GW - 156

GENERAL CORRESPONDENCE

YEAR(S):

2006 - 1992

AFFIDAVIT OF PUBLICATION

Ad No. 53441

STATE OF NEW MEXICO
County of San Juan:

CONNIE PRUITT, being duly sworn says: That she is the ADVERTISING MANAGER of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication and appeared in the Internet at The Daily Times web site on the following day(s):

Friday, May 12, 2006.

And the cost of the publication is $199.75.

Connie Pruitt

ON 5/19/06 CONNIE PRUITT appeared before me, whom I know personally to be the person who signed the above document.

Wynell Corey

My Commission Expires November 17, 2008.

COPY OF PUBLICATION

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-248) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their Trunk A Booster Station located in the NE/4 NW/4, Section 8, Township 29 North, Range 8 West, NMPM, San Juan County, New Mexico. Approximately 16 barrels per day of process wastewater is collected in an above ground, closed top tank prior to transport to an OCD approved off-site disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 460 feet with a total dissolved solids concentrations ranging from 200 to 2000 mg/l. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. The OCD proposed conditions can be viewed at www.emnrd.state.nm.us/ocd in the Draft Discharge Permit for this facility.

(GW-249) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their Trunk B Booster Station located in the SW/4 SW/4, Section 28, Township 31 North, Range 8 West, NMPM, San Juan County, New Mexico. Approximately 16 barrels per day of process wastewater is collected in an above ground, closed top tank prior to transport to an OCD approved off-site disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 500 feet with a total dissolved solids concentrations ranging from 200 to 2000 mg/l. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. The OCD proposed conditions can be viewed at www.emnrd.state.nm.us/ocd in the Draft Discharge Permit for this facility.

(GW-250) - Williams Field Service, David Bays, Senior Environmental Specialist, 188 CR 4900, Bloomfield, New Mexico 87413, has submitted a discharge plan renewal application for their Coyote Springs Compressor Station located in the SW/4 NE/4, Section 30, Township 32 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 16 barrels per day of process wastewater is collected in an above ground, closed top tank prior to transport to an OCD approved off-site disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 100 feet with a total dissolved solids concentrations ranging from 200 to 2000 mg/l. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. The OCD proposed conditions can be viewed at www.emnrd.state.nm.us/ocd in the Draft Discharge Permit for this facility

(GW-216) – Arapahoe Drilling Company, Mr. Steve Schalk, P.O. Box 26687, Albuquerque, New Mexico 87125, has submitted a discharge plan renewal application for their Farmington facility located in the NW/4, Section 13, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico. All effluents that may be generated at the facility will be collected in a closed top tank transported offsite to an OCD approved disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 70 feet with a total dissolved solids concentrations of approximately 900 mg/l. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. The OCD proposed conditions can be viewed at www.emnrd.state.nm.us/ocd in the Draft Discharge Permit for this facility.

(GW-156) – Key Energy Services, Inc. Four Corners Drilling, Ms. Cynthia Gray, Consultant to Key Energy Services, has submitted a discharge plan renewal application for the Farmington facility located in the SW/4 SW/4 of Section 21, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 60 barrels per week of wastewater is collected in a double walled steel tank then transported offsite for disposal into Key Energy Class II Disposal well. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. Groundwater most likely to be affected by an accidental discharge is at a depth of 45 feet with a total dissolved solids concentrations ranging from approximately 200 mg/l to 2000 mg/l. The OCD proposed conditions can be viewed at www.emnrd.state.nm.us/ocd in the Draft Discharge Permit for this facility.

(GW-171) – BP America Production Company, Mr. Kevin Hansford, 200 Energy Court, Farmington, New Mexico 87401 has submitted a renewal application for their Gallegos Canyon 3-C Compressor Station located in the SW/4 SE/4 of Section 29, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. All fluids generated at this site are contained within collection steel tanks prior to transport offsite for disposal in an OCD approved facility. Ground water most likely to be affected in the event of an accidental discharge at the surface is at a depth ranging from approximately 200 to 250 feet with a total dissolved solids concentration of approximately 1000 mg/l. The discharge permit addresses how oilfield products and waste will be properly handled, stored and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water. The OCD pro-

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Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 6th day of April 2006.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL
MARK FESMIER, P.E.,
Director

Legal #78927
Pub. May 12, 2006

SMA
CIVIL/ENVIRONMENTAL
SCIENTISTS & ENGINEERS

Letter of Transmittal

ATTENTION: MR. JACK FORD **DATE: 4/27/06**

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

RECEIVED
APR 28 2006

PROJECT REFERENCE: KEY ENERGY SERVICES 5651 US HWY 64 FACILITY DISCHARGE PLAN
PROJECT NO: 5115935
Description:
RENEWAL OF Facility Discharge Plan Aopplication for Service Companies, Gas Plants, Refineries, Compressor, Geothermal Facilities, and Crude Oil Pump Stations

On Behalf of Key Energy Services, SMA is sending you the following:

No. Originals	No. Copies	
1		Discharge Plan Application (Renewal)

REMARKS:

IT IS OUR UNDERSTANDING THAT A CHECK HAS ALREADY BEEN RECEIVED BY NM OCD RELATIVE TO THIS RENEWAL APPLICATION. HOWEVER, IF ADDITIONAL FUNDS ARE REQUIRED, PLEASE DO NOT HESITATE TO CONTACT ME OR MR. BOB JAMES OF KEY ENERGY. A SECOND COPY OF THIS RENEWAL APPLICATION HAS BEEN FORWARDED TO YOUR AZTEC DISTRICT III OFFICE. THANK YOU FOR YOUR ASSISTANCE WITH THIS MATTER.

RESPECTFULLY SUBMITTED,

CYNTHIA A. GRAY, CHMM
SOUDER MILLER & ASSOCIATES
ON BEHALF OF KEY ENERGY SERVICES.

Tel. (505) 325-5667 Fax (505) 327-1496
P. O. BOX 2606 • FARMINGTON, NM 87499
-TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT-

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

March 22, 2006

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Ms. Robyn Miller, CLA
Key Energy Services, Inc.
6 Desta Drive, Suite 4400
Midland, Texas 79705

RE: Farmington Service Facility (formerly Four Corners Drilling) – GW156
Farmington Service Facility (American Energy Services) – GW-235

Dear Ms. Miller:

Enclosed is a copy of the renewal application for the formerly Four Corners Drilling company facility in Farmington covered by the discharge permit GW-156. The enclosed does not include the site plan, which was too large to copy, and include. I would suggest that the current renewal application include a site plan with the application. One copy of the renewal application should be kept in your files and one copy kept at the facility site. Be sure to send one copy of the renewal application to the Aztec OCD office. Review the regulations for public notice requirements as they have changed since the prior renewal.

A copy of the renewal application and a cover sheet from the environmental consulting firm is enclosed for the discharge permit GW-235. Key Energy Services, Inc has not notified the Oil Conservation Division (OCD) of the acquisition of American Energy Services. A separate letter should be addressed to the OCD Santa Fe office notifying the OCD that a change of ownership has occurred and the date of change of ownership. The application for this facility is much too long to copy and it is suggested that you contact the environmental company that prepared the initial application for a copy. If this is not possible then it is suggested that someone in your Farmington office contact the OCD District office in Aztec to see if they can go to that office and copy the application.

Renewal applications for both facilities must be received in the Santa Fe office by April 15, 2006. Please be advised that Key Energy Services, Inc. is in violation of WQCC Rule 20 NMAC 6.2.3.3104 and 20 NMAC 6.2.3.3106.F that could lead to the issuance of a compliance order that includes a financial penalty. It is the operator's responsibility to comply with all Federal, State and Local Rules and Regulations.

Sincerely,

W. Jack Ford, C.P.G.
Environmental Bureau
Oil Conservation Division

cc: Aztec OCD District Office

Key Energy Services, Inc.
Four Corners Division
P.O. Box 900
5651 US Highway 64
Farmington, NM 87499

Phone: 505-327-4935
Fax: 505-327-4962

JUN 18

JUNE 16, 1999

ROGER ANDERSON
ENVIROMENTAL BUREAU
2040 S. PACHECO
SANTA FE, NM 87505

MR ANDERSON,

IT HAS COME TO MY ATTENTION THAT KEY ENERGY SERVICES; INC. HAS PAID FOR DISCHARGE PLAN FEES TWICE. I HAVE BEEN IN CONTACT WITH JACK FORD AT THE OIL AND CONSERVATION DIVISION AND FOUND THAT WE PAID $740.00 THE FIRST TIME IN JANUARY OF THIS YEAR ON OUR CHECK# 113623, AND $690.00 IN APRIL ON OUR CHECK# 116853.

PER MY CONVERSATION WITH JACK FORD HE INSTRUCTED ME TO PUT OUR REQUEST FOR A REFUND OF THE 2ND CHECK, FOR $690.00 IN WRITING TO YOU.

THE CHECK SHOULD BE MADE OUT TO:

KEY ENERGY SERVICES, INC.
P.O. BOX 900
FARMINGTON, NM 87499

ATTN: TAMI

THANK YOU IN ADVANCE FOR YOUR HELP IN THIS MATTER.

SINCERELY,

Tami Scott

TAMI SCOTT
A/P MANAGER

OK to pay

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: NMP3600978835391

2. Page 1 of 1 — Information in the shaded area is not required by Federal law.

3. Generator's Name and Mailing Address: General Waste Corp, 5047 Edith Blvd. N.E., Albuquerque, NM 87108

4. Generator's Phone: (505) 343-9888

A. State Manifest Document Number: 50391

B. State Generator's ID:

5. Transporter 1 Company Name: Safety-Kleen (TG), Inc.

6. US EPA ID Number: SCD987574647

C. State Transporter's ID:

D. Transporter's Phone: (505) 345-1515

7. Transporter 2 Company Name: Triad Transportation

8. US EPA ID Number: OKD981588781

E. State Transporter's ID:

F. Transporter's Phone: (800) 364-9233

9. Designated Facility Name and Site Address: Safety-Kleen Southwest, 1340 W. Lincoln St., Phoenix, AZ 85007

10. US EPA ID Number: AZD049318009

G. State Facility's ID:

H. Facility's Phone: (602) 258-5155

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Hazardous Waste Solid, nos, (chrome, sand) 9 NA3077 PG III	X	020	DF	09000	P	D007
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

A: NMGWF-0001 ERG#171

B:

C:

D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

In Emergency Call 3E @ 1-800-468-1760 (581-250)

Site=Four Corners Drilling-5621 Hwy 64, Farmington, NM"

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
For GENERATOR: MANNY OHIRI		10	15	99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TERRY L. STUDY	Terry L. Study	10	15	99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

EXHIBIT

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

Style CF 17 LABELMASTER, AN AMERICAN LABELMARK CO., CHICAGO, IL 60646 (800)621-5808

EPA Form 8700-22 (Rev 9-88) Previous editions are obsolete

ORIGINAL - RETURN TO GENERATOR

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Page 1 of 2

Generator Name/Location: Four Corners Drilling - Farmington NM

EPA I.D. Number: NMP 360097883

Waste Profile or ARF Designation: See B1

Manifest Number: 50391

EPA Waste Number(s): See B1

Waste Analysis Available? Yes (attached) _____ No ✓ On file at receiving facility _____

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☐ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). NOTE-1: A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268.48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on FORM B, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☒ **(2a) Restricted Waste Notification**

I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**

The waste contains the following contaminants subject to treatment [check all that apply]:

_______ §268.45(b)(1) - Toxicity characteristic debris;

_______ §268.45(b)(2) - Debris contaminated with listed waste;

_______ §268.45(b)(3) - Cyanide reactive debris.

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on Form B, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ *I notify pursuant to 40 CFR §268.7(a)(3) that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that this waste is subject to a national capacity variance under 40 CFR §268 Subpart C, or a case-by-case extension under 40 CFR §268.5, or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: [signature] DATE: [illegible]

PRINT NAME: [illegible handwriting] TITLE: [illegible]

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location: Four Corners Drilling — Page 2 of 2

EPA I.D. Number: NMR 36009 7883 — Manifest: 50391

Waste Profile or ARF	Container No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
NMGWF-0001	2 a	D007			NWW	25

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	Carbon tetrachloride
6	Chlorobenzene
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	1,1,2-Trichloroethane
25	Trichlorothylene
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanool
33	2-Nitropropane

Legends 34-43 RESERVED

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 - 264

Container Contents

Page 1 of 1

Safety-Kleen.

☒ Bulk ☐ Mixed Lab

Manifest # 50391

Manifest page _____ Line Item _____

RQ _____

	Year	Month	Day	Code	Number	Chemist
Container Number:	9	9	05	07	NMGWF- 01-720	TLS

DOT Shipping Name:	Hazardous Waste Solid, NOS			
Hazard Class: Division:	9	UN/NA Number	NA3077	PG III RQ
Container Type:	Poly	Size: 55	Chemical Constituents:	(Chrome, sand)

Profile Number	NMGWF-0002
Disposal Site	
Approval Code	

Line No.	Material Description	PS	Material Quantity	I.C.	EPA Waste Code Number
01					
02	Sand, Chrome	S	1X450#	B	D007
03					
04					
05					
06					
07					
08					
09	450 #				
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

PS - PHYSICAL STATE
L - LIQUID/POURABLE
S - SOLID X - SLUDGE

IC - INTERNAL CONTAINER
G - GLASS M - METAL
P - PLASTIC F - PAPER

This Lab Pack list continues: YES ☐ NO ☐

YELLOW: DISPOSER • PINK: TSD • GOLD: GENERATOR

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: _____ PAGE: ___ OF ___

PLI Accession #:

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER:

COMPANY: GENERAL WASTE CORP.
ADDRESS: 5047 EDITH, BLVD. NE.
ALBUQUERQUE, NM. 87107
PHONE: (505) 343-7282
FAX: (505) 842-8706
BILL TO: GENERAL WASTE CORP
COMPANY: SAME / EDITH BLVD. NE.
ADDRESS: ALBUQUERQUE, NM. 87107

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
01	4/29/99	11:00 AM	NAQ	

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
																							X			1

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: FOUR CORNER
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS: 1
CUSTODY SEALS: (Y) N/NA
RECEIVED INTACT: YES
BLUE ICE/ICE: N

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☒ 1 WEEK (NORMAL) ☐

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

I, Francine Tonno w/ Pinnacle Lab, witness sampling @ GWC.

RELINQUISHED BY: 1.

Signature: [signature] Time: 11:00 AM
Printed Name: Date: 4/29/99
Company: GWC
See reverse side (Force Magure)

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.

Signature: [signature] Time: 1165
Printed Name: FRANCINE TONNO Date: 4/29
Company: Pinnacle Laboratories Inc.

GENERAL WASTE CORPORATION

NM 0000421727

P O. Box 90186
Albuquerque, N.M. 87109-0186

(505) 888-9722
(505) 888-9723
Fax (505) 888-9724

GENERATOR'S MATERIAL PROFILE DATA SHEET

GENERAL WASTE USE ONLY

Approval No _____ Sales Rep. _____

Sample No _____ Wastestream No. _____ of _____

Date Received _____ Date approved / rejected _____

I. GENERATOR INFORMATION

Generator Name FOUR CORNER DRILLING
Facility Address 5621 US HWY 64
FARMINGTON, NM. 87401

Title _____ Tel No. _____
EPA ID No. 2 NMP360097883
Generator Status: Large Qty. _____
Small Qty ___ Cond. Exempt _____
SIC Code _____

II. BILLING INFORMATION

Company Name _____
Contact _____
Mailing Address _____

Tel No. _____ Fax No. _____

III. GENERAL WASTE INFORMATION

Common Name of Waste _____
Generating Process _____

Rate of Generation Generated 2/11/98
Volume in storage _____
Radioactive Material __Yes __No
Biomedical / Etiological Waste __Yes __No
Polychlorinated Biphenyls __Yes __No
Cyanide / Sulfide Waste __Yes __No
Solvent Regulated Waste __Yes __No
California List Regulated Waste __Yes __No
Pesticide / Herbicide Waste __Yes __No
EPA Hazardous Waste No(s) D007
State Waste No(s) _____

IV. SHIPPING INFORMATION

Is Waste DOT Hazardous __ Yes __ No
Proper DOT Shipping Name _____
DOT Hazard Class _____
DOT ID No. _____ Reportable Qty. _____ lbs.
DOT Emergency Response Guide No. _____
Emergency Response Tele. No. _____
Type of container _____
Method of Transportation _____

V. PHYSICAL PROPERTIES

Physical State __ Liquid __ Sludge __ Mixed X Solid
Number of Layers _____ Percentage of each ____
Total Solids ____ % Wt. Suspended Solids ____ %Wt.
BTU _____ lb. Sp. Gravity _____ Water _____ %Wt.
Flashpoint ____ F (closed cup) ph (if aqueous) _____
Oder _____
Appearance ORANGE CRYSTAL
Is this waste pourable? _____ Pumpable? _____
MSD Sheet attached? ____ Is a sample provided? ___
Additional Analysis? _____
Method of Disposal _____

BRIDGEAU ENVIRONMENTAL SERVICES

USTOMER NO.	BILLING ID	SALESPERSON	DATE 4/3 - 5/3
CKUP DATE	CLIENT P.O.	DISP. SITE SWO	COUNTY

LLING CUSTOMER

General Waste Corp

PICK-UP CUSTOMER AND ADDRESS

T. Stady

CHEMIST/DRIVER

TRANSPORTATION (04000)	UNIT/PRICE 30/55/3-5	UNIT/PRICE 85	EXTENSION
0-50 MILES			
51-100 MILES			
101-200 MILES			
200-500 MILES			
► 500 MILES			
TOTAL			

LABOR (04045)	HOURS	PRICE
emist T. STADY	5 1/4	
THER D. lalonde	2 3/4	
ject Manager		

PROFESSIONAL SERVICES (04035)	QUANTITY	PRICE
SAMPLE ANALYSIS		
WASTE STREAM EVALUATION		

EQUIPMENT (04065)	QUANTITY	PRICE

POSAL (04060)

MATERIALS (04040)	QUANTITY	PRICE
85-G Salvage Drum-New		
55-G 17C, 17H, 17E Recon. 14G POL		
~~55-G 37M - New~~	1	
30-G ~~17H - New~~ 1poly	3	
~~30-G, 20-G Fiber New~~ 10 POF	1	
5-G Pail - 37E, 37A-New, 34-5, 35-50	8	
Dot Spec. Wooden Box		
Drum Thief		
Disposal Coliwassa		
Absorbant, Clay, Vermiculite, CornCob - Bag	6	
Drum Pump-Use & Decon.		
4 Mil Liners		
Reactive Bags		
Dot Labels		
EPA Labels		
Sample Bottles		
Protective Gear - Level I		
~~Protective Gear - Level II~~		
Packing Materials 5G		
~~Packing Materials 20G~~		
~~Packing Materials 30G, 55G~~		

OTHER (04055)	QUANTITY	PRICE
Minimum Charge		

ROFILE/LABPACK	DESCRIPTION	QTY.	UM	UNIT PRICE

arks

CCTG-1	2. Customer Service Rep.	3. Customer Service Supv.	4. Operations

'346 (3-94)

GENR SIGNATURE

FACILITY COPY

FOUR CORNERS DRILLING CO.
5651 U.S. HWY. 64
P. O. BOX 1067
FARMINGTON, NEW MEXICO 87499
•
TELEPHONE: (505) 326-3371
FAX: (505) 326-3370

February 11, 1998

Tom Morris
General Waste

Mr. Morris:

This is to authorize Mr. Tom Morris of General Waste to sign necessary paper work for Four Corners Drilling Company to obtain a provisional EPA identification number.

Sincerely,

FOUR CORNERS DRILLING COMAPNY

W. E. Lang

Earl Lang
VP

Please print or type. (Form designed for use on elite (pica) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NMP360097883 — Manifest Document No. 50394

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
Four Corners Drilling
5621 U.S. Hwy. 64
Farmington, NM 87401

4. Generator's Phone (505) 343-9888

A. State Manifest Document Number: 50394

B. State Generator's ID:

5. Transporter 1 Company Name: Safety-Kleen (TG), Inc.

6. US EPA ID Number: SCD987574647

C. State Transporter's ID:

D. Transporter's Phone: (505) 345-1515

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
Safety-Kleen Southwest
1340 W. Lincoln St.
Phoenix, AZ 85007

10. US EPA ID Number: AZD049318009

G. State Facility's ID:

H. Facility's Phone: (602) 258-6155

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Oxidizing Solid, nos, (sodium bichromate) 5.1 UN 1479 PG II RQ(D001,D007)	X	020	DF	10000	P	D001, D007
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
A: 2088501 ERG#140
B:
C:
D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
In Emergency Call 3E @ 1-800-468-1760 (581-250)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
For Generator	Manny Olivi	05 11 89

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Christopher O. May		05 11 95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

Style CF 17 LABELMASTER, AN AMERICAN LABELMARK CO., CHICAGO, IL 60646 (800)621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL-RETURN TO GENERATOR

FORM B1 *(Must be accompanied by Form A)*

Generator Name/Location Four Corners Drilling Page 2 of 2

EPA I.D. Number : NMP360097883 Manifest : 50394

Waste Profile or ARF	Category No.	EPA or State Waste Code	Variance Date	Description/Sub Category	Treatability Group (WW or NWW)	Waste Constituents or Legend #
2088501	29	D001		Oxidizer	WW	
↓	↓	D007			↓	25

CONSTITUENTS IN SOLVENT, CALIFORNIA LIST AND CHARACTERISTIC WASTES.

F001 - F005 spent solvents

Legend #	Constituent Name
1	Acetone
2	Benzene
3	n-Butyl alcohol
*4	Carbon disulfide
5	Carbon tetrachloride
6	Chlorobenzene
7	Cresol (m-and p-isomers)
8	o-Cresol
*9	Cyclohexanone
10	1,2-Dichlorobenzene
11	Ethyl Acetate
12	Ethyl Benzene
13	Ethyl Ether
14	Isobutyl alcohol
*15	Methanol
16	Methylene Chloride
17	Methyl Ethyl Ketone
18	Methyl isobutyl ketone
19	Nitrobenzene
20	Pyridine
21	Tetrachloroethylene
22	Toluene
23	1,1,1-Trichloroethane
24	1,1,2-Trichloroethane
25	Trichlorothylene
26	1,1,2-Trichloro-1,2,2-trifluoroethane
27	Trichloromonofluoro-methane
28	Xylenes (total)

Legends 29-31 RESERVED

** If these constituents are present alone or in any combination of the three, then non waste water forms of these constituents must be treated to TCLP levels as indicated in §268.40.*

Technology-Based standards For F005 when the constituent is the only listed F00-F005 solvent

Legend #	Constituent Name
32	2-Ethoxyethanool
33	2-Nitropropane

Legends 34-43 RESERVED

CALIFORNIA LIST WASTES

Legend #	Constituent Name
44	Nickel
45	Thallium
46	Cyanide (Liquid)
47	Liquid Polychlorinated Biphenyls (PCB's)
48	Halogenated Organic compounds (HOC's)

SEE BACK FOR THE UNIVERSAL TREATMENT STANDARDS (UTS), Legends 49 -264

LAIDLAW ENVIRONMENTAL SERVICES

FORM A

Customer Notification And Certification

Generator Name/Location: Four Corners Drilling Farmington NM

EPA I.D. Number: NMP360097883

Waste Profile or ARF Designation: See B1

Manifest Number: 50394

EPA Waste Number(s): See B1

Waste Analysis Available? Yes (attached) _____ No ✓ On file at receiving facility _____

Unrestricted Waste Notification (*Category 1*)

Mark the statement below if you generate a waste that is not a land disposal restricted waste (the waste has no applicable treatment standards).

☐ *I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR §268, Subpart D or any applicable prohibitions set forth in 40 CFR §268.32 or RCRA Section 3004(d).*

Restricted Waste/Debris Notification (*Category 2*)

Mark statement (2a) below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards). **NOTE-1:** A waste may pass one or more standards and require treatment or be varianced for others. In this case, all applicable categories must be checked. NOTE-2: D001, D002 and D012 - D043 wastes must be evaluated for underlying constituents found in 40 CFR §268. 48 (Table UTS), that are reasonably expected to be present. A list of these constituents must be included on **FORM B**, or attached to and accompany this notification with each waste shipment. Mark statement (2b) if you generate a debris waste that will be treated to the alternate debris standards located in 40 CFR §268.45.

☒ **(2a) Restricted Waste Notification**
I notify that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is subject to the treatment standards specified in 40 CFR §268 Subpart D. The waste: (a) must be treated to the appropriate regulatory treatment standard, by the appropriate regulatory treatment method; (b) qualifies for a variance as described in category 3 below; or (c) meets some or all of the standards as described in Category 4 below.

☐ **(2b) Alternate Debris Treatment Notification: This hazardous debris is subject to the alternate treatment standards of 40 CFR §268.45.**
The waste contains the following contaminants subject to treatment [check all that apply]:
_______§268.45(b)(1)- Toxicity characteristic debris;
_______§268.45(b)(2)- Debris contaminated with listed waste;
_______§268.45(b)(3)- Cyanide reactive debris.

Restricted Waste Variance Notification (*Category 3*)

Mark the statement below and list the applicable variance date on **Form B**, if you generate a waste which does not require treatment prior to land disposal because of a variance (including a case-by-case extension under 40 CFR §268.5, a nationwide variance under 40 CFR §268 Subpart C, a no migration petition under 40 CFR §268.6, or other applicable variance).

☐ *I notify pursuant to 40 CFR §268.7(a)(3) that I am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that this waste is subject to a national capacity variance under 40 CFR §268 Subpart C, or a case-by-case extension under 40 CFR §268.5, or an exemption under 40 CFR §268.6.*

Restricted Waste Certification (Treatment Standards Met) (*Category 4*)

Mark the certification statement below if you generate a waste that is restricted from land disposal (the waste has applicable treatment standards), and the waste meets the standards as generated. Note: All applicable constituent standards must be accounted for. A waste may pass one or more standards and require treatment or be variance for other constituents. In this case, all applicable categories must be checked.

☐ *I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA § 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.*

SIGNATURE: [signature] DATE: Manny Olivi/ 7/1/98

PRINT NAME: _______________ TITLE: [illegible]

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 4-8-99,

or cash received on _____ in the amount of $ 690.00

from Key Energy Services

for Farmington Service Center GW-156
(Facility Name) (OP No.)

Submitted by: _____ Date: 4-15-99

Submitted to ASD by: _____ Date: 4-15-99

Received in ASD by: _____ Date: _____

Filing Fee ___ New Facility ___ Renewal X

Modification ___ Other _____
(specify)

Organization Code 521.07 Applicable FY 99

To be deposited in the Water Quality Management Fund.

Full Payment X or Annual Increment ___

KEY ENERGY SERVICES, INC.
FOUR CORNERS DIVISION
5651 US HIGHWAY 64 * PO BOX 900
FARMINGTON, NEW MEXICO 87499
(505) 327-4935

PNC BANK, NATIONAL ASSOCIATION
JEANNETTE, PA
60-162/433

No. [redacted]

Check Date 4/08/1999

PAY Six Hundred Ninety and 00/100 Dollars

AMOUNT
$********690.00

TO THE ORDER OF
WATER QUALITY MANAGEMENT FUND
NM OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE NM 87505

Ron Fellabaum

AUTHORIZED SIGNATURE IF OVER $10,000.00

[redacted]

WATER QUALITY MANAGEMENT FUND 4/08/1999 CHECK NO. [redacted]

INVOICE NO.	INVOICE DATE	GROSS	DISCOUNT	NET AMOUNT
040799	4/07/99	690.00	.00	690.00
Message : RENEWAL FLAT FEE FOR DISCHARGE PLAN - FARMINGTON FACILITY				
TOTALS		690.00	.00	690.00

GW-156

The Santa Fe New Mexican

Since 1849. We Read You.

MAR 18 1999

OIL CONSERVATION DIVISION

NM OCD
ATTN: LUPE SHERMAN
2040 S. PACHECO ST.
SANTA FE, NM 87505

AD NUMBER: 66207 ACCOUNT:
LEGAL NO: 64785 P.O.#: 99199000357
169 LINES 1 time(s) at $ 67.64
AFFIDAVITS: 5.25
TAX: 4.56
TOTAL: 77.45

AFFIDAVIT OF PUBLICATION

NOTICE OF PUBLICATION

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application(s) have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-156) - Key Energy Services, Inc. Four Corners Drilling, 327-4935, 5651 US Highway 64, Farmington, new Mexico 87401, has submitted a discharge plan renewal application for the Farmington facility located in Section 29, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 60 barrels per week of waste water is collected in a double walled steel tank then transported offsite for disposal into Key Energy Class II Disposal well. Ground water most likely to be affected in the event of an accidental discharge is at an estimated depth of approximately 45 feet with a total dissolved solids concentration of approximately 2,200 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application(s) may be viewed at the above address between 8:00 a.m and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan application(s), the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan(s) based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan(s) based on the information in the discharge plan application(s) and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 23rd day of September 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
LORI WROTENBERY, Director

Legal #64785
Pub. January 27, 1999

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, B. Perner being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTE FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication #64785 a copy of which is hereto attached was published in said newspaper 1 day(s) between 01/27/1999 and 01/27/1999 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 27 day of January, 1999 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/ Betsy Perner
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 27 day of January A.D., 1999

Notary B Mathie

Commission Expires 3-13-2001

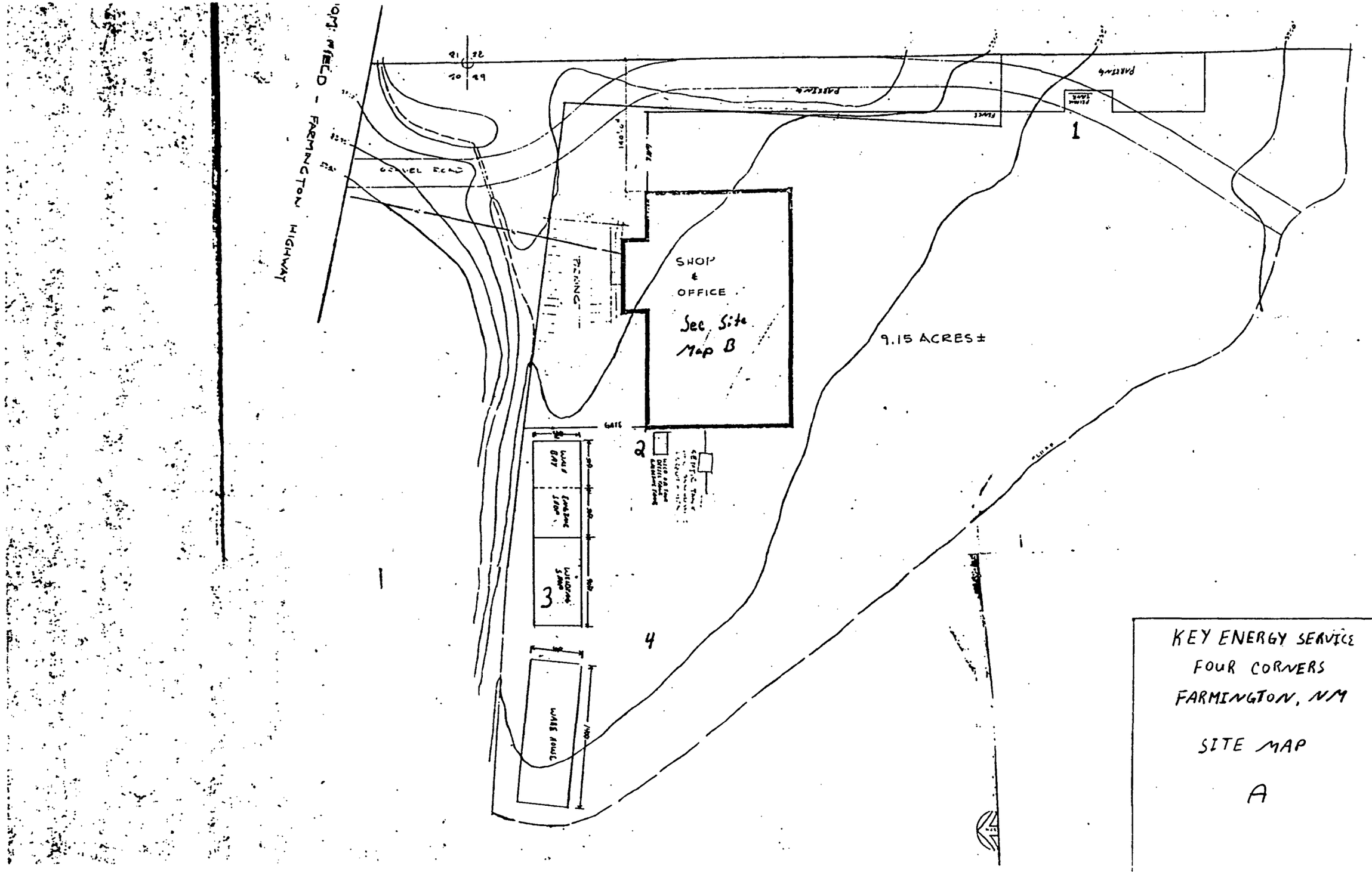
OFFICIAL SEAL
B MATHIE
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires

KEY ENERGY SERVICE
FOUR CORNERS DIVISION

5654 US HIGHWAY 64
FARMINGTON, NM

SITE PLAN LEGEND
MARCH 01, 1999

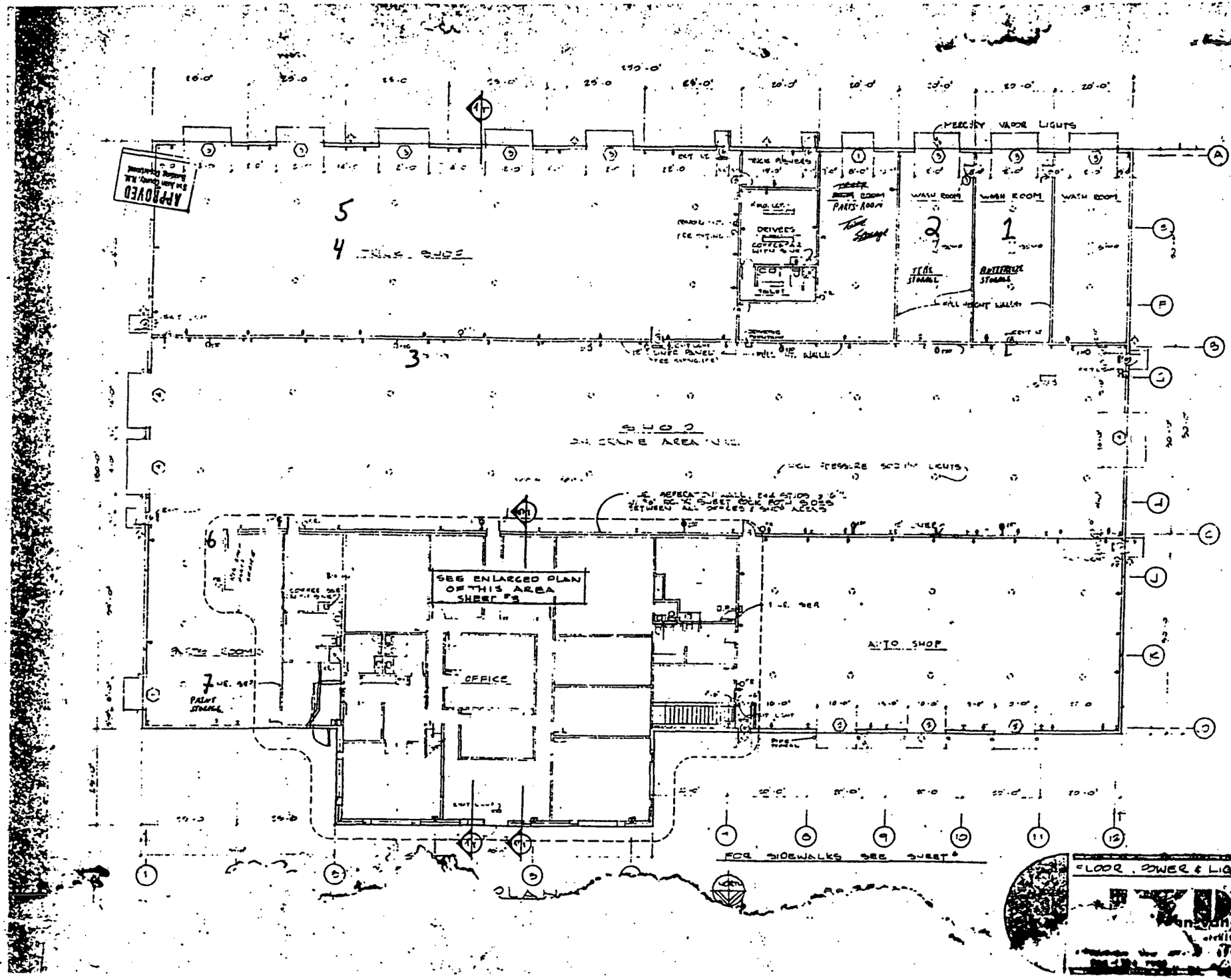
SITE PLAN	REFERENCE	DESCRIPTION
A	1	LPG (Propane Tank), 6,000 Gallon Capacity
A	2	Tank Storage, Diesel, Gasoline and Used Oil Tanks
A	3	Welding Shop, Oxygen and Acetylene used here.
A	4	Oxygen and Acetylene Storage Area
B	1	Antifreeze Storage Area
B	2	Truck Tire Storage Area
B	3	Rig Tire Storage Area
B	4	Bulk Oil Tank, 15w40
B	5	Used Oil Tank
B	6	Oil Storage Area, 5 Gallon Buckets
B	7	Paint Storage Area



KEY ENERGY SERVICE
FOUR CORNERS
FARMINGTON, NM

SITE MAP

A


NOTES
MERCURY VAPOR LIGHTS
WASH ROOM
WASH ROOM
WASH ROOM
2
1
DRIVERS
PARTS ROOM
STEEL STORAGE
BATTERY STORAGE
SHOP
AUTO SHOP
OFFICE
PAINT STORAGE
SEE ENLARGED PLAN OF THIS AREA SHEET #3
FOR SIDEWALKS SEE SHEET #
PLAN
APPROVED
KEY ENERGY SERVICE
FOUR CORNERS
FARMINGTON, N.M.
SITE MAP
B
FLOOR, POWER & LIGHTING PLANS

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
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

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

Revised 12/1/95

Submit Original
Plus 1 Copies
to Santa Fe
1 Copy to appropriate
District Office

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS, REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS

(Refer to the OCD Guidelines for assistance in completing the application)

☐ New ☒ Renewal ☒ Modification

1. Type: Oil and gas well drilling and servicing contractor
2. Operator: Key Energy Services Inc. Four Corners Div
   Address: 5651 U.S. Highway 64 Farmington, N.M. 87401
   Contact Person: Rick Vecellio/Bob James Phone: 505-327-4935
3. Location: 1/4 1/4 Section 29 Township 29N Range 12W
   Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
   Key Energy Services Inc. Four Corners Division 5651US Hiway64Fmn.327-4935
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
14. CERTIFICATION

I herby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Rick Vecellio Title: Safety MANAGER

Signature: Rick Vecellio Date: Jan. 13, 1999.

KEY ENERGY SERVICES
FOUR CORNERS
5651 US HIGHWAY 64
P.O. BOX 900
FARMINGTON, NM 87499

OFFICE (505) 327-4935 FAX (505) 327-4962

VII. Wastewater comes from 4 wash bays, where parts are washed. The water drains into a double shell, double bottom tank. The average daily volume of water draining with the tank is 60 barrel a week.

VIII. The wastewater described above is taken to Key Energy Disposal well.

When the waste oil is brought in, in a 55-gallon drum, it is picked up and taken to Dial Oil to be disposed of at their facility. If is in a 5 gallon bucket, it is drained into waste oil tank, which is emptied by D&D Oil and disposed of. Oil filters are drained, crushed and placed in a special dumpster designed for such wastes by Waste Management.

All empty 55-gallon drums are drained and returned to be recycled at Dial Oil.

For waste oil storage, a 1000 gallon waste oil tank along with a tank for 500 gallon of Red Diesel and a tank for 500 gallons of Kerosene. These tanks are in a re-enforced concrete storage area that measures 30" x 35' with a 2' high retaining wall. The storage area will be able to hold 15,000 gallons of liquid in a case of a spill. The concrete is sloped so that any liquid spilled, or rainwater entering the enclosed area will drain into a sump.

IX. 1.) Install waste oil heaters in the shop. Used oil from serving the rigs and truck will be burned and the heat recovered to heat the shops. The waste oil heaters can also burn the used oil filters leaving the ash and metal housings for disposal.

2.) Installing hot water parts washers. These washers would be installed in the rig, engine and truck shop. Would eliminate the need for solvent washers and hot tanks. The units being considered would skim the hydrocarbons off to a separate container, which would be added to the used oil tank. The water would be evaporated off leaving the solids and sludge, which would be added to the other solids and sludge for disposal via Safety Kleen or permitted land farm.

X. A visual inspection of the waste oil storage area will be done daily as well as a visual inspection of the steal tank where the wash water will be held, will also be done daily.

XI. If a major spill or leakage would only occur in the following areas; and either area is self contained with it being in a re-enforced concrete storage area or the double steel tank. In either case no damage to ground water or to surface water would occur.

a. Fuel/ Used Oil Area
Containment of any spills would be within the enclosed storage area, and drained into a sump. Any spill material would be picked up in a vacuum truck and taken to a proper off site disposal site. This would be done after notification of the local OCD director. This notification would be immediate upon detection of any spills.

b. Waste Water Tank
Leak detection would be done by visual inspections being done daily as will as gauging. In the event of any significant leaks, immediate notification to the local OCD director will be made. Immediate usage of vacuum trucks will begin as well as the usage of shut off valve. Any material suctioned up would be disposed of at Key Energy Disposal during regular business hours.

c. Other
Oil spills in yard will be remediated by using Oil Gator.

XII. A. The nearest surface water is the San Juan, which is, located approximately ¼ mile away. These are no ground water discharge sites or water wells within 1 mile of this facility.

B. No ground water would be affected by discharge, as any discharge would be in self-contained area.

C. 1. Soil types for this facility are sand and clay mixture and a sandstone base being encountered between 3' to 5' depending on the area of the facility in which work is being done.

DISCHARGE PLAN APPLICATION

Oilfield Service Facilities

Part VI. Form (Optional)

Materials Stored or Used at the Facility – For each category of material listed below provide information on the general composition of the material or specific information (including brand names if requested), whether a solid or liquid, type of container, estimated volume stored and location. Submit MSD information for chemicals as requested. Use of this form is optional, but information requested must be provided.

Name	*General Makeup or Specific Brand Name (if requested)*	*Solids(S) or Liquids(L)*	*Type of Container (tank, drum, etc.)*	*Estimated Volume Stored*	*Location (yard, shop drum storage, etc.)*
1. *Drilling Fluids (include general makeup & types special additives [e.g. oil, chrome, etc])*	Free Pipe	L	Cans	45 gal.	Shop
	Pipe Lax	L	Drums	80 gal.	Shop
2. *Brines – (KCI, NaCI, etc).*	Celcium Chloride	S	Box	800#	Storage
3. *Acids//Caustics (Provide names & MSD sheets)*	Zepresto	L	Drum	125 gal.	Shop
4. *Detergents/Soaps*	Acclaim	S	Box	300#	Shop
	Soil-A-Way	L	Can	35 gal.	Shop
5. *Solvents & Degreasers (Provide names & MSD sheets)*	Solvent 140			100 gal.	Shop
6. *Paraffin Treatment/ Emulsion Breakers (Provide names & MSD sheets)*					
7. *Biocides (Provide names & MSD sheets)*	Fuel Prep 2012	L	Can	5 gal.	Shop
8. *Others – (Include other liquids & solids, e.g. cement etc.)*	Conoco Super Sta Grease	S	Drum	70 lbs.	Shop
	Conoco A.S.M.O. 10-40wt.	L	Drum	15 gal.	Shop
	Conoco Anti-Freeze	L	Drum	2750 gal.	Shop

Name	*General Name or Specific Brand Name (if requested)*	*Solids(S) or Liquids(L)*	*Type of Container (tank, drum, etc.)*	*Estimated Volume Stored*	*Location (yard, shop drum storage, etc.)*
8. *Others (Cont.)*	Fleet Supreme 15w40 Oil	L	Drum	200 gal.	Shop
	10w40	L	Can	15 gal.	Shop
	30wt	L	Drum	50 gal.	Shop
	C3	L	Drum	50 gal.	Shop
	Hyd. 46	L	Drum	50 gal	Shop
	80w90	L	Drum	50 gal.	Shop
	Methanol	L	Drum	50 gal.	Shop

Paint and starting fluid are stored in a parts room inside of the facility.

DISCHARGE PLAN APPLICATION

Oilfield Service Facilities

Part VII. Form (Optional)

Sources and Quantities of Effluent and Waste Solids Generated at the Facility – For each source include types of effluents (e.g. salt water, hydrocarbons, sewage, etc.), estimated quantities in barrels or gallons per month, and types and volumes of major additives (e.g. acids, biocides, detergents, degreasers, etc.). Use of this form is optional, but the information requested must be provided.

Waste Type	*General Composition and Source Per Month (solvents from small parts cleaning oil filters from trucks, etc.)*	*Volume truck washing, soap (bbl or gal)*	*Major Additives(e.g. degreaser fluids from in steam cleaners)*
1. Truck Wastes (Describe types of original contents trucked [e.g. brine produced water, drilling fluids, oil wastes, etc.])			
2. Truck, Tank & Drum Washing			
3. Steam Cleaning of Parts, Equipment, Tanks	Hydrocarbons Mud, Soap, H20, sand silt	24,000 gal.	Liquid Soap
4. Solvents/Degreaser Use			
5. Spent Acids, Caustics, or Completion Fluids (Describe)			

Waste Type	*General Composition and Source (solvents from small parts cleaning oil filters from trucks, etc.)*	*Volume Per Month (bbl or gal)*	*Major Additives(e.g. degreaser fluids from truck washing, soap in steam cleaners)*
6. Waste Stop Oil	N/A		
7. Waste Lubrication and Motor Oils	Rig Shop 50 gal. Auto Shop 80-100 Truck Shop	1300 gal. 14 bbl	
8. Oil Filters			
9. Solids and sludge from Tanks (Describe types of materials [e.g. crude oil tank bottoms, sand, etc.])			
10. Painting Wastes	Dried – Placed in a Waste Management dumpster for disposal		
11. Sewage (Indicate if other wastes mixed with sewage; if no commingling, domestic sewage under jurisdiction of the NMEID)	Yes – Not mixed under NMEID		
12. Other waste Liquids (Describe in detail)	Sludge for Oil Buckets	20 gal.	Hydrocarbon
13. Other Waste Solids (Cement, construction materials, used drums)	Used oil drums	12	Empty Oil Drums

DISCHARGE PLAN APPLICATION

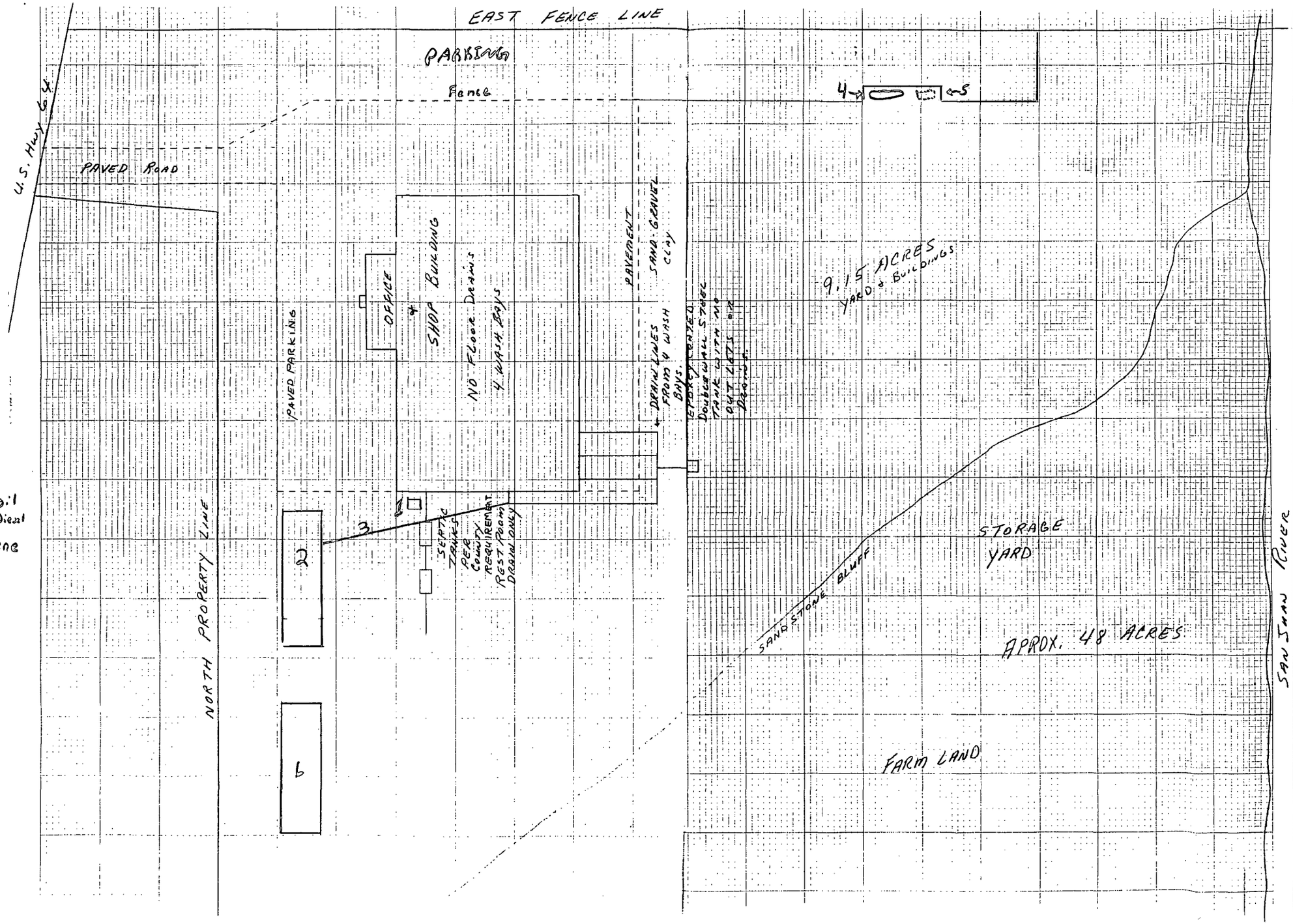
Oilfield Service Facilities

Part VIII. Form (Optional)

Summary Description of Existing Liquid and Solid Waste Collection and Disposal -- For each waste type listed in Part VII, provide summary information about onsite collection and disposal systems. Information on basic construction features, specific descriptions, and wastewater schematics should be provided as required in the Guidelines. The use of this form is optional, but the summary information requested must be provided.

Waste Type	*Tank(T) Drum(S)*	*Floor Drain(F) Sump(S)*	*Pits- Lined(L) or Unlined(U)*	*Onsite Injection Well*	*Leach Field*	*Offsite Disposal*
1. Truck Wastes						
2. Truck, Tank & Drum Washing						
3. Steam Cleaning of Parts, Equipment, Tanks						
4. Solvent/Degreaser Use						
5. Spent Acids, Caustics, or Completion Fluids						
6. Waste Stop Oil						

Waste Type	*Tank(T) Drum(S)*	*Floor Drain(F) Sump(S)*	*Pits- Lined(L) or Unlined(U)*	*Onsi Injection Well*	*Leach Field*	*Offsite Disposal*
7. Waste Lubrication and Motor Oils	T					D&D Oil Recycling Bloomfield (Trucked)
8. Oil Filters	S					Waste Management (Trucked)
10. Solids and Sludge from Tanks						
11. Sewage						
12. Other Waste Liquids						
Used Oil drums – picked up by Dial Oil						Dial Oil Aztec, NM (Trucked)
13. Other Waste Solids						



1) Tanks
U.O. Used Oil
D Red Diesel
K Kerosene

2) Engine/Welding Shop

3) Line f/Engine shop
Same connecting to existing lined storage tank

4) 6,000 Gallon Propane Tank

5) Proposed Propane Tank

6) Warehouse

* Not drawn to scale

1-11-99

KEY ENERGY SERVICES
FOUR CORNERS
5651 US HIGHWAY 64
P.O. BOX 900
FARMINGTON, NM 87499

OFFICE (505) 327-4935 FAX (505) 327-4962

VII. Waste water comes from 4 wash bays, where parts are washed. The water drains into a double shell, double bottom tank. The average daily volume of water draining with the tank is 60 barrel a week.

VIII. The waste water described above is taken to Key Energy Disposal well.

If the waste oil is brought in, in a 55 gallon drum it is then picked up and taken to Dial Oil to be disposed of in their facility. If in 5 gallon buckets they are drained into waste oil tank, which is emptied by D & D Oil and disposed of. Oil filters are drained, crushed and placed in a special dumpster designed for such wastes by Waste Management.

All empty 55-gallon drums are drained and returned to be recycled at Dial Oil.

For waste oil storage, a 1000 gallon waste oil tank along with a tank for 500 gallon of Red Diesel and a tank for 500 gallons of Kerosene. These tanks are in a re-enforced concrete storage area measuring 30" x 35' with a 2' high retaining wall. The storage area will be able to hold 15,000 gallons of liquid in a case of a spill. The concrete is sloped so that any liquid spilled, or rain water entering the enclosed area will drain into a sump.

IX. 1.) Install waste oil heaters in the shop. Used oil from serving the rigs and trucks will be burned and the heat recovered to heat the shops. The waste oil heaters can also burn the used oil filters leaving the ash and metal housings for disposal.

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DISCHARGE PLAN APPLICATION

Oilfield Service Facilities

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3. *Acids//Caustics (Provide names & MSD sheets)*	Zepresto	L	Drum	125 gal.	Shop
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6. *Paraffin Treatment/ Emulsion Breakers (Provide names & MSD sheets)*					
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	30wt	L	Drum	50 gal.	Shop
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	Hud 46	L	Drum	50 gal	Shop
	80w90	L	Drum	50 gal.	Shop
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3. Steam Cleaning of Parts, Equipment, Tanks	Hydrocarbons Mud, Soap, H20, sand silt	24,000 gal.	Liquid Soap
4. Solvents/Degreaser Use			
5. Spent Acids, Caustics, or Completion Fluids (Describe)			

Waste Type	*General Composition and Source (solvents from small parts cleanng oil filters from trucks, etc.)*	*Volume Per Month (bbl or gal)*	*Major Additives(e.g. degreaser fluids from truck washing, soap in steam cleaners)*
6. *Waste Stop Oil*	N/A		
7. *Waste Lubrication and Motor Oils*	Rig Shop 50 gal. Auto Shop 80-100 Truck Shop	1300 gal. 14 bbl	
8. *Oil Filters*			
9. *Solids and sludges from Tanks (Describe types of materials [e.g. crude oil tank bottoms, sand, etc.])*			
10. *Painting Wastes*	Dried – Placed in a waste management dumpster for disposal		
11. *Sewage (Indicate if other wastes mixed with sewage; if no commingling, domestic sewage under jurisdiction of the NMEID)*	Yes – Not mixed under NMEID		
12. *Other waste Liquids (Describe in detail)*	Sludge for Oil Bktg	20 gal.	Hydrocarbon
13. *Other Waste Solids (Cement, construction materials, used drums)*	Used oil drums	12	Empty Oil Drums

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6. Waste Stop Oil						

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7. Waste Lubrication and Motor Oils	T					D&D Oil Recycling Bloomfield (Trucked)
8. Oil Filters	S					Waste Management (Trucked)
10. Solids and Sludges from Tanks						
11. Sewage						
12. Other Waste Liquids						
Used Oil drums – picked up by Dial Oil						Dial Oil Aztec, NM (Trucked)
13. Other Waste Solids						

M - I D R I L L I N G F L U I D S, L.L.C.

5950 North Course Drive, Houston, TX 77072

TRANSPORTATION & MATERIAL SAFETY DATA SHEET

TRADE NAME : PIPE-LAX

NFPA HAZARD RATING : HEALTH 1
FLAMMABILITY 2
REACTIVITY 0
SPECIAL HAZARD

EMERGENCY TELEPHONE NUMBERS
(713) 561-1600
(713) 561-1300
DAY OR NIGHT

PREAMBLE

M-I Drilling Fluids, L.L.C. is pleased to furnish this data at your request independent of any sale of the product. While every effort has been made to accurately describe this product and associated manifestations, some of the data are obtained from the open literature, independent laboratory studies, or other sources beyond our direct supervision. We cannot make any assertion as to the reliability or completeness; therefore, the User may rely thereon only at User's risk. We have made no effort to censor nor to conceal deleterious aspects of this product. Since we cannot anticipate or control the many different conditions under which this information and our products may be used, we make no guarantee that the health and safety precautions we have suggested will be adequate for all individuals and/or situations. Likewise, we make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state or local laws. It is the obligation of each User of this product to determine and comply with the requirements of all applicable statutes. M-I Drilling Fluids, L.L.C. will furnish, upon request, any additional information to assist the User; however, no warranty, either expressed or implied, nor liability of any nature with respect to the product or to the data herein is made or incurred hereunder.

I. PRODUCT IDENTIFICATION

COMMON NAME : Oil surfactant blend
MANUFACTURER : M-I Drilling Fluids
PACKAGE QUANTITY : 18.9, 208 L (5, 55 gal)
USE : Drilling fluid additive
FREIGHT DESCRIPTION : Oil well drilling fluid additive
CHEMICAL FORMULA : Proprietary
CAS NUMBER : Multiple
UNIT OF ISSUE : Liter (gallon)
APPLICATION : Lubricant
CONTAINER SPECIFICATIONS : Steel drum meets DOT requirements (49 CFR 178)

II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%	(A) OSHA PEL /	(B) ACGIH TLV /	(C) OTHER LIMITS RECOMMENDED
Diesel, petroleum distillates (naphtha)	<85	(A) 400 ppm (1600 mg/m3) (1)	(B) 300 ppm (1370 mg/m3) (2)	
n-Butyl alcohol, skin [71-36-3]	<10	(A) C:50 ppm (150 mg/m3) (1)	(B) C:50 ppm (152 mg/m3) (2)	

III. PHYSICAL DATA

BOILING POINT (760 mm Hg) : N.D.
pH (1% Soln.) : 5.6-6.6
SPECIFIC GRAVITY (H2O=1) : 0.9
VAPOR DENSITY (air=1) : N.D.
PHYSICAL APPEARANCE : Liquid
BULK DENSITY : N.D.
MELTING POINT : N.A.
VAPOR PRESSURE @ 20 deg C : N.D.
SOLUBILITY IN WATER @ 20 deg C : Insoluble
EVAPORATION RATE (BUTYL ACETATE=1): N.D.
FLASH POINT (method used) : 60 C 140 F (PMCC)
ODOR & COLOR : Oily odor, dark black color

IV. REACTIVITY DATA

PRODUCT IS STABLE? : Yes
PRODUCT DECOMPOSES? : No
PRODUCT POLYMERIZES? : No

INCOMPATIBILITY — AIR _ HEAT X ACID _ BASE _ WATER _ OXIDIZER X
OTHER (Specify) N.D.

N.D.-Not Determined N.A.-Not Applicable <-Less Than >-Greater Than C-Ceiling Limit
Note: For additional information and interpretive assistance, see last page.

X. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Wear proper protective equipment (MSDS Section VIII). Contain the spill. Remove all ignition sources. Redrum or recycle if possible. Add absorbent material and sweep waste into a suitable container. Keep out of sewers and waterways.
WASTE DISPOSAL METHOD	Material is considered a hazardous waste by RCRA standards (ignitability). Dispose of according to federal and state regulations dealing with hazardous chemicals. Contact Environmental Services for more information.

XI. U.S. GOVERNMENT & OTHER REGULATORY AGENCY CONTROLS

SARA TITLE III ACUTE: X CHRONIC: X FIRE: X REACTIVITY: SUDDEN RELEASE OF PRESSURE:

n-Butyl alcohol is listed by the CAA, RCRA, CERCLA, SARA Title III Section 313, SARA 110, OSHA and DOT. It appears on the Canadian IDL 1% list and on substance lists in Massachusetts, New Jersey and Pennsylvania. This product's RQ is 173 drums (208 L).

XII. TRANSPORTATION INFORMATION

A. DEPARTMENT OF TRANSPORTATION (DOT)

CLASSIFIED AS A HAZARDOUS MATERIAL ACCORDING TO DOT (49 CFR 172): Yes

PROPER SHIPPING NAME : Flammable liquids, n.o.s. (contains diesel fuel)
HAZARD CLASS : 3, PG III
IDENTIFICATION NO. : UN 1993, ERG90 Guide No. 27
LABEL(S) REQUIRED : Flammable Liquid
EXCEPTIONS & PACKAGING REQUIREMENTS (SEE SECTION) : 173.150; 173.203; 173.242
MAXIMUM QUANTITY PASSENGER AIRCRAFT : 60 L
IN ONE PACKAGE CARGO AIRCRAFT : 220 L

B. AIR TRANSPORT REGULATIONS (IATA/ICAO)

PROPER SHIPPING NAME : Flammable liquid, n.o.s. (contains diesel fuel) UN NO.: 1993
HAZARD CLASS : 3, PG III FLASH POINT : 140 deg F 60 deg C
MAXIMUM QUANTITY PASSENGER AIRCRAFT : 60 L PACKAGING (SEE SECTION) : 309
IN ONE PACKAGE CARGO AIRCRAFT : 220 L PACKAGING (SEE SECTION) : 310

C. INTERNATIONAL MARITIME ORGANIZATION REGULATIONS (IMO)

SUBSTANCE NAME : Flammable liquids, n.o.s. (contains diesel oil) UN NO.: 1993
HAZARD CLASS : Flammable liquids CLASS NO. : 3.3 PAGE NO. : 3345
LABEL(S) : Flammable liquid FLASH POINT : 140 deg F 60 deg C
DESCRIPTION : Oil well drilling fluid additive that contains diesel oil and n-butanol

XIII. ADDITIONAL INFORMATION

References:

(1) Chemical Guide to the OSHA Hazard Communication Standard, Ed. by Clansky, K.B., 7th Edition; Roytech: Burlingame, CA, (1992).
(2) 1991-1992 Threshold Limit Values and Biological Exposure Indices; American Conference of Governmental Industrial Hygienists: Cincinnati, (1991).
(3) Sax, N. I. and Lewis, R.J.,Sr. ; Dangerous Properties of Industrial Materials, 7th Edition, Vols. I-III; VNR: New York, (1989).
(4) IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Polynuclear Aromatic Hydrocarbons, Part 2, Vol. 33; World Health Organization: Lyon, France, (1984).
(5) NOTE: The flash point of diesel varies with seasonal blends.

FOR ADDITIONAL INFORMATION CONTACT:
Manager, Environmental Affairs (713) 561-1507

Prepared by : James H. Rushing
Date Prepared : Revised: February 1993

N.D.-Not Determined N.A.-Not Applicable <-Less Than >-Greater Than
Note: For additional information and interpretive assistance, see last page.

V. FIRE AND EXPLOSION HAZARD INFORMATION

FLAMMABLE LIMITS BY AIR, % BY VOL. L.E.L.: N.D. U.E.L.: N.D. AUTO IGNITION TEMPERATURE: N.D.

PRODUCTS EVOLVED WHEN SUBJECTED TO HEAT BY COMBUSTION	Upon combustion, aldehydes and oxides of carbon, nitrogen, and sulfur may form, producing toxic fumes.
EXTINGUISHING MEDIA	Use water spray, dry chemical, alcohol-resistant foam, or carbon dioxide. Use water to cool fire-exposed containers and disperse unignited vapors.
UNUSUAL FIRE FIGHTING PROCEDURES	Normal fire fighting procedures may be used. Self-contained breathing apparatus may be required in enclosed or confined areas during a fire.
UNUSUAL FIRE AND EXPLOSION HAZARDS	Vapors may travel to an ignition source and flash back causing an explosion.

VI. HEALTH HAZARD INFORMATION

PRIMARY ROUTES OF EXPOSURE: EYE CONTACT: X SKIN CONTACT: X SKIN ABSORPTION: INHALATION: X INGESTION:

TARGET ORGAN: Eyes, skin, respiratory and central nervous system

CARCINOGENICITY NTP: No IARC: No OSHA: No

ACUTE EFFECTS OF EXPOSURE	Petroleum distillates may cause cough, dyspnea, nausea or vomiting. Skin effects include dermatitis, oil acne and melanosis.(3,4) n-Butyl alcohol irritates the skin, eyes and the upper respiratory system, also the conjuctiva.(3)
CHRONIC EFFECTS OF EXPOSURE	Diesel fuel oil is an IARC Group 2B possible carcinogen.(1)
TOXICITY DATA	None reported.

VII. EMERGENCY AND FIRST AID PROCEDURES

FIRST AID	EYES	Hold eyelids apart and flush eyes with water for at least 15 minutes. Seek medical attention promptly.
	SKIN	Wash thoroughly with soap and water. Remove contaminated clothing.
	INGESTION	Drink water to dilute. Never give anything by mouth to an unconscious person. Seek medical attention promptly.
	INHALATION	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
OTHER INSTRUCTIONS		Sensitive individuals should avoid further contact. Persons seeking medical attention should carry a copy of this msds with them.

VIII. OCCUPATIONAL CONTROL MEASURES

RESPIRATORY	Wear a NIOSH/MSHA-approved chemical cartridge respirator when the airborne concentration is above the PEL.
VENTILATION	Supply natural or mechanical ventilation adequate to keep exposures below the recommended OSHA PELs
SKIN	Wear chemically resistant gloves and long protective clothing. Wash thoroughly after handling. Wash clothes and clean shoes before reuse.
EYES	Wear chemical safety goggles or glasses with sideguards. Insure proper fit for best protection.
OTHER PROTECTIVE EQUIPMENT	Ordinary measures of personal hygiene should be observed. Avoid contact with skin and clothing. Avoid breathing vapor or mist.

IX. SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING	WARNING! Combustible liquid and vapor. Contains diesel fuel oil inhalation of which may cause cancer. Material is an irritant.
PRECAUTIONS FOR TRANSPORTATION HANDLING AND STORAGE	Keep away from heat, sparks, and flame. Keep container closed. Use with adequate ventilation. See msds for proper protective equipment.

N.D.-Not Determined N.A.-Not Applicable <-Less Than >-Greater Than
Note: For additional information and interpretive assistance, see last page.

EXPLANATION OF THE TRANSPORTATION AND MATERIAL SAFETY DATA SHEET

NFPA HAZARD INTERPRETATION

Degree of Health Hazard

Type of Possible Injury

4 A few whiffs of the vapor could cause death; or the vapor or liquid could be fatal on penetrating the fire fighter's normal full protective clothing which is designed for resistance to heat.
3 Materials extremely hazardous to health, but areas may be entered with extreme care. Full protective clothing should be provided. No skin surface should be exposed.
2 Materials hazardous to health, but areas may be entered freely with self-contained breathing apparatus.
1 Materials only slightly hazardous to health.
0 Materials which on exposure under fire conditions would offer no health hazard beyond that of ordinary combustible material.

Degree of Flammability

Susceptibility of Materials to Burning

4 Very flammable gases, very volatile flammable liquids, and materials that in the form of dusts or mists readily form explosive mixtures when dispersed in air.
3 Liquids ignitable under almost all normal temperature conditions, solids that burn rapidly, and any materials that ignite spontaneously at normal temperatures in air.
2 Liquids which must be moderately heated before ignition will occur and solids that readily give off flammable vapors.
1 Materials that must be preheated before ignition can occur.
0 Materials that will not burn.

Degree of Reactivity

Susceptibility to Release of Energy

4 Materials which in themselves are readily capable of detonation or of explosive decomposition or explosive reaction at normal temperatures and pressures.
3 Materials which in themselves are capable of detonation or of explosive decomposition or of explosive reaction but which require a strong initiating source or which must be heated under confinement before initiation.
2 Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate.
1 Materials which in themselves are normally stable but which may become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently.
0 Materials which are normally stable even under fire exposure conditions and which are not reactive with water.

A "W" in the bottom space of the diamond alerts fire fighting personnel to the possible hazard in use of water. The violence of the reaction with water is indicated by the degree number in the REACTIVITY category.

SECTION II. HAZARDOUS INGREDIENTS

For the purposes of this form, a material shall be defined as hazardous if it meets any one of the following criteria (From - OSHA 29 CFR Part 1910 Hazard Communication):

(1) Toxicity - A toxic substance is one that has demonstrated the potential to: endanger human life by exposure via any route found in the workplace; produce short- or long-term disease or bodily injury; affect health adversely; induce cancer or other neoplastic effects in humans or experimental animals; induce a transmissible change in characteristics of an offspring from those of its human or experimental animal parent; or cause the production of physical defect in the developing human or experimental animal embryo. As required by OSHA, these substances are identified if they are present in quantities greater than 1%, or in the case of carcinogens, greater than 0.1%, or if a hazard is determined at a lower concentration.
Toxic substances not regulated under OSHA 29 CFR 1910 but covered by other governmental regulations will be listed as required under any state regulation or the following federal regulations: CERCLA/Superfund 40 CFR 117, Toxic Substance Control Act (TSCA), FIFRA pesticide registration, Resource Conservation and Recovery Act (RCRA), and the Federal Clean Air and Water Acts 40 CFR 60-61, 40 CFR 401 and 116.
(2) Corrosive - As defined by OSHA is a chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact.
(3) Irritant - As defined by OSHA is a chemical which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact.
(4) Sensitizer - As defined by OSHA is a chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure of the chemical.
(5) Physical Hazards - As defined by OSHA, DOT, and RCRA; will be based on the flammbility, corrosivity, reactivity and/or explosive nature of the product as a whole, a mixture, or individual ingredients as determined to be the most hazardous.

SECTION VI. HEALTH HAZARD INFORMATION

Primary Routes of Exposure: Should indicate one or more possible pathways by which substance may affect the human body.
Acute Effects of Exposure: Acute effect applies to injuries which rapidly follow through direct exposure to a hazardous material without implying degree of severity.
Chronic Effects of Exposure: Chronic effect applies to injuries which are delayed and occur after repeated or prolonged exposure to a hazardous material without implying degree of severity.
Median Lethal Dose (LD50, LC50): Median Lethal Dose (MLD) refers to the Lethal Dose (LD) or Lethal Concentration (LC) of the material which will produce death in 50 percent of the test animals. LDLO is the single lowest reported dose that has proven to be fatal in one individual. TDLO is the single lowest reported dose which has caused a specific toxic effect in an individual.

SECTION XI. U.S. GOVERNMENT AND OTHER REGULATORY AGENCY CONTROLS

Specifies if the use and marketing of the product is restricted by the indicated federal regulatory agencies or state and local regulations. This list is not intended as a comprehensive review of all regulations or concerned agencies; rather, it is a quick check of several major agencies or regulations.

NFPA HAZARD RATING	
HEALTH	1
FIRE	0
REACTIVITY	0

0 = None
1 = Minimal
2 = Moderate
3 = High
4 = Extreme

Blue Coral®

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTITY: [redacted]

REFERENCE CODES: 5547

DATE OF ISSUE: 2/21/91

SUPERSEDES: 9/1/90

SECTION I

[redacted]
4775 S. BUTTERFIELD DR., STE. 175
TUCSON, AZ 85714

Emergency Phone No. 1-800-228-5635

Phone No. for Information: 1-800-288-2100

SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

INGREDIENTS	CAS NO.	OSHA PEL	ACGIH TLV	IDLH LEVEL	% OPT.	SUBJECT TO SARA 313 REPORTING
Sodium metasilicate	6834-92-0	Unknown	Unknown	Unknown	35	No

SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: N/A
Vapor Pressure: N/A
Specific Gravity: N/A
Vapor Density: N/A
Evaporation Rate (n-Butyl Acetate = 1): N/A
Solubility in Water: Complete
pH 100%: N/A
pH 1%: 11.8-12.2
Appearance and Odor: Blue powder with slight alcohol odor.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (method): N/A

Flammable Limits: LEL N/A UEL N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: N/A

SECTION V REACTIVITY DATA

Stability: Stable X Unstable

Conditions to Avoid:

Incompatibility: Acids

Hazardous Decomposition Products:

Hazardous Polymerization: Will Occur May Not Occur X

NFPA HAZARD RATING

HEALTH	2
FIRE	0
REACTIVITY	0

0 = None
1 = Minimal
2 = Moderate
3 = High
4 = Extreme

Blue Coral

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTITY: WHITLEY'S SOILAWAY

REFERENCE CODES: 5700;5703; 5709

DATE OF ISSUE: Nov. 23, 1992

SUPERSEDES: New

SECTION I

BLUE CORAL SYSTEMS
4775 S. BUTTERFIELD DR., STE. 175
TUCSON, AZ 85714

Emergency Phone No. 1-800-228-5635

Phone No. for Information: 1-800-288-2100

SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

INGREDIENTS	CAS NO.	OSHA PEL	ACGIH TLV	IDLH LEVEL	% OPT.	SUBJECT TO SARA 313 REPORTING
Butoxyethanol	111-76-2	25ppm	25ppm	700ppm	3-7	Yes
Sodium Ortho Silicate	Unknown	Unknown	Unknown	Unknown	3-7	No

SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 212 deg. F
Vapor Pressure: Unknown
Vapor Density: Unknown
Solubility in Water: Complete
Appearance and Odor: Greenish-yellow liquid; Pine odor

Specific Gravity: 1.08-1.09
Evaporation Rate (n-Butyl Acetate = 1): <1
pH 100%: 13.2-13.6 pH 1%: 11.3-11.6

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (method): None (T.C.C.)

Flammable Limits: LEL N/A UEL N/A

Extinguishing Media: N/A

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards:

SECTION V REACTIVITY DATA

Stability: Stable X Unstable

Conditions to Avoid:

Incompatibility:

Hazardous Decomposition Products:

Hazardous Polymerization: Will Occur May Not Occur X

MATERIAL SAFETY DATA SHEET
AND SAFE HANDLING AND DISPOSAL INFORMATION

ZEP *CLEAN ACROSS AMERICA AND THROUGHOUT THE WORLD™*

[redacted]
P.O. BOX 2015
ATLANTA, GEORGIA 30301

06/02/93
ISSUE DATE: 09/12/90
SUPERSEDES: 07/26/89

BIG A WELL SERVICE
708 S TUCKER
FARMINGTON, NM 87401

SECTION I - EMERGENCY CONTACTS

TELEPHONE:
(404) 352-1680 — *BETWEEN 8:00 AM - 5:00 PM (EST)*

MEDICAL EMERGENCY:
(404) 435-2973
(404) 351-2952
(404) 432-2873
NON-OFFICE HOURS, WEEKENDS AND HOLIDAYS, PLEASE CALL YOUR **LOCAL POISON CONTROL**

TRANSPORTATION EMERGENCY:
(404) 922-0923

CHEMTREC:
1-800-424-9300 — **TOLL-FREE - ALL CALLS RECORDED**

DISTRICT OF COLUMBIA:
(202) 483-7616 — **ALL CALLS RECORDED**

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
@ " METHYLENE CHLORIDE " dichloromethane; methylene dichloride; CAS# 75-09-2; RTECS# PA8050000; OSHA PEL-500 PPM; OSHA CEILING LIMIT-1000 PPM	50	CNS IRR CAR	40-60
@ " CRESYLIC ACID " CAS# 1319-77-3; RTECS# GO5950000; OSHA PEL- 5 ppm.	5	TOX COR	5-10
" XYLENOLS " dimethylphenol blend; CAS# 1300-71-6; RTECS# NONE; OSHA PEL - N/D	N/D	TOX IRR	< 5
@ " PHENOL " carbolic acid; CAS# 108-95-2; RTECS# SJ3330000; OSHA PEL- 5 ppm	5	HTX IRR	< 5

@ Identifies chemicals listed under SARA-Section 313 for release reporting

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:
Corrosive on contact. Inhalation of vapor can produce central nervous system depression characterized by dizziness, headache, nausea, cardiac and/or respiratory depression, stupor, unconsciousness, and death in extreme cases. Contact with liquid can cause immediate tissue damage or destruction to skin, eyes (can cause blindness), or upper respiratory tract. Exposure to high concentrations of vapor by inhalation can be irritating to mucous membranes, such as eyes and upper respiratory tract. If product is ingested and victim is conscious, induce vomiting by having victim drink two glasses of water and then touch a finger to the back of victim's throat. Be sure victim's head is below hip level to prevent aspiration of solvent. Get emergency medical attention immediately.

Chronic Effects of Overexposure:
Repeated or prolonged inhalation may produce liver or kidney damage or damage to the central nervous system (characterized by tingling or numbness in the extremities, blurred vision, or confusion). One of the ingredients in this product has been shown to cause tumors in laboratory test animals. The relevance of these studies for humans has not been established.

Est'd PEL/TLV: Not established — **Primary Routes of Entry:** Inh, Skin, Ing.

HMIS Codes: HEALTH 3;FLAM. 1;REACT. 1;PERS. PROTECT. F ;CHRONIC HAZ. YES

FIRST AID PROCEDURES:
Skin: Immediately flush contaminated skin with plenty of water for at least 15 minutes. Get medical attention immediately.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
Ingest: If swallowed, induce vomiting by giving two glasses of water and sticking finger down throat. Call a physician immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Wear butyl rubber gloves, a rubber apron, rubber boots, and a face shield.
Eye Protection: Use tight-fitting, splash-proof safety goggles. Contact lenses should not be worn when handling this material.
Respiratory Protection: If ventilation is inadequate, wear a properly fitting MSHA or OSHA-approved respirator.
Ventilation: Ventilation should be equivalent to outdoors. Use exhaust fans and open windows in enclosed spaces.

SECTION V - PHYSICAL DATA

Boiling Point (°F):	105F	**Specific Gravity:**	1.2	**Vapor Pressure (mmHg):**	300(SOL. ONLY)
Percent Volatile by Volume (%):	72	**Vapor Density (air=1):**	2.0	**Evaporation Rate (CCL4 =1):**	2.5
Solubility in Water:	EMULSIFIES	**pH (concentrate):**	N/A	**pH (use dilution of N/A):**	N/A

Appearance and Odor: CLEAR,THIN DARK BROWN LIQUID WITH STRONG "CRESYLIC" ODOR.

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): N/A (TCC)
Flammable Limits: LEL N/A UEL N/A
Extinguishing Media: Noncombustible.
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: SEE SECTION VII

Engine Shop

Conoco Inc.

MOTC0090 | Revised 04-Dec-92 | Printed 23-Jun-93

FLEET HEAVY DUTY MOTOR OIL

MATERIAL IDENTIFICATION

Manufacturer/Distributor	Conoco Inc. P.O. Box 2197 Houston, TX 77252
Phone Numbers	General Information 1-(713)293-5550 Transport Emergency 1-(800)424-9300 Medical Emergency 1-(800)441-3637
Chemical Family	Petroleum Hydrocarbon
Trade Names and Synonyms	Product Codes: 6210/6211/6220/6230/6240/6244/6245/ 6250/6260/6261/6265/6266 Grades: SAE 10W, 10W LP, 10W-30, 15W-40, 20W-20, 30, 40, 50; 10 TBN SAE 15W-40, 10W-30, 30, 40
NFPA Ratings	Health: 0 Flammability: 1 Reactivity: 0
NPCA-HMIS Ratings	Health: 1 Flammability: 1 Reactivity: 0 Personal Protection rating to be supplied by user depending on use conditions.
WHMIS Classification	This is not a WHMIS controlled product.

OSHA HAZARD DETERMINATION

Hazardous Ingredients	CAS Number
Oil Mist, if generated	DP5017-68-9

Under normal conditions of use, this material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

(continued)

PHYSICAL DATA

Boiling Point	>520 to 1200°F
Vapor Pressure	Nil
Vapor Density	>1 (Air = 1.0)
% Volatiles	Nil
Evaporation Rate	Nil
Water Solubility	Insoluble
Odor	Mild Petro. Hydrocarbon
Form	Liquid
Color	Dark Amber to Dark Brown
Specific Gravity	0.87-0.90 @ 60 deg F

HAZARDOUS REACTIVITY

Instability	Stable at normal temperatures and storage conditions.
Incompatibility	Incompatible with strong oxidizing materials. Avoid heat, sparks, and flame.
Decomposition	Combustion forms oxides of carbon and may produce small quantities of oxides of nitrogen, phosphorus, sulfur, and zinc.
Polymerization	Polymerization will not occur.

FIRE AND EXPLOSION DATA

Flash Point	340°F
Method	PMCC
Autoignition	650°F
Fire and Explosion Hazards	Class IIIB Combustible Liquid (NFPA).
Extinguishing Media	Water Spray. Foam. Dry Chemical. CO_2.
Special Fire Fighting Instructions	Special Fire Fighting Procedures: Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures. Unusual Fire and Explosion Hazards: Products of combustion may contain carbon monoxide, carbon dioxide and other toxic materials. Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

(continued)

HEALTH HAZARD INFORMATION

Primary Route of Exposure/Entry: Skin, inhalation.

Signs and Symptoms of Exposure/Medical Conditions Aggravated by Exposure:

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper personal protective equipment and sufficient ventilation can provide adequate protection.

Animal Studies:

Mouse skin painting studies have shown that highly solvent-refined petroleum lubricating oils, which are similar to ingredients in this product, have not caused skin tumors.

"Used" Motor Oil:

Laboratory studies with mice have shown that "used" motor oil applied repeatedly to the skin caused skin cancer. In these studies, the "used" motor oil was not removed between applications. Health hazards to "used" motor oil can be minimized by avoiding prolonged skin contact.

Carcinogenicity	None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.
Applicable Exposure Limits	
Oil Mist, if generated	
AEL * (Du Pont)	5 mg/m3 - 8 & 12 Hr. TWA
TLV (ACGIH)	5 mg/m3 - 8 Hr. TWA, STEL 10 mg/m3 See Notice of Intended Changes (1992-93) 5 mg/m3 - 8 Hr. TWA, severely refined
PEL (OSHA)	5 mg/m3 - 8 Hr. TWA
* AEL is Du Pont's Acceptable Exposure Limit.	Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.
Safety Precautions	Wash thoroughly after handling. Wash clothing after use.

FIRST AID

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Skin Contact	Wash thoroughly with soap and water after handling. If irritation develops, consult a physician.
Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

(continued)

FIRST AID (continued)

Ingestion	If swallowed, do not induce vomiting. Immediately give two glasses of water. Never give anything by mouth to an unconscious person. Call a physician.
Notes to Physician	Activated charcoal slurry may be administered. To prepare activated charcoal slurry, suspend 50 grams activated charcoal in 400mL water and mix thoroughly. Administer 5mL/kg, or 350mL for an average adult. Acute aspiration of large amounts of oil laden material may produce a serious aspiration pneumonia; however, the chances of this occurring are quite unlikely.

PROTECTION INFORMATION

Generally Applicable Control Measures and Precautions	Ventilation: Normal shop ventilation.
Personal Protective Equipment	Respiratory Protection: None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protection where necessary to maintain exposures below acceptable limits. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure, and published respirator protection factors. Protective Gloves: Should be worn when the potential exists for prolonged or repeated skin contact. NBR or Neoprene recommended. Eye/Face Protection: Safety glasses with side shields if splashing is probable. Other Protective Equipment: Coveralls with long sleeves if splashing is probable. Launder contaminated clothing before reuse. Other Precautions: Avoid any prolonged or repeated skin contact with "used" motor oil. Wash thoroughly with soap and water after contact.

SPILL, LEAK AND DISPOSAL INFORMATION

Spill, Leak, or Release	NOTE: Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up. Remove source of heat, sparks, flame, impact, friction or electricity. Dike spill. Prevent liquid from entering sewers, waterways or low areas. Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.
Waste Disposal	Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

(continued)

SHIPPING INFORMATION

DOT	
Proper Shipping Name	Not regulated.
IATA/IMO	
Proper Shipping Name	Not restricted.

STORAGE CONDITIONS

Store in accordance with National Fire Protection Assn regulations. Do not store with strong oxidizing materials.

Store in cool, dry, well-ventilated area, away for heat and all sources of ignition. Keep container closed. Store only in approved containers.

Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container.

"Empty" container retains residue (liquid and/or vapor) and may explode in heat of a fire. Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

TITLE III HAZARD CLASSIFICATIONS

Acute	No
Chronic	No
Fire	No
Reactivity	No
Pressure	No

REGULATORY INFORMATION

OSHA HAZARD DETERMINATION
Under normal conditions of use, this material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

CLEAN AIR ACT, 40 CFR 50, SECTIONS 112, 114
The material is not known to contain a Hazardous Air Pollutant in sufficient quantity to make it subject to CAA regulations.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, & LIABILITY ACT, (CERCLA/SUPERFUND), 40 CFR 302
Not applicable; this material is covered by the CERCLA petroleum exclusion. Releases are not reportable.

(continued)

REGULATORY INFORMATION (continued)

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986, TITLE III (SARA) - SECTIONS 302, 304, 313

SECTION 302/304 - Extremely Hazardous Substances (40 CFR 355)
The material is not known to contain extremely hazardous substances at greater than 1.0% concentration.

SECTION 313 - List of Toxic Chemicals (40 CFR 372)
The material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements.

Toxic Chemical	: Zinc Dialkyl Dithiophosphate
CAS Registry Number	: 68649-42-3
Approximate Concentration (Upper Bound)	: 2.7%

TOXIC SUBSTANCES CONTROL ACT (TSCA)(40 CFR 710)
The material is a mixture as defined by TSCA. The chemical ingredients in this material are in the Section 8(b) Chemical Substance Inventory (40 CFR 710) and/or are otherwise in compliance with TSCA. In the case of ingredients obtained from other manufacturers, Conoco relies of the assurance of responsible third parties in providing this statement.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261, SUBPART C AND D
The material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable or reactive according to U.S. EPA definitions (40 CFR 261). This material could also become a hazardous waste if it is mixed with, or comes in contact with, a listed hazardous waste. If it is a hazardous waste, regulations at 40 CFR 262-266 and 268 may apply.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 116.4A, Section 311.
The material contains the following ingredient(s) which is considered hazardous if spilled in navigable waters and therefore reportable to the National Response Center (1-800-424-8802).

Ingredient	: Petroleum Hydrocarbons
Reportable Quantity	: Film or sheen upon or discoloration of the water surface or adjoining shoreline.

STATE REGULATIONS

(continued)

REGULATORY INFORMATION (continued)

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 ("PROPOSITION 65")
This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT
The material contains the following ingredient(s) found on the Pennsylvania Worker and Community Right-to-Know Act Hazardous Substances List:

Ingredient	**: Zinc Dialkyl Dithiophosphate**
CAS Registry Number	**: 68649-42-3**
Category	**: Environmental Hazard**

Non-hazardous ingredient(s) information is withheld as trade secret in accordance with Section 11 of Pennsylvania Worker and Community Right to Know Act.

ADDITIONAL INFORMATION AND REFERENCES

Product Use : Motor Oil

The above data are based on tests, experience, and other information which Conoco believes reliable and are supplied for informational purposes only. However, some ingredients may have been purchased or obtained from third-party manufactures. In these instances, Conoco, in good faith, relies on information provided by those third parties. Since conditions of use are outside our control, CONOCO DISCLAIMS ANY LIABILITY FOR DAMAGE OR INJURY WHICH RESULTS FROM USE OF THE ABOVE DATA. NOTHING CONTAINED HEREIN SHALL CONSTITUTE A GUARANTEE, WARRANTY (INCLUDING WARRANTY OF MERCHANTABILITY) OR REPRESENTATION (INCLUDING FREEDOM FROM PATENT LIABILITY) BY CONOCO WITH RESPECT TO THE DATA, THE MATERIAL DESCRIBED, OR ITS USE FOR ANY SPECIFIC PURPOSE, EVEN IF THAT PURPOSE IS KNOWN TO CONOCO.

Responsibility for MSDS:

MSDS Administrator
Conoco Inc.
PO Box 2197
Houston, TX 77252
713/293-5550

End of MSDS

CONOCO®

MSDS MATERIAL SAFETY DATA SHEET

ATFC0080 | Revised 6-APR-1994 | Printed 1-MAR-1995

Hydraulic Transmission Fluid Type C-3

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Use
Torque Converter Fluid

Tradenames and Synonyms
7576 - Conoco Base Code

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

PHONE NUMBERS

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

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
May contain any combination of the following		>95
base oils:		
Solvent Refined Dist., Lt. Paraffinic	64741-89-5	
Solvent Refined Dist., Hvy. Paraffinic	64741-88-4	
Solvent Dewaxed Dist., Hvy. Paraffinic	64742-65-0	
*Zinc Compound	68649-42-3	0-1
Proprietary Additives		<5

(Continued)

COMPOSITION/INFORMATION ON INGREDIENTS(Continued)

If oil mist is generated, exposure limit applies.

* Regulated as a Toxic Chemical under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Potential Health Effects

Substance Information
Primary Route of Entry: Skin

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper personal protective equipment and sufficient ventilation can provide adequate protection.

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

FIRST AID MEASURES

First Aid
INHALATION

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

SKIN CONTACT

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

EYE CONTACT

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

INGESTION

(Continued)

FIRST AID MEASURES(Continued)

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

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

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point	380 F (193 C)
Method	Cleveland Open Cup - COC.
Autoignition	660 F (349 C)
NFPA Classification	Class IIIB Combustible Liquid.

Extinguishing Media
Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions
Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures.

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

ACCIDENTAL RELEASE MEASURES

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

Initial Containment
Remove source of heat, sparks, and flame. Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up
Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.

(Continued)

HANDLING AND STORAGE

Handling (Personnel)
Wash thoroughly after handling. Wash clothing after use.

Handling (Physical Aspects)
Close container after each use. Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container. Empty container retains residue (liquid and/or vapor) and may explode in heat of a fire.

Storage
Store in accordance with National Fire Protection Association recommendations. Store in a cool, dry place. Store in a well ventilated place. Store away from oxidizers, heat, sparks and flames.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls
VENTILATION
Normal shop ventilation.

Personal Protective Equipment
RESPIRATORY PROTECTION
None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protective equipment when exposed to sprays or mists. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure, and published respirator protection factors.

PROTECTIVE GLOVES
Should be worn when the potential exists for prolonged or repeated skin contact. NBR or neoprene recommended.

EYE PROTECTION
Safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT
Coveralls with long sleeves if splashing is probable.

Exposure Guidelines
Applicable Exposure Limits
If oil mist is generated, exposure limit applies.

PEL	(OSHA)	5 mg/m3, 8 Hr. TWA
TLV	(ACGIH)	5 mg/m3, 8 Hr. TWA, STEL 10 mg/m3 Notice of Intended Changes (1993-1994) 5 mg/m3, 8 Hr. TWA, severely refined
AEL *	(Du Pont)	5 mg/m3, 8 Hr. TWA

* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

(Continued)

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	>600-1000 F (316-538 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air = 1)
% Volatiles	Nil
Evaporation Rate	Nil
Solubility in Water	Negligible
Odor	Mild Petro. Hydrocarbon
Form	Liquid
Color	Amber or Clear Red
Specific Gravity	0.871-0.876 @ 60 F (16 C)
Density	7.25-7.29 lb/gal @ 60 F (16 C)

STABILITY AND REACTIVITY

Chemical Stability
Stable at normal temperatures and storage conditions.

Conditions to Avoid
Heat, sparks, and flames.

Incompatibility with Other Materials
Incompatible or can react with strong oxidizers.

 # Decomposition
Hazardous gases or vapors can be released, including oxides of carbon, nitrogen, sulfur.

Polymerization
Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data
Mouse skin painting studies have shown that highly solvent-refined petroleum distillates similar to ingredients in this product have not caused skin tumors.

Animal skin exposure studies show high concentrations of zinc organic phosphates cause testicular atrophy, but this effect appears related to stress from the chemical causing severe skin irritation. Low concentrations of the zinc component, as occurs in lubricant products, would not have caused testicular damage.

ECOLOGICAL INFORMATION

Ecotoxicological Information
No specific aquatic data available for this product.

(Continued)

DISPOSAL CONSIDERATIONS

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

Container Disposal
Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

TRANSPORTATION INFORMATION

Shipping Information
DOT
Not regulated.

ICAO/IMO
Not restricted.

REGULATORY INFORMATION

U.S. Federal Regulations
OSHA HAZARD DETERMINATION
Under normal conditions of use, this material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

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

SARA, TITLE III, 302/304
This material is not known to contain extremely hazardous substances.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Non-hazardous

SARA, TITLE III, 313
This material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements:

Toxic Chemical Zinc Compound.

TSCA
Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

(Continued)

REGULATORY INFORMATION(Continued)

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

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

Ingredient	Petroleum Hydrocarbons.
Reportable Quantity	Film or sheen upon or discoloration of any water surface.

State Regulations (U.S.)
CALIFORNIA "PROP 65"
This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT
This material may contain the following ingredient(s) subject to the Pennsylvania and Community Right to Know Hazardous Substances List.

Ingredient	Zinc Compound.
Category	Environmental Hazard.

Canadian Regulations
This is not a WHMIS Controlled Product.

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

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	0
Flammability	1
Reactivity	0

NPCA-HMIS Rating	
Health	1
Flammability	1
Reactivity	0

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

(Continued)

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

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

 # Indicates updated section.

End of MSDS

HYDC0180 Revised 13-JAN-1994 Printed 13-FEB-1994

SUPER HYDRAULIC OIL 22, 32, 46, 68

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Use
Antiwear Hydraulic Fluid

Tradenames and Synonyms
7447, 7448, 7449, 7450 - Conoco Product Codes

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

PHONE NUMBERS

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

COMPOSITION/INFORMATION ON INGREDIENTS

# Components Material	CAS Number	%
May contain any combination of the following		90-99
base oils:		
Solvent Refined Dist, Lt Paraffinic	64741-89-5	
Solvent Refined Dist, Hvy Paraffinic	64741-88-4	
Solvent Dewaxed Dist, Hvy Paraffinic	64742-65-0	
Hydrotreated Dist, Hvy Paraffinic	64742-54-7	
Hydrotreated Bottoms	64742-57-0	
*Zinc Compound	68649-42-3	0-1

(Continued)

FIRST AID MEASURES(Continued)

EYE CONTACT

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

INGESTION

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

Notes to Physicians

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

High velocity injection under the skin can cause a bloodless puncture wound and result in necrosis. Immediate attention by a surgical specialist is recommended.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point	355 F (179 C) (Minimum)
Method	Cleveland Open Cup - COC.
Autoignition	650 F (343 C)
NFPA Classification	Class IIIB Combustible Liquid.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures.

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

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

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

(Continued)

EXPOSURE CONTROLS/PERSONAL PROTECTION(Continued)

Exposure Guidelines

Applicable Exposure Limits

If oil mist is generated, exposure limit applies.

PEL (OSHA)	5 mg/m3, 8 Hr. TWA
TLV (ACGIH)	5 mg/m3, 8 Hr. TWA, STEL 10 mg/m3 Notice of Intended Changes (1993-1994) 5 mg/m3, 8 Hr. TWA, severely refined
AEL * (Du Pont)	5 mg/m3, 8 Hr. TWA

* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	>555-1060 F (291-571 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air = 1)
% Volatiles	Nil
Evaporation Rate	Nil
Solubility in Water	Insoluble
Odor	Mild petro. hydrocarbon
Form	Liquid
Color	Clear Yellow to Light Amber to Brown
Specific Gravity	0.863-0.88 @ 60 F (16 C)
Density	7.16-7.33 lb/gal @ 60 F (16 C)

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Conditions to Avoid

Avoid heat, sparks, and flame.

Incompatibility with Other Materials

Incompatible or can react with strong oxidizers.

Decomposition

Normal combustion forms oxides of carbon and may produce minor quantities of oxides of nitrogen, phosphorus, sulfur, and zinc.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

 # Animal Data

Mouse skin painting studies have shown that highly solvent-refined petroleum distillates similar to ingredients in this product have not caused skin tumors.

(Continued)

REGULATORY INFORMATION(Continued)

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

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

SARA, TITLE III, 313
This material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements:

Toxic Chemical(s) Zinc Compound

TSCA
Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

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

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

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

State Regulations (U.S.)
CALIFORNIA "PROP 65"
This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT
This material contains the following ingredient(s) subject to the Pennsylvania Worker and Community Right to Know Hazardous Substances List.

Ingredient	Zinc Compound
Category	Environmental Hazard

Canadian Regulations
This is not a WHMIS Controlled Product.

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

(Continued)

CONOCO®

MSDS MATERIAL SAFETY DATA SHEET

GREC0290 | Revised 24-AUG-1994 | Printed 20-JAN-1995

"SUPER-STA" GREASE

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification
"SUPER-STA" is a registered trademark of Conoco.

Grade: No. 1, No. 2

Product Use
Grease

Tradenames and Synonyms
9029, 9030 - Conoco Base Codes

Company Identification
MANUFACTURER/DISTRIBUTOR
CONOCO INC.
PO BOX 2197
HOUSTON, TX 77252

PHONE NUMBERS

Product Information	1-713-293-5550	
Transport Emergency	1-800-424-9300	(Canada 1-613-348-3616)
Medical Emergency	1-800-441-3637	(Canada 1-613-348-3616)

COMPOSITION/INFORMATION ON INGREDIENTS

#	Components Material	CAS Number	%
	Highly Solvent-Refined Base Oils		>85
	Lithium Stearate Soap	7620-77-1	<10
*	Zinc Compound		0-1
	Proprietary Additives		<10

* Regulated as a Toxic Chemical under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

(Continued)

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point	450 F (232 C) (Base Oil)
Method	Cleveland Open Cup - COC.
Autoignition	700 F (371 C)
NFPA Classification	Class IIIB Combustible Liquid.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures.

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

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

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

Spill Clean Up

Recover undamaged and minimally contaminated material for reuse and reclamation. Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

HANDLING AND STORAGE

Handling (Personnel)

Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

Handling (Physical Aspects)

Close container after each use. Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container. Empty container retains residue (liquid and/or vapor) and may explode in heat of a fire.

Storage

Store in accordance with National Fire Protection Association recommendations. Store away from oxidizers, heat, sparks and flames.

(Continued)

REGULATORY INFORMATION

 # U.S. Federal Regulations

OSHA HAZARD DETERMINATION
This material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

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

SARA, TITLE III, 302/304
This material is not known to contain extremely hazardous substances.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

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

SARA, TITLE III, 313
This material contains the following chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and is subject to toxic chemical release reporting requirements:

Toxic Chemical	Zinc Compound.
CAS Number	Proprietary.

TSCA
Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

RCRA
This material has been evaluated for RCRA characteristics and does not meet hazardous waste criteria if discarded in its purchased form. Because of product use, transformation, mixing, processing, etc., which may render the resulting material hazardous, it is the product user's responsibility to determine at the time of disposal whether the material meets RCRA hazardous waste criteria.

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

Ingredient	Petroleum Hydrocarbons.
Reportable Quantity	Film or sheen upon or discoloration of any water surface.

(Continued)

REGULATORY INFORMATION(Continued)

 # State Regulations (U.S.)

CALIFORNIA "PROP 65"
This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT
This material may contain the following ingredient(s) subject to the Pennsylvania and Community Right to Know Hazardous Substances List.

Ingredient	Zinc Compound.
CAS Number	Proprietary.
Category	Environmental Hazard.

Canadian Regulations

This is not a WHMIS Controlled Product.

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

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	0
Flammability	1
Reactivity	0

NPCA-HMIS Rating	
Health	1
Flammability	1
Reactivity	0

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

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

Responsibility for MSDS	: MSDS Administrator
Address	: Conoco Inc.
>	: PO Box 2197
>	: Houston, TX 77252
Telephone	: 1-713-293-5550

# Indicates updated section.

End of MSDS

No. 2 Diesel Fuel

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification
CAS Number 68476-34-6

 # Tradenames and Synonyms
Diesel Fuel No. 2, Low Sulfur
Diesel Fuel No. 2, High Sulfur
-
3502, 3504, 3510, 3512

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

PHONE NUMBERS

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

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
Diesel Fuel, No. 2	68476-34-6	100

HAZARDS IDENTIFICATION

Potential Health Effects

Primary Routes of Exposure/Entry: Skin, Inhalation.

Signs and Symptoms of Exposure/Medical Conditions Aggravated by Exposure:
The product may cause irritation to the eyes, lungs, and skin after prolonged or repeated exposure. Extreme

(Continued)

HAZARDS IDENTIFICATION (Continued)

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

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

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

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

Carcinogenicity Information
None of the components in this material is listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid
INHALATION

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

SKIN CONTACT

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

EYE CONTACT

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

INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses

(Continued)

of water. Never give anything by mouth to an unconscious person. Call a physician.

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

FIRE FIGHTING MEASURES

Flammable Properties

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

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

NFPA Classification Class II Combustible Liquid.

Extinguishing Media
Water Spray, Foam, Dry Chemical, CO2.

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

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

ACCIDENTAL RELEASE MEASURES

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

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

(Continued)

ACCIDENTAL RELEASE MEASURES (Continued)

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

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

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

HANDLING AND STORAGE

Handling (Personnel)
Avoid breathing vapors or mist. Wash thoroughly after handling Wash clothing after use.

Handling (Physical Aspects)
Ground container when pouring. Keep away from heat, sparks and flames.

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

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls
Use only with adequate ventilation. Keep container tightly closed.

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

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

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

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

Exposure Guidelines
Exposure Limits
No. 2 Diesel Fuel

PEL	(OSHA)	None Established
TLV	(ACGIH)	None Established

(Continued)

PHYSICAL AND CHEMICAL PROPERTIES

 # Physical Data

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

*Color : High Sulfur Diesel - Green
Others - Clear or Light Yellow

STABILITY AND REACTIVITY

Chemical Stability
Stable at normal temperatures and storage conditions.

Conditions to Avoid
Avoid heat, sparks, and flame.

Incompatibility with Other Materials
Incompatible or can react with strong oxidizers.

Decomposition
Incomplete combustion may produce carbon monoxide.

Polymerization
Polymerization will not occur.

TOXICOLOGICAL INFORMATION

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

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

(Continued)

TOXICOLOGICAL INFORMATION (Continued)

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

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

DISPOSAL CONSIDERATIONS

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

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

TRANSPORTATION INFORMATION

Shipping Information
INTERNATIONAL HM-181

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

DOMESTIC HM-181

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

(Continued)

REGULATORY INFORMATION

U.S. Federal Regulations

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

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

SARA, TITLE III, 302/304
This material is not known to contain extremely hazardous substances.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

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

SARA, TITLE III, 313
This material is not known to contain any chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and subject to release reporting requirements.

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

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

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

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

State Regulations (U.S.)

CALIFORNIA "PROP 65"
This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT
This material contains the following ingredient(s) subject to the

(Continued)

REGULATORY INFORMATION (Continued)

Pennsylvania Worker and Community Right to Know Hazardous Substances List.

Ingredient	Diesel Fuel Oil
Category	Hazardous Substance

Canadian Regulations

CLASS B Division 3 - Combustible Liquid.

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

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

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	0
Flammability	2
Reactivity	0

NPCA-HMIS Rating	
Health	1
Flammability	2
Reactivity	0

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

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

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

# Indicates updated section.

End of MSDS

GASC0210 Revised 17-SEP-1993 Printed 28-SEP-1993

No. 1 Diesel Fuel, No. 1 Fuel Oil

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

 # Tradenames and Synonyms

Fuel Oil, No. 1
Diesel Fuel, No. 1
No. 1 Diesel Fuel, Low Sulfur
3501, 3511, 4195

Company Identification

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

PHONE NUMBERS

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

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
Straight Run Kerosene	8008-20-6	
and/or		
Hydrodesulfurized Kerosene	64742-81-0	

HAZARDS IDENTIFICATION

Potential Health Effects

Primary Routes of Exposure/Entry: Skin, Inhalation.

Signs and Symptoms of Exposure/Medical Conditions Aggravated by Exposure:

(Continued)

HAZARDS IDENTIFICATION(Continued)

The product may cause irritation to the eyes, lungs, and skin after prolonged or repeated exposure. Extreme overexposure or aspiration into the lungs may cause lung damage and death. Overexposure may cause weakness, headache, nausea, confusion, blurred vision, drowsiness, and other nervous system effects; greater exposure may cause dizziness, slurred speech, flushed face, aortic plaques, heart beat irregularities, unconsciousness, and convulsions.

Pulmonary fibrosis has been reported in cable plant workers exposed to mist and vapors of mineral oils and kerosene for 5-35 years. Because of mixed exposures to mineral oils as well as kerosene it is difficult to attribute these effects to kerosene alone.

Individuals with preexisting diseases of the lungs, liver, or kidneys may have increased susceptibility to the toxicity of excessive exposures.

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

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

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

Carcinogenicity Information
None of the components in this material is listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid
INHALATION

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

SKIN CONTACT

(Continued)

FIRST AID MEASURES(Continued)

Wash skin thoroughly with soap and water after handling. Ifirritation develops, consult a physician.

EYE CONTACT

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

INGESTION

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

Notes to Physicians

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

Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances. Activated charcoal may induce vomiting, but may be given after emesis or lavage to absorb toxic additives. Steroid therapy in mild to moderate cases does not improve outcome. Bacterial pneumonia often occurs after exposure, but prophylactic antibiotics are not indicated and should be reserved for documented bacterial pneumonia.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point	115 F (46 C)
Method	TCC
Flammable limits in Air, % by Volume	
LEL	0.5
UEL	6
Autoignition	410 F (210 C)

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

NFPA Classification Class II Combustible Liquid.

Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

(Continued)

FIRE FIGHTING MEASURES (Continued)

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

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

ACCIDENTAL RELEASE MEASURES

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

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

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

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

HANDLING AND STORAGE

Handling (Personnel)
Avoid breathing vapors or mist. Wash thoroughly after handling. Wash clothing after use.

Handling (Physical Aspects)
Ground container when pouring. Keep away from heat, sparks and flames.

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

(Continued)

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls
Use only with adequate ventilation. Keep container tightly closed.

Personal Protective Equipment
Respiratory Protection: None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protection where necessary to avoid inhalation of mist or vapors and to maintain exposures below acceptable limits. Proper respiratory selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure and published respirator protection factors.

Protective Gloves: Should be worn when the potential exists for prolonged or repeated skin exposure. NBR or neoprene recommended.

Eye Protection: Wear safety glasses. Wear coverall chemical splash goggles and face shield when the possibility exists for eye and face contact due to splashing or spraying of material.

Other Protective Equipment: Coveralls with long sleeves if splashing is probable. Launder contaminated clothing before reuse. Extremely contaminated leather shoes should be discarded.

Exposure Guidelines
Exposure Limits
No. 1 Diesel Fuel, No. 1 Fuel Oil

PEL	(OSHA)	None Established
TLV	(ACGIH)	None Established

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	330-572 F (166-300 C)
Vapor Pressure	2 mm/Hg @ 68 F (20 C)
Vapor Density	>1 (Air = 1)
% Volatiles	(by volume) Nil
Solubility in Water	Insoluble
Odor	Paraffinic
Form	Liquid
Color	Clear
Specific Gravity	0.81

(Continued)

STABILITY AND REACTIVITY

Chemical Stability
Stable at normal temperatures and storage conditions.

Conditions to Avoid
Avoid heat, sparks, and flame.

Incompatibility with Other Materials
Incompatible with oxidizing materials.

Decomposition
Incomplete combustion may produce carbon monoxide.

Polymerization
Polymerization will not occur.

TOXICOLOGICAL INFORMATION

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

Mouse skin painting studies have shown that petroleum middle distillates (boiling range 100-700 F; naphtha, jet fuel, diesel fuel, kerosene, etc.) can cause skin cancer when repeatedly applied and never washed from the animal's skin. The relative significance of this to human health is uncertain since the petroleum distillates were not washed from the skin and resulting skin effects (irritation, cell damage, etc.) may play a role in the tumorigenic response. A few studies have shown that washing the animal's skin with soap and water between treatements greatly reduces the carcinogenic effect of some petroleum oils.

Skin	: Extremely irritating; no mortality at 5 ml/kg, rabbit
Oral	: LD50: 9 ml/kg, rat

(Continued)

DISPOSAL CONSIDERATIONS

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

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

TRANSPORTATION INFORMATION

Shipping Information
INTERNATIONAL HM-181

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

DOMESTIC HM-181

Proper Shipping Name	Fuel oil (or) Diesel fuel
Hazard Class	Combustible liquid
UN/NA Number	NA 1993
Packing Group	III
Label	None
Placard	Combustible

Special Information:
Material must be shipped as a flammable liquid in accordance with the international description if shipped by vessel or air.

REGULATORY INFORMATION

U.S. Federal Regulations
OSHA HAZARD DETERMINATION
This material is hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

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

SARA, TITLE III, 302/304
This material is not known to contain extremely hazardous substances.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

(Continued)

REGULATORY INFORMATION(Continued)

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

SARA, TITLE III, 313
This material is not known to contain any chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and subject to release reporting requirements.

TSCA
Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

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

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

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

State Regulations (U.S.)
CALIFORNIA "PROP 65"
This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT
This material contains the following ingredient(s) subject to the Pennsylvania Worker and Community Right to Know Hazardous Substances List.

Ingredient	Kerosene (Petroleum)
Category	Hazardous Substance

Canadian Regulations
CLASS B Division 3 - Combustible Liquid.

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

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

(Continued)

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	0
Flammability	2
Reactivity	0

NPCA-HMIS Rating	
Health	1
Flammability	2
Reactivity	0

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

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

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

# Indicates updated section.

End of MSDS

UNIVERSAL GEAR LUBRICANT

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification
Grade 80W-90, 85W-140

Tradenames and Synonyms
7650, 7651
UGL

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

PHONE NUMBERS

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

COMPOSITION/INFORMATION ON INGREDIENTS

# Components Material	CAS Number	%
May contain any combination of the following		>80
base oils:		
	64742-65-0	
Solvent Dewaxed Distillate, Heavy Paraffinic		
	64741-88-4	
Solvent Refined Distillate, Heavy Paraffinic		
	64742-54-7	
Hydrotreated Distillate, Heavy Paraffinic		

(Continued)

COMPOSITION/INFORMATION ON INGREDIENTS(Continued)

	64742-62-7	
Solvent Dewaxed Residual Oil		
Solvent Refined Residuum	64742-01-4	
Hydrotreated Bottoms	64742-57-0	
Olefin Sulfide		0-5
Amyl Acid Phosphate Compound		0-5
Proprietary Additives		<20
Oil Mist, if generated		

HAZARDS IDENTIFICATION

Potential Health Effects

Substance Information
Primary Routes of Entry: Skin, inhalation

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper personal protective equipment and sufficient ventilation can provide adequate protection.

Carcinogenicity Information
None of the components in this material is listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid
INHALATION

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

SKIN CONTACT

Wash thoroughly with soap and water after handling. If irritation develops, consult a physician.

EYE CONTACT

(Continued)

FIRST AID MEASURES(Continued)

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

INGESTION

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

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

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point	280 F (138 C)
Method	PMCC
Autoignition	680 F (360 C)
NFPA Classification	Class IIIB Combustible Liquid.

Extinguishing Media
Water Spray, Foam, Dry Chemical, CO2.

Fire Fighting Instructions
Special Fire Fighting Procedures: Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures.

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

ACCIDENTAL RELEASE MEASURES

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

Initial Containment
Remove source of heat, sparks, flame, impact, friction or electricity. Dike spill. Prevent material from entering sewers, waterways, or low areas.

Spill Clean Up
Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.

(Continued)

HANDLING AND STORAGE

Handling (Personnel)
Wash thoroughly after handling. Wash clothing after use.

Storage
Store in accordance with National Fire Protection Association recommendations. Store in a cool, dry place. Store away from heat, sparks and flames, oxidizers. Close container after each use.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls
Ventilation: Normal shop ventilation.

Personal Protective Equipment
Respiratory Protection: None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protection where necessary to maintain exposures below acceptable limits. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure, and published respirator protection factors.

Protective Gloves: Should be worn when the potential exists for prolonged or repeated skin contact. NBR or Neoprene recommended.

Eye/Face Protection: Safety glasses with side shields if splashing is probable.

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

Exposure Guidelines
Applicable Exposure Limits
Oil Mist, if generated

PEL	(OSHA)	5 mg/m3, 8 Hr. TWA
TLV	(ACGIH)	5 mg/m3, 8 Hr. TWA, STEL 10 mg/m3 Notice of Intended Changes (1992-1993) 5 mg/m3, 8 Hr. TWA, severely refined
AEL *	(Du Pont)	5 mg/m3, 8 Hr. TWA

* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

(Continued)

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	750-1200 F (399-649 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air = 1)
% Volatiles	Nil
Evaporation Rate	Nil 0
Solubility in Water	Insoluble
Odor	Mild Petro. Hydrocarbon
Form	Viscous Liquid
Color	Dark brown
Specific Gravity	0.89 (Water = 1)

STABILITY AND REACTIVITY

Chemical Stability
Stable.

Incompatibility with Other Materials
Incompatible with strong oxidizing materials. Avoid heat, sparks, and flame.

Decomposition
Incomplete combustion may produce carbon monoxide.

Polymerization
Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data
Mouse skin painting studies have shown that highly solvent-refined petroleum distillates similar to ingredients in this product have not caused skin tumors.

DISPOSAL CONSIDERATIONS

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

TRANSPORTATION INFORMATION

Shipping Information

DOT
Proper Shipping Name — Not regulated.

DOT/IMO
Proper Shipping Name — Not restricted.

(Continued)

REGULATORY INFORMATION

U.S. Federal Regulations

OSHA HAZARD DETERMINATION
Under normal conditions of use, this material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

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

SARA, TITLE III, 302/304
This material is not known to contain extremely hazardous substances.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

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

SARA, TITLE III, 313
This material is not known to contain any chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of Toxic Chemicals and subject to release reporting requirements.

TSCA
Material and/or components are listed in the TSCA Inventory of Chemical Substances (40 CFR 710).

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

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

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

State Regulations (U.S.)

CALIFORNIA "PROP 65"
This material is not known to contain any ingredient(s) subject to the Act.

PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT

(Continued)

REGULATORY INFORMATION (Continued)

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

Canadian Regulations
This is not a WHMIS Controlled Product.

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating

Health	0
Flammability	1
Reactivity	0

NPCA-HMIS Rating

Health	1
Flammability	1
Reactivity	0

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

Additional Information
Product Use: Petroleum Lubricating Oil

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

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

# Indicates updated section.

End of MSDS

Interstate Chemical Co.
MSDS for SOLVENT 140

4 - Section III - Physical Data

BOILING POINT (INDICATE IF "F" OR "C"): 367 - 414 F

VAPOR PRESSURE(mm Hg): <1 @ R.T.

VAPOR DENSITY (AIR = 1): 5.40

SPECIFIC GRAVITY (H2O=1): 0.7900

PERCENT VOLATILE BY VOLUME (%): 100

EVAPORATION RATE (But Ac)=1: 0.1

SOLUBILITY IN WATER: nil

APPEARANCE AND ODOR: Clear, colorless, liquid; mild odor.

5 - Section IV - Fire and Explosion Hazard Data

LASH POINT (METHOD USED): 143 F (TCC)

FLAMMABLE LIMITS: Volume % in Air
LEL: 2.1
UEL: 13.0

EXTINGUISHING MEDIA: CO2, dry chemical, alcohol foam, water mist (fog).

SPECIAL FIRE FIGHTING PROCEDURES: Use SCBA, wear protective equipment, combustible liquid.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

6 - Section V - Health Hazard Data

THRESHOLD LIMIT VALUE: See sect. II.

EFFECTS OF OVEREXPOSURE:

EYE CONTACT: Slightly irritating but does not injure eye tissue.

6 - Section V - Health Hazard Data (continued)

SKIN CONTACT: Low order of toxicity. Frequent or prolonged contact causes irritation and/or dermatitis.

INHALATION: High vapor/aerosol concentrations (greater than approximately 1000ppm) are irritating to the eyes and the respiratory tract. This may cause headaches, dizziness, drowsiness, unconsciousness, anesthesia, and other central nervous system effects, including death.

INGESTION: Minimal toxicity. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT: Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, after flushing has begun.

INHALATION: Using proper respiratory protection, immediately remove the affected vicitm to fresh air. Administer artifical respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

INGESTION: If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

7 - Section VI - Reactivity Data

STABILITY (choose one): ( )UNSTABLE
(x)STABLE

* CONDITIONS TO AVOID: Heat, sparks, open flame.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: CO & CO2

7 - Section VI - Reactivity Data (continued)

HAZARDOUS POLYMERIZATION (choose one): ( )MAY OCCUR
(x)WILL NOT OCCUR

* CONDITIONS TO AVOID: None.

8 - Section VII - Spill or Leak Procedures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contain spill; provide adequate ventilation; keep people away; EXTINGUISH ALL IGNITION SOURCES; keep material out of public waters; use dry absorbant on small spills.

WASTE DISPOSAL METHOD: Incinerate according to all federal, state and local regulations.

9 - Section VIII - Special Protection Information

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH approved organic vapor cartridge.

VENTILATION:

LOCAL EXHAUST: preferred
MECHANICAL (GENERAL): acceptable
SPECIAL:
OTHER:

PROTECTIVE GLOVES: Rubber or neoprene.

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Rubber apron and boots.

10 - Section IX - Special Precautions

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in dry, cool area; keep containers closed; use adequate ventilation; wash thoroughly after handling; use protective clothing; no ignition sources present.

10 - Section IX - Special Precautions (continued)

OTHER PRECAUTIONS: COMBUSTIBLE LIQUID- Clean equipment thoroughly prior to maintenance and/or repair.

11 - Section X - SARA Title III

This product may contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Right to Know Act of 1986 and of 40 CFR 372.

NALCO

MATERIAL SAFETY DATA SHEET

PRODUCT

[redacted]

Emergency Telephone Number
Medical (708) 920-1510 (24 hours)

SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: FUEL-PREP 2012 FUEL TREATMENT
DESCRIPTION: A hydrocarbon solution of an amine substituted resin and an imidazoline.

NFPA 704M/HMIS RATING: 3/3 HEALTH 2/2 FLAMMABILITY 0/0 REACTIVITY 0 OTHER
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evaluation has identified the following chemical ingredient(s) as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 14 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX.%
Amine substituted resin	Trade secret	40-70
Heavy aromatic naphtha	64742-94-5	20-40
1-(2-hydroxyethyl)-2-alkyl (C-18)-2-imidazoline	61791-39-7	25

SECTION 3 PRECAUTIONARY LABEL INFORMATION

DANGER: Harmful if swallowed, inhaled, or absorbed through the skin. Causes severe eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Keep away from heat and open flame. Keep container closed when not in use. Avoid breathing of vapor. Use with adequate ventilation. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

SECTION 4 FIRST AID INFORMATION

EYES:	Immediately flush for at least 15 minutes while holding eyelids open. Call a physician at once.
SKIN:	Immediately flush with water for at least 15 minutes. For a large splash, flood body under a shower. Call a physician at once.
INGESTION:	Do not induce vomiting. Give water. Call a physician at once.
INHALATION:	Remove to fresh air. Treat symptoms. Call a physician at once.

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60563-1198
AREA 708-305-1000

SECTION 4 FIRST AID INFORMATION (CONTINUED)

NOTE TO PHYSICIAN: No specific antidote is known. Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.

SECTION 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin, Inhalation

EYE CONTACT: Corrosive to the eyes with possible permanent damage depending on the length of exposure and on the first aid action given.

SKIN CONTACT: Corrosive to the skin with possible permanent damage depending on the length of exposure and on the first aid action given.

INGESTION: Can be harmful.

INHALATION: Inhalation of vapor may be harmful.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.

SECTION 6 TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have been conducted on this product. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS): LD_{50} = 2,500 mg/kg

95% Confidence Limit = Plus or minus 400 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS): LD_{50} = 5,600 mg/kg

COMMENTS: Severe local skin reactions included severe edema and subdermal hemorrhage that lead to necrosis.

SECTION 6 TOXICOLOGY INFORMATION (CONTINUED)

ACUTE INHALATION TOXICITY (ALBINO RATS): LC_{50} = Greater than 2.0 mg/l (4-hour exposure)

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):
SKIN IRRITATION INDEX DRAIZE RATING: 8.0/8.0 Extremely irritating

COMMENTS: Corrosive to skin and underlying tissues.

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):
EYE IRRITATION INDEX DRAIZE RATING: 94/110.0 Extremely irritating

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Clear to slightly hazy, amber FORM: Liquid ODOR: Hydrocarbon

DENSITY:	7.6-7.4 lbs/gal.	
SOLUBILITY IN WATER:	Insoluble	
SPECIFIC GRAVITY:	0.91-0.93 @ 60 Degrees F	
VISCOSITY:	106 cts/97 cps/489 SUS @ 60 Degrees F	ASTM D-445
POUR POINT:	Less than -22 Degrees F	ASTM D-97
FLASH POINT:	151 Degrees F (PMCC)	ASTM D-93
PERCENT VOLATILE:	2 @ 75 Degrees F	ASTM D-323

NOTE: These physical properties are typical values for this product.

SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: 151 Degrees F (PMCC) ASTM D-56

EXTINGUISHING MEDIA: Based on the NFPA guide, use dry chemical, foam, carbon dioxide or other extinguishing agent suitable for Class B fires. Use water to cool containers exposed to fire. For large fires, use water spray or fog, thoroughly drenching the burning material.

UNUSUAL FIRE AND EXPLOSION HAZARD: Containers exposed in a fire should be cooled with water to prevent vapor pressure buildup leading to a rupture.

SECTION 9 REACTIVITY INFORMATION

INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

SECTION 9 REACTIVITY INFORMATION (CONTINUED)

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO_2, NOx, may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 10 PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION: If it is possible to generate significant levels of vapors or mists, a NIOSH approved or equivalent respirator is recommended.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION: General ventilation is recommended. Additionally, local exhaust ventilation is recommended where vapors or mists may be released.

PROTECTIVE EQUIPMENT: Wear gloves, boots, apron and a face shield with chemical splash goggles. A full slicker suit is recommended if gross exposure is possible.

The availability of an eye wash fountain and safety shower is recommended.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

SECTION 11 SPILL AND DISPOSAL INFORMATION

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (708-920-1510)

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 14.

Large liquid spills: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 14.

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60563-1198

AREA 708-305-1000

SECTION 11 SPILL AND DISPOSAL INFORMATION (CONTINUED)

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D. Can be incinerated in accordance with local, state and federal regulations.

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

METAL CONTAINERS: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

PLASTIC CONTAINERS: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 12 ENVIRONMENTAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish. Do not discharge into lakes, streams, ponds or public waters. Do not contaminate water by cleaning of equipment or disposal of wastes.

AQUATIC DATA:

96-hour static acute LC_{50} to Bluegill Sunfish = 1.09 ppm

95% Confidence Limit of 96 hour LC_{50} = 0.93 - 1.24 ppm

TOXICITY RATING: Toxic

96-hour static acute LC_{50} to Rainbow Trout = 1.17 ppm

TOXICITY RATING: Toxic

OTHER STUDIES:
8-day dietary LC_{50} - Bobwhite Quail = Greater than 5,000 ppm
8-day dietary LC_{50} - Mallard Ducks = Greater than 5,000 ppm

SECTION 12 ENVIRONMENTAL INFORMATION (CONTINUED)

If released into the environment, see CERCLA in Section 14.

SECTION 13 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME/HAZARD CODE - CORROSIVE LIQUID, N.O.S.
CORROSIVE MATERIAL UN 1760

CONTAINS - ORGANIC AMINE COMPOUND

SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:
Based on our hazard evaluation, the following ingredients in this product are hazardous and the reasons are shown below.

Amine substituted resin - Eye/skin irritant
Heavy aromatic naphtha - Irritant, combustible
1-(2-hydroxyethyl)-2-alkyl(C-18)-2-imidazoline - Corrosive

Heavy aromatic solvent = 100 ppm TLV
Manufacturer's recommendation

CERCLA/SUPERFUND, 40 CFR 117, 302:
Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):
This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

XX Immediate (acute) health hazard
-- Delayed (chronic) health hazard
XX Fire hazard

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AREA 708-305-1000

SECTION 14 REGULATORY INFORMATION (CONTINUED)

-- Sudden release of pressure hazard
-- Reactive hazard

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):
This product does not contain ingredients (at a level of 1% or greater) on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):
The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT (FIFRA):
EPA Reg. No. 1706-101.
This product is registered for use as a microorganism control chemical used in distillate fuel oil treatment. In all cases follow instructions on the product label.

REGISTERED WITH THE U. S. EPA, OFFICE OF FUEL AND FUEL ADDITIVE REGISTRATION, as a fuel additive.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:
Consult Section 11 for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 (formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):
None of the ingredients are specifically listed.

CLEAN AIR ACT, 40 CFR 60, SECTION 111, 40 CFR 61, SECTION 112:
This product does not contain ingredients covered by the Clean Air Act.

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:
None of the chemicals on the current Proposition 65 list are known to be present in this product.

MICHIGAN CRITICAL MATERIALS:
This product does not contain ingredients listed on the Michigan Critical Materials Register.

STATE RIGHT TO KNOW LAWS:
This product is regulated under FIFRA and is exempt from Right To Know Laws.

INTERNATIONAL REGULATIONS:

SECTION 14 REGULATORY INFORMATION (CONTINUED)

This product is a registered biocide and is exempt from WHMIS under The House of Commons of Canada Bill C-70.

SECTION 15 ADDITIONAL INFORMATION

Nalco internal number F08515

SECTION 16 USER'S RESPONSIBILITY

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

SECTION 17 BIBLIOGRAPHY

ANNUAL REPORT ON CARCINOGENS, U.S. Department of Health and Human Services, Public Health Service, PB 33-135855, 1983.

CASARETT AND DOULL'S TOXICOLOGY, THE BASIC SCIENCE OF POISONS, Doull, J., Klaassen, C. D., and Admur, M. O., eds., Macmillian Publishing Company, Inc., N. Y., 2nd edition, 1980.

CHEMICAL HAZARDS OF THE WORKPLACE, Proctor, N. H., and Hughes, J. P., eds., J. P. Lipincott Company, N.Y., 1981.

DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, Sax, N. Irving, ed., Van Nostrand Reinhold Company, N.Y., 6th edition, 1984.

IARC MONOGRAPHS ON THE EVALUATION OF THE CARCINOGENIC RISK OF CHEMICALS TO MAN, Geneva: World Health Organization, International Agency for Research on Cancer, 1972-1977.

PATTY'S INDUSTRIAL HYGIENE AND TOXICOLOGY, Clayton, G. D., Clayton, F. E., eds., John Wiley and Sons, N. Y., 3rd edition, Vol. 2 A-C, 1981.

REGISTRY OF TOXIC EFFECTS ON CHEMICAL SUBSTANCES, U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health, 1983

SECTION 17 BIBLIOGRAPHY (CONTINUED)

supplement of 1981-1982 edition, Vol. 1-3, OH, 1984.

Title 29 Code of Federal Regulations Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS IN THE WORKROOM ENVIRONMENT WITH INTENDED CHANGES, American Conference of Governmental Industrial Hygienists, OH.

PREPARED BY: Ricky A. Stackhouse PhD., Toxicologist
DATE CHANGED: 11/11/91 DATE PRINTED: 05/02/92

NALCO CHEMICAL COMPANY ONE NALCO CENTER • NAPERVILLE, ILLINOIS 60563-1198
AREA 708-305-1000

TENNECO METHANOL

Tenneco Building
P.O. Box 2511
Houston, Texas 77252
(713) 757-2131

PRODUCT DATA

EFFECTIVE 7/10/89 SUPERSEDES

METHANOL
(Methyl Alcohol)

An intermediate for the synthesis of a variety of chemicals, such as; formaldehyde, methyl esters, ethers, amines, methyl and methylene chlorides and various chemical intermediates; used in non-permanent anti-freeze; as a fuel, solvent, extractant, and denaturant.

FORMULA CH_3OH **MOL. WT.:** 32.04

FORM: Liquid

SPECIFICATIONS:

		TEST METHOD ASTM-
Appearance	clear, colorless, liquid; free from suspended matter	(1)
Odor	no foreign odor: characteristic	D-1296
Methanol	99.90% by wt. minimum	(2)
Distillation range	1°C. max., to include 64.6 ± 0.1°C @ 760mm.	D-1078
Specific Gravity	0.7892 maximum, @ 25°/25°C	E-346
Color	5 APHA, maximum	D-1209
Acidity	0.003% by wt. maximum; as acetic acid	D-1613
Alkalinity	0.0003% wt./wt. maximum; as ammonia	D-1614
Acetone	0.003% wt./wt. maximum	D-1612
Carbonizables	20 APHA, maximum	E-346
Hydrocarbons	clear when diluted 1:2 with water, after 30 minutes	E-346
Non-Volatile matter	0.001% wt./wt. maximum	D-1353
Permanganate time	50 minutes minimum (0.02% $KMnO_4$ @ 15°C)	D-1363
Water	0.05% wt./wt. maximum when shipped.	E-203

NOTES:

(1) Visual
(2) by difference

(over)

P-9000

METHANOL
(Methyl Alcohol)

PHYSICAL PROPERTIES

Boiling Point 760mm	64.5°C
Refractive Index, 20°C	1.3284nD
Explosive limits, in air	6 to 36.5% by volume
Flash Point, open cup	16°C (61°F)
Ignition Temperature	470°C (878°F)
Vapor Pressure, 20°C	92mm. Hg.
Weight per gallon, 60°F	6.63 lbs.
Coefficient of Expansion, 20°C	0.00119 per °C
Vapor Density, Air = 1	1.11

SOLUBILITY

Miscible with water, alcohols, esters, ethers, ketones, and hydrocarbons.

HAZARDS

Methanol is a flammable liquid, and precautions against sources of ignition must be taken. Inhalation of concentrated vapor may irritate respiratory tract and produce narcosis. Contact with liquid irritates eyes, causes drying of skin. Absorption from prolonged skin contact produces toxic effects. Swallowing causes dizziness, headache, acidosis, visual disturbances and damage, and possible death. If inhaled, move to fresh air, give artificial respiration or oxygen, if breathing is difficult. In case of contact, flush eyes or skin with plenty of water. If swallowed, induce vomiting (if conscious) by giving tablespoonful of salt in glass of warm water. Repeat until vomit is clear. CALL A PHYSICIAN.

SHIPPING POINT

Plant - Pasadena, Texas

Terminals - Chicago, Illinois
Cincinnati, Ohio
Perth Amboy, New Jersey
Wilmington, North Carolina
Allemania, Louisiana
Denver, Colorado
Savannah, Georgia
St. Louis, Missouri
Memphis, Tennessee
East Liverpool, Ohio

CONTAINERS

Barges - 250,000 gallons, or greater
Tank Cars - 20,000, 30,000 gallons
Tank Trucks - 4,500 gallon minimum

SHIPPING CLASSIFICATION

Methanol
Not Mailable
DOT Flammable Liquid

OLD WORLD AUTOMOTIVE PRODUCTS INC.
4065 COMMERCIAL AVENUE • NORTHBROOK, ILLINOIS 60062-1851 • 708-559-2000 • Fax 708-559-1329

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTITY: FLEET CHARGE™ HEAVY DUTY ANTIFREEZE

I. SUPPLIER

OLD WORLD AUTOMOTIVE PRODUCTS, INC.
4065 COMMERCIAL AVENUE
NORTHBROOK, ILLINOIS 60062
PHONE: 708/559-2000
CHEMTREX PHONE: 1-800/424-9300

II. INGREDIENTS

MATERIAL	CAS#	% BY WT.	PEL (OSHA)	TLV (ACGIH)
Ethylene Glycol	107-21-1	90 - 95	50 ppm	50 ppm
Diethylene Glycol	111-46-6	0 - 5	None	None

HAZARD RATING (NFPA 704M):

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

KEY: 0 - Minimal, 1 - Slight, 2 - Moderate, 3 - Serious, 4 - Severe

III. PHYSICAL AND CHEMICAL DATA

COLOR:	Clear pale pink
FORM:	Liquid
ODOR:	Mild
DENSITY:	9.3 lbs/gal.
SOLUBILITY IN WATER:	Complete
SPECIFIC GRAVITY:	1.12 @ 72°F
pH (NEAT) =	10 - 11
VISCOSITY:	17 cps @ 73°F
FREEZE POINT:	- 8°F
FLASH POINT (PMCC):	< 261°F

IV. FIRE & EXPLOSION HAZARDS

EXTINGUISHING MEDIA: Based on the NFPA guide, use dry chemical, alcohol foam, carbon dioxide or other extinguishing agent suitable for Class B fires. Use water to cool containers exposed to fire. For large fires, use water spray or fog, thoroughly drenching the burning material.

V. REACTIVITY DATA

INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO_2 may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

VI. HEALTH HAZARD DATA

EYE CONTACT: Can cause moderate irritation. Vapors may be irritating.

SKIN CONTACT: May cause irritation with prolonged contact.

INGESTION: Can be harmful or fatal. Large single quantities may be fatal to humans. May cause kidney malfunction and central nervous system depression.

INHALATION: Prolonged inhalation of vapor may be harmful.

SYMPTOMS OF ACUTE EXPOSURE: Inhalation of high concentrations can cause giddiness, headaches, dizziness, vomiting, nausea, stupor or unconsciousness. Kidney damage may be noted by changes in urinary output. Liver damage may be noticed by yellow skin color.

AGGRAVATION OF EXISTING CONDITIONS: Individuals with pre-existing kidney or liver damage may experience a worsening of effects from ingestion.

VII. FIRST AID INFORMATION

EYES:	Flush with water for 15 minutes. Call a physician.
SKIN:	Flush with water for 15 minutes.
INGESTION:	Induce vomiting. Give water. Call a physician at once.
INHALATION:	Remove to fresh air. Treat symptoms. Call a physician at once.
NOTE TO PHYSICIAN:	No specific antidote is known. Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.
CAUTION:	If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

VIII. TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES	Acute toxicity studies have not been conducted on this product, but toxicity studies of the ingredient(s) in Section II have been reviewed. The results are shown below.
ACUTE ORAL TOXICITY:	LD50 = 6 g/kg
ACUTE DERMAL TOXICITY:	LD50 = 9.5 ml/kg
ACUTE INHALATION TOXICITY:	LC50 = 0 / 8 deaths after 8 hours exposure in saturated air.
OTHER TOXICITY RESULTS:	Hazardous ingredient has been shown to produce dose-related teratogenic effects in rats and mice when administered by gavage or in drinking water at high concentrations.
CHRONIC TOXICITY RESULTS:	Two chronic feeding studies, using rats and mice, have not shown any evidence that the chemical causes dose-related increases in tumor incidence, or a different pattern of tumors compared to untreated controls. The absence of a carcinogenic potential has been supported by numerous in vitro genotoxicity studies showing that is does not produce mutagenetic or clastogenic effects.

IX. PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION:

Respiratory protection is not normally needed. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z 88.2, 1980 for requirements and selection).

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION:

General ventilation is recommended.

PROTECTIVE EQUIPMENT:

Use impermeable gloves and chemical splash goggles (ANSI Z 87.1 requirements and selection of gloves, goggles, shoes, etc.) when attaching feeding equipment or doing maintenance.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

X. SPILL & DISPOSAL INFORMATION

SPILL CONTROL & RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section XII.

Large liquid spills: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section XII. For large indoor spills, evacuate employees and ventilated area. Those responsible for control and recovery should wear the protective equipment specified in Section IX.

DISPOSAL:

If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, (i.e. D001 through D017) nor is it listed under Subpart D.

As a non-hazardous liquid waste, it should be solidified before disposal to a sanitary landfill. Can be incinerated in accordance with local, state and federal regulations.

XI. TRANSPORT INFORMATION

DOT CLASSIFICATION / DESCRIPTION

Proper Shipping Name:	**Proprietary Antifreeze**
Hazard Class:	**None**
United Nation Number:	**None**
Hazardous Substance/RQ	**One pound**

XII. REGULATORY INFORMATION

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200
Based on our hazard evaluation, the following ingredient in this product is hazardous and the reason is shown below.

Ethylene glycol: Systemic effects, possible birth defects based on tests with laboratory animals.

Ethylene glycol (vapor) = TWA 50 ppm, 125 mg/m3 (ceiling) ACGIG/TLV

SARA / SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 312 AND 313:

SECTION 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories: Immediate (acute) Health Hazard and Delayed (chronic) Health Hazard.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):
This product contains the following ingredient(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals.

Ethylene Glycol	**107-21-1**	**90+**

TOXIC SUBSTANCES CONTROL ACT (TSCA):
The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:
If this product becomes a waste, it does not meet the criteria of a hazardous waste.

CLEAN AIR ACT, 40 CFR 60, SECTION 111, 40 CFR 61, SECTION 112: This product contains the following ingredients covered by the Clean Air Act:

Ethylene glycol - Section 111

CALIFORNIA PROPOSITION 65: None of the chemicals on the current Proposition 65 list are known to be present in this product.

XII. REGULATORY INFORMATION (CONTINUED)

MICHIGAN CRITICAL MATERIALS: This product does not contain ingredients listed on the Michigan Critical Materials Register.

STATE RIGHT TO KNOW LAWS: Regulated in those states using the TLV for ethylene glycol as a criteria for listing.

XIII. USER'S RESPONSIBILITY

Old World Automotive Products, Inc. makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Automotive Products, Inc. as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World assume any liability arising out of the use by others of this product referred to herein. The data in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Old World does not recommend blending this product with any other chemicals.

DATED: 9/3/92

NMED WATER QUALITY MGT. 1/13/1999 CHECK NO. [redacted]

INVOICE NO.	INVOICE DATE	GROSS	DISCOUNT	NET AMOUNT
RENEWAL Message : DISCHARGE PLAN FEES	1/13/1999	740.00	.00	740.00
TOTALS		740.00	.00	740.00

GW-156
4-Corners Drlg.
Farmington

KEY ENERGY SERVICES, INC.
5651 US HIGHWAY 64 * PO BOX 900
FARMINGTON, NEW MEXICO 87499
(505) 327-4935

PNC BANK, NATIONAL ASSOCIATION
JEANNETTE, PA
60-162/433

No. [redacted]

Check Date 1/13/1999

AMOUNT
$********740.00

PAY Seven Hundred Forty and 00/100 Dollars

TO THE ORDER OF
NMED WATER QUALITY MGT.
OIL CONSERVATION DIVISION
2040 S. PACHECO STREET
SANTA FE NM 87505

Ron Fellabaum

AUTHORIZED SIGNATURE IF OVER $10,000.00

[redacted]

AFFIDAVIT OF PUBLICATION

No. 40695

STATE OF NEW MEXICO
County of San Juan:

ALETHIA ROTHLISBERGER, being duly sworn says: That she is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):

Thursday, February 4, 1999

and the cost of publication is: $68.65

Alethia Rothlisberger

On 2-5-99 ALETHIA ROTHLISBERGER appeared before me, whom I know personally to be the person who signed the above document.

Ginny Beck

My Commission Expires April 2, 2000.

COPY OF PUBLICATION

Legals

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application(s) have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-156) - Key Energy Services, Inc. Four Corners Drilling, 327-4935, 5651 US Highway 64, Farmington, New Mexico 87401, has submitted a discharge plan renewal application for the Farmington facility located in Section 29, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 60 barrels per week of waste water is collected in a double walled steel tank then transported offsite for disposal into Key Energy Class II disposal well. Ground water most likely to be affected in the event of an accidental discharge is at an estimated depth of approximately 45 feet with a total dissolved solids concentration of approximately 45 feet with a total dissolved solids concentration of approximately 2,200 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application(s) may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan application(s), the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan(s) based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan(s) based on the information in the discharge plan application(s) and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 23rd day of September, 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL

/s/Roger C. Anderson
for LORI WROTENBERY, Director

Legal No. 40695. published in The Daily Times, Farmington, New Mexico, Thursday, February 4, 1999.

The Santa Fe New Mexican

Since 1849. We Read You.

NM OCD
ATTN: LUPE SHERMAN
2040 S. PACHECO ST.
SANTA FE, NM 87505

AD NUMBER: 66207 ACCOUNT:
LEGAL NO: 64785 P.O.#: 99199000357
169 LINES 1 time(s) at $ 67.64
AFFIDAVITS: 5.25
TAX: 4.56
TOTAL: 77.45

AFFIDAVIT OF PUBLICATION

NOTICE OF PUBLICATION

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application(s) may be viewed at the above address between 8:00 a.m and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan application(s), the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan(s) based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan(s) based on the information in the discharge plan application(s) and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 23rd day of September 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
LORI WROTENBERY, Director

Legal #64785
Pub. January 27, 1999

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, B. Perner being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTE FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication #64785 a copy of which is hereto attached was published in said newspaper 1 day(s) between 01/27/1999 and 01/27/1999 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 27 day of January, 1999 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/ Betsy Perner
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 27 day of January A.D., 1999

Notary B Mathie

Commission Expires 3-13-2001

OFFICIAL SEAL
B MATHIE
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application(s) have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-156) - Key Energy Services, Inc. Four Corners Drilling, 327-4935, 5651 US Highway 64, Farmington, New Mexico 87401, has submitted a discharge plan renewal application for the Farmington facility located in Section 29, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 60 barrels per week of waste water is collected in a double walled steel tank then transported offsite for disposal into Key Energy Class II Disposal well. Ground water most likely to be affected in the event of an accidental discharge is at an estimated depth of approximately 45 feet with a total dissolved solids concentration of approximately 2,200 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application(s) may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan application(s), the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan(s) based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan(s) based on the information in the discharge plan application(s) and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 23rd day of September 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Roger C. Anderson

S E A L

for LORI WROTENBERY, Director

Z 559 572 990

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Farmington Daily Times	
Street & Number P.O. Box 450	
Post Office, State, & ZIP Code Farmington, NM 87401	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, April 1995

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 23rd day of September 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Roger A. Anderson

S E A L

for LORI WROTENBERY, Director

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

November 18, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-357-870-038

Mr. Rick Vecellio
Key Four Corners, Inc.
P.O. Box 1067
Farmington, New Mexico 87499

RE: Discharge Plan GW-156 Renewal
Four Corners Drilling Farmington Facility
San Juan County, New Mexico

Dear Mr. Vecellio:

On April 18, 1994, the groundwater discharge plan, GW-156, for the **Four Corners Drilling Farmington Facility** located in the NE/4 of Section 29, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, was approved by the Director of the New Mexico Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years. **The approval will expire on April 18, 1999.**

If your facility continues to have potential or actual effluent or leachate discharges and you wish to continue operation, you must renew your discharge plan. **If Key Four Corners, Inc. submits an application for renewal at least 120 days before the discharge plan expires, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved.** The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several weeks to months. Please indicate whether you have made, or intend to make, any changes in your system, and if so, please include these modifications in your application for renewal.

Please submit the original and one copy to the OCD Santa Fe Office and one copy to the OCD Aztec District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request.(Copies of the WQCC regulations and discharge plan application form and guidelines have been provided to Key Four Corners, Inc. in the past. A complete copy of the regulations is also available on OCD's website at www.emnrd.state.nm.us/ocd.htm.)

The discharge plan renewal application for the Four Corners Drilling Farmington Facility is subject to the WQCC Regulations 3114 discharge plan fee. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of fifty ($50) dollars. There is a renewal flat fee required of $690.00 for service company facilities which is equal to one-half of the orginal flat fee. The fifty ($50) dollar filing fee is to be submitted with discharge plan renewal application and is nonrefundable.

Please make all checks payable to **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

If you no longer have any actual or potential discharges a discharge plan is not needed, please notify this office. If you have any questions regarding this matter, please do not hesitate to contact W. Jack Ford at (505) 827-7156.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/wjf

cc: OCD Aztec District Officer

Z 357 870 038

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Rick Vecellio	
Street & Number Key 4 corners	
Post Office, State, & ZIP Code Farmington	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date GW-156	

PS Form 3800, April 1995

FOUR CORNERS DRILLING CO.
5651 U.S. HWY. 64
P. O. BOX 1067
FARMINGTON, NEW MEXICO 87499

TELEPHONE: (505) 326-3371
FAX: (505) 326-3370

January 28, 1998

Mr. Roger Anderson
Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, NM 87505

Re: Transfer of Discharge Plan GW-156

Dear Mr. Foust:

Please accept this letter as a request to transfer Discharge Plan GW-156 from Four Corners Drilling Company to Key Four Corners, Inc., d.b.a. Big A Well Service/Sunco Trucking As of February 2, 1998. This is due to Four Corners Drilling Company being sold to Key Energy, Inc. All aspects of the original plan GW-156 will remain the same.

If there are any questions on this matter, please feel free to contact me at (505)326-3371.

Sincerely,

Rick Vecellio

Rick Vecellio
Safety Coordinator

RV/nw

cc: Mr. Denny Foust
Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

August 31, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. P-176-012-182

Mr. Earl Lang
Four Corners Drilling Company
5651 U.S. Highway 64
Farmington, New Mexico 87401

Re: Discharge Plan (GW-156)
Four Corners Drilling Farmington Facility
San Juan County, New Mexico

Dear Mr. Lang:

A review of the file for discharge plan GW-156 for the Four Corners Drilling Company's Farmington Service Facility located in the NE/4, Section 29, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico has revealed that the 1995 incremental installment for the payment of the April, 1994 discharge plan flat fee has not been submitted to the Oil Conