| . Location of Material (Street Address or ULSTR) Williams Compressor | |
| <u>Circle One</u> : | |
| All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned. | on of origin. No waste classified hazardous by |
| RIEF DESCRIPTION OF MATERIAL: RATIO WATER NAIKED WITH WAS A DECEIVED JUL 3 1 1997 OIL CON. DIV. DIST. 3 Stimated Volume 2400 56/s cy Known Volume (to be entered by the open states) | All Fluid is STORED IN TANKS At the 29-6 #4 |
| SIGNATURE: Mulaul Jacon TITLE: DISPOSA Waste Management Fecility Authorized Agent TYPE OR PRINT NAME: MICHAEL TALOVICH TE (This space for State Use) | LM6R DATE: 7-30-97 LEPHONE NO. 505-334-6186 |
| APPROVED BY: Kerry S. Found TITLE: Geold APPROVED BY: Kerry S. Tours TITLE: Deur | DATE: 2/31/97 DATE: 8/5/97 |

trist - (505) 393-6161
). Box 1980
bbs, NM 88241-1980
trict II - (505) 748-1283
S. First
csia, NM 88210
trict III - (505) 334-6178.
Rio Brazos Road
cc, NM 87410

APPROVED BY:

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 8/8/98

> Submit Original Plus 1 Copy to appropriate District Office

| rict IV - (505) 827-7131 | | |
|---|--|---|
| REQUES | ST FOR APPROVAL TO ACCEPT | SOLID WASTE |
| RCRA Exempt: Non-Exe | mpt: 🔯 | 4. Generator Williams Field |
| Verbal Approval Received: | Yes No No | 5. Originating Site Compressor |
| 2. Management Facility Destination | Sunco DISPOSA L | 6. Transporter ຽປΝCo |
| 3. Address of Facility Operator CR | • | 8. State NM |
| 7. Location of Material (Street Addre | ess or ULSTR) Williams Compressor | ~ . |
| 9. <u>Circle One</u> : | | |
| PROVE the material is not-hall listing or testing will be appro | accept non-exempt wastes must be accommodated accommodate accommodated | ompanied by necessary chemical analysis to on of origin. No waste classified hazardous by |
| | | |
| BRIEF DESCRIPTION OF MATERIA | • | |
| KAIN WATER | MIKED with WASh | wster |
| | | |
| | | All Fluid 13 |
| • | WEGEINEII) | STORED IN TANKS |
| | DECEIVED | At the 29-6 #4 |
| | OIL COM. DIV. | |
| Estimated Volume 2400 bb/s | cy Known Volume (to be entered by the op | perator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Mulauf All Waste Management Fecility | yAuthonzed Acent . | LMGR DATE: 7-30-97 |
| TYPE OR PRINT NAME: MICH | ARL TALOUICH TE | LEPHONE NO. <u>505-334-6186</u> |
| | | |
| (This space for State Use) | | •1 |
| APPROVED BY: Demy | g. Tout TITLE: Geol | 09/ST DATE: 7/31/97 |
| 1 | | • |

TITLE:

CERTIFICATE OF WASTE STATUS

| 1. Generator Name and Address: | 2. Destination Name: |
|--|--|
| WILLIAMS FIELD SERVICE
P.O. BOX 215 | SUNCO |
| BLOOMFIELD, NM 87413 | |
| 3. Originating Site (name): Aztec 29-6#2 30-5 32-8#1 Carracas 29-6#3 30-8 32-8#2 Cedar 29-6#4 31-6 32-8#3 Coyote 29-7 32-7 32-9 Decker | Hart Location of the Waste (Street address &/or ULSTR): Manzanares PLA-9 Trunk A Middle Pipkin Trunk B Kernaghan Moore Pritchard Trunk C N-30 Pump Trunk F |
| Attach list of originating sites as appropriate | LaCosa Navajo Sims Trunk L
Trunk M |
| 4. Source and Description of Waste RAIN WATER & WASH WATER FOR THE MONTH OF: | |
| , BUSTER GASTON | representative for: |
| (Print Name) | |
| | do hereby certify that. |
| PRODUCTION OPERATORS, INC. according to the Resource Conservation and 1988, regulatory determination, the above de EXEMPT oilfield waste X NO | do hereby certify that, Recovery Act (RCRA) and Environmental Protection Agency's July, escribed waste is: (Check appropriate classification) ON-EXEMPT oilfield waste which is non-hazardous by characteristic palysis or by product identification |
| PRODUCTION OPERATORS, INC. according to the Resource Conservation and 1988, regulatory determination, the above de EXEMPT oilfield waste X NO an | Recovery Act (RCRA) and Environmental Protection Agency's July escribed waste is: (Check appropriate classification) ON-EXEMPT oilfield waste which is non-hazardous by characteristic |
| PRODUCTION OPERATORS, INC. according to the Resource Conservation and 1988, regulatory determination, the above de EXEMPT oilfield waste X NO an and that nothing has been added to the exemption of the exempti | Recovery Act (RCRA) and Environmental Protection Agency's July ascribed waste is: (Check appropriate classification) ON-EXEMPT oilfield waste which is non-hazardous by characteristic nalysis or by product identification onto or non-exempt non-hazardous waste defined above. In documentation is attached (check appropriate items): Other (description): |

TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL CONCENTRATION

Client:

Production Operators

Project:

None Given

Sample ID:

29-6 #4 0397G01172

Laboratory ID: 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
Lével | 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:

2508 W. Main Street Farmington, New Mexico 87401

Quality Control / Quality Assurance

* * * 10 " " (A. ed) 14. 45.

Spike Analysis / Blank Analysis TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Client:

Production Operators

Date Reported:

07/15/97

Project:

None Given

Date Analyzed:

6/30-7/797

Sample Matrix:

Water

Date Received:

06/20/97

Spike Analysis

| | Spike | Sample | Spike | |
|-------------|------------------|---------------------|--------------|--------------------|
| Parameter | Result
(mg/L) | Result
(mg/l.) | Added (mo#) | Percent
Recover |
| . ardinatal | (mArc) | (010/10) | (mg/L) | Kecokai |
| 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 | * | •• | * | t t |

Method Blank Analysis

| Parameter | Result | Detection | Units |
|-------------|--------|-----------|-------|
| raraillelei | Vegair | Limit | Umis |
| 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 ____

475

2506 W. Main Street Farmington, New Mexico 87401

Quality Control / Quality Assurance

Known Analysis TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Client:

Production Operators

Project:

Sample Matrix:

None Given

Water

Date Reported:

07/15/97

Date Analyzed:

6/30-7/797

Date Received:

06/20/97

Known Analysis

| .010
).94
.000 | .0.010
1.00 | 100%
94% | mg/L
mg/L |
|----------------------|----------------------|---|---|
|).94 | 1.00 | 94% | mg/L |
| | ., | | • • |
| .000 | 4.000 | 4000/ | |
| | 1.00C | 100% | mg/L |
| 1.01 | 1,00 | 101% | mg/L |
| 1.02 | 1.00 | 102% | mg/L |
| .008 | 0.008 | 95% | mg/L |
| .011 | 0.010 | 110% | mg/L |
| 1.02 | 1.00 | 102% | mg/L |
| | 1.02
.008
.011 | 1.02 1.00 .008 0.008 .011 0.010 | 1.02 1.00 102% .008 0.008 95% .011 0.010 110% |

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:

2506 W. Main Street Farmington, New Mexico 87401

Quality Control / Quality Assurance

Known Analysis TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Client:

Production Operators

Project:

Water

Sample Matrix:

None Given

Date Reported:

07/15/97

Date Analyzed:

6/30-7/797

Date Received:

06/20/97

Known Analysis

| Found
Result | Known
Result | Percent | Units |
|-----------------|--|---|---|
| жовк | i veson | 1,000,10,1 | · · · · · · · · · · · · · · · · · · · |
| 0.010 | 0.010 | 100% | mg/L |
| 0.94 | 1.00 | 94% | mg/L |
| 1.000 | 1.00G | 100% | mg/L |
| 1.01 | 1.00 | 101% | mg/L. |
| 1.02 | 1.00 | 102% | mg/L |
| 0.008 | 0.008 | 95% | mg/L |
| 0.011 | 0.010 | 110% | mg/L |
| 1.02 | 1.00 | 102% | mg/L |
| | 0.010
0.94
1.000
1.01
1.02
0.008
0.011 | Result Result 0.010 0.010 0.94 1.00 1.000 1.000 1.01 1.00 1.02 1.00 0.008 0.008 0.011 0.010 | Result Result Recovery 0.010 0.010 100% 0.94 1.00 94% 1.000 1.00C 100% 1.01 1.00 101% 1.02 1.90 102% 0.008 0.008 95% 0.011 0.010 110% |

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:

TOXICITY CHARACTERISTIC LEACHING PROCEDURE **HSL VOLATILE COMPOUNDS**

1160 Research Drive Bozeman, Montana 59718

Client:

PRODUCTION OPERATORS

Sample ID: 29-6 #4 Project ID:

Water

Lab ID: Matrix: None Given

B973260

0397G01172

Date Reported: Date Sampled:

07/02/97

Date Received:

06/20/97

Date Extracted:

06/24/97 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.

Reviewed

TOXICITY CHARACTERISTIC LEACHING PROCEDURE HSL SEMI-VOLATILE COMPOUNDS

1160 Research Drive Bozeman, Montana 59718

Client:

PRODUCTION OPERATORS

Sample ID:

29-6 #4

Water

Project ID:

None Given

Lab ID: Matrix:

B973260

0397G01172

Date Reported:

07/21/97

Date Sampled:

06/20/97

Date Received: Date Extracted: 06/24/97

Date Analyzed:

06/27/97 07/01/97

| | | Date | Anaryzeu: | 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.

Reviewed F. D.

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 | PΩL | 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 | mġ/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)

Reviewed

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 | لــــــــــــــــــــــــــــــــــــ | | |
| 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 | % | | ٠. | | |
| 1,2-Dichloroethane-d4 | 95 | | · | | |
| Bromofluorobenzene | 101 | | | | |
| Toluene-d8 | 100 | | | | |

ND - Not Detected at Practical Quantitation Level (PQL)

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

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 | О | 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 | o . | 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

F.O.

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 |

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 | | | <u> </u> | |
| 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 | NĎ | 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 | |

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)

Reviewed_ \vdash b.

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 PARA | METERS | | |

| | Spike
Added | MSD
Conc. | MSD
Recovery | RPD | |
|-----------------------|----------------|--------------|-----------------|-----|---|
| Parameter | (mg/L) | (mg/L) | (%) | (%) | 1 |
| 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 | |



CHAIN OF CUSTODY RECORD

| Client/Project Name | | | Proje | ct Location | | :: | | | , | | | | _ | |
|--|-----------------|--|---------------------|--|---------------------------------------|---------------------------------------|----------------------|-----------|-----------|--|---------|-----------------|---------|---|
| Production | <u> </u> | eroton | λ | | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | /,, | · / | ANAL | YSES / | PAR | AMETER | IS
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| Sampler: (Signature) | | | Chain of Cu | stody Tape I | No. | | | | - C | <u> </u> | 7 | Por | narks | |
| Production Sampler: (Signature) RUSSEII | Keller | . | | | | | de s | 1.8 | 183 | 7 / | , | Leii | | |
| Sample No./
Identification | Date | Time | ்
Lab Number | | Matrix | | No. of
Containers | TCLP | Nami | | | | | · 人 · · · · · · · · · · · · · · · · · · |
| 29-60#4 | 10-20-97 | 1245 | | | H2O | | 4 | | | | | | | |
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| Relinquished by: (Signature) | 2 1/ | 1/1/1 | | Date | Time | Received | by: (Sigr | nature) | · - · - | ^ | | | Date | Time |
| LKu | DMI . | MILL | | 6-20-97 | 12:4581 | Bu | ala | گري | Jast | ton | • | | 6-20-97 | 2:20 P |
| Relinquished by: (Signature) | | | | Date | Time | Received | by: (Sigr | nature) | | | | | Date | Time |
| Busten X | Jak | <u> </u> | \$ | 6-20-97 | 1435 | (h | nin . | Ro | ume | 4) | | | 6-20-97 | 1435 |
| Relinquished by: (Signature) | | | | Date | Time. | Received | by labor | atory: (S | ignature) | | | | Date | Time |
| | | | · · · · · | 100 | | | · | | | | | | | |
| | | | Inter-Mo | untain l | abora | tories. | Inc. | | 71.04 | | | | | |
| | | | | | The way | | | | | | | | 9 49 6 | . 4 🗪 |
| 1633 Terra Avenue
Sheridan, Wyoming 828
Telephone (307) 672-89 | 01 Gille | 1 Phillips Circ
ette, Wyoming
ephone (307) | g 82718 Farm | West Main Str
ington, NM 87
phone (505) 32 | 401 | 1160 Rése
Bozeman,
Telephone | Montana | 59715 | · Co | 183 SH 30
llege Stati
lephone (4 | ion, TX | 77845
6-8945 | 474 | 47 U |

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

District IV - (505) 827-7131

c, NM 87410.

New Mexico Energy Laterals 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: Non-Exempt: | 4. Generator Williams Field Service |
|--|---|
| Verbal Approval Received: Yes 🔲 No 🔟 | 5. Originating Site ELCEDIO Plun T |
| 2. Management Facility Destination SUNCO DIS POSAL | 6. Transporter SUNCO |
| 3. Address of Facility Operator CR 3500 # 345 AZ+ec , NM. | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) モレ Ceono | ^ . |
| 9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accepted of the control | companied by necessary chemical analysis to |
| All transporters must certify the wastes delivered are only those consigne | ed for transport. |
| Estimated Volume 10066/s + cy Known Volume (to be entered by the operation of the Management Facility Authorized Agent TYPE OR PRINT NAME: MICHAEL TAISURCH TE | |
| (This space for State Use) APPROVED BY: Denny D. Frent TITLE: Geold APPROVED BY: Almy Rollinson TITLE: | DATE: 7/28/97 |

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 isExemptNon-Exempt and that it has been identified as non hazardous by characteristic analysis or by product identification as required. |
| ECCEDEO Originating Site: S- T- R- 1/4 1/4 County Rro Arrib State MM |
| Physical Address if appropriate: |
| Source and description of waste: <u>Amine</u> , TEF, makeup water
Scale, dirt. |
| |
| Check the appropriate line(s): |
| MSDS Information sheetRCRA TCLP AnalysisRCRA Metals AnalysisCorrosivity, Ignitability, ReactivityExempt |
| I futher certify that there has been no change in the waste stream at the facility generating the waste since |
| Signature Maux Tout Printed Name FRANK FORT Title Superintendent Date July 25, 1887 |
| Destination: Sunco Disposal, 345 CR 3500, Aztec, San Juan Co. N M |

unici I - (505) 393-6161). Box 1980 bbs., NM 88241-1980 urici II - (505) 748-1283 1 S. First csia, NM 88210 uict III - (505) 334-6178 Rio Brazos Road .c. NM 87410

urict IY - (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

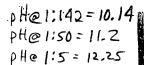
> Submit Original Plus I Čopy to appropriate District Office

| REQUEST FOR APPROVAL TO ACCEPT | SOLID WASTE |
|---|---|
| 1. RCRA Exempt: Non-Exempt: | 4. Generator FIELD SERVICE |
| Verbal Approval Received: Yes No No | 5. Originating Site COMP. STATION |
| 2. Management Facility Destination GUNLO DISPOSAL | 6. Transporter SUNLO TRUCKING |
| 3. Address of Facility Operator 346 CR 3500 ALTEL SAN JUAN L | 8. State NM |
| 7. Location of Material (Street Address or ULSTR) BALLARD COMP. STATION | |
| 9. <u>Circle One</u> : | |
| A.) All requests for approval to accept oilfield exempt wastes will be accepted acceptator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accepted. PROVE the material is not-hazardous and the Generator's certification listing or testing will be approved. All transporters must certify the wastes delivered are only those consignation. | companied by necessary chemical analysis to ion of origin. No waste classified hazardous by |
| BRIEF DESCRIPTION OF MATERIAL: | |
| WATER + | FROM INLET |
| GAS SCRUBBER | |
| | DECEIVED N JUL 2 5 1997 |
| | OIL CON. DIV |
| Estimated Volume 80 BBL cy Known Volume (to be entered by the c | operator at the end of the haul) ———————————————————————————————————— |
| SIGNATURE: Management Fecility Authorized Agent TITLE: DISPOSA | al mar DATE: 7-25-97 |
| TYPE OR PRINT NAME: MICHAEL THOSICH TO | ELEPHONE NO. 565 334 6186 |
| | •• |
| APPROVED BY: Deny B. Paint TITLE: GEO | |
| APPROVED BY: John Colinson TITLE: Field | Rep I DATE: 7-25.97 |

CERTIFICATE OF WASTE STATUS

| l Sa | ndra D. Miller | representative | |
|--|--|--|----|
| for El | . Paso Field Ser | vice Co. | |
| 61 | 4 Reilly Ave., | Farmington, NM 87401 | |
| do hereby cert | ify that according | to the Resource Conservation and Recovery Act | |
| | described waste is | ExemptNon-Exempt and that it has been identified ic analysis or by product identification as required. | |
| Originating Sit | e: S-26 T-26N | R-9W 1/4 NE 1/4 SE County San Juan State NM | |
| Physical Addre | ess if appropriate:_ | 30 miles Southeast of Bloomfield, NM | |
| Source and des | scription of waste: | Sludge from inlet gas scrubber at Ballard | |
| Compressor | Station which i | s located 22.5 mi. S. of Bloomfield, NM on Hwy | 41 |
| Then 7 mi. | E. on CR 7425. | | |
| | | | |
| Check the app | ropriate line(s): | | |
| RCRA TO | nformation sheet
CLP Analysis
letals Analysis
ty, Ig nitabilit y, Re | activity | |
| I futher certify generating the Signature Printed Name | waste since 1957
Tombe W W | elle, | |
| Date | 7/14/97 | • | |

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





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 COMPON | IENT 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 - I | 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 | % YOLATILE, 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) | release of Heat. |
| | s, chlorine dioxide, phosphorus, ssium persulfate, and tetrahydrofuran. |
| | Will not decompose. |
| HAZARDOUS POLYMERIZATION | |
| | Will not occur |

| VI - FIRE AND EX | PLOSION HAZARD DATA |
|------------------------------------|-------------------------|
| FLASH POINT (Method used) None | FLAMMABLE LIMITS IN AIR |
| EXTINGUISHING MEDIA N/A | |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | |
| None | |

| VII - TOXICITY | | |
|---|--|------|
| Sodium metasilicate ACGIH 2 mg/m ³ Ceiling OSHA None | | ing |
| MEDICAL CONDITIONS A | GGRAVATED BY EXPOSURE | |
| | No known medical conditions aggravated by expo | sure |

Skin: May cause irritation.

Eyes: Liquid in the eye can cause severe irritation.

Ingestion: Ingestion can cause severe irritation and pain in mouth,
throat, esophagus and stomach.

Inhalation: Inhalation of solution mist can cause mild irritation.

VIII - FIRST AID

<u>Skin:</u> 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.**

<u>Ingestion:</u> If the person is conscious, give large quantities of water to dilute product. Do NOT induce vomiting. Get medical attention immediately.

<u>Inhalation:</u> 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.

XI - ST(iE AND HANDLING PRECAUTI

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.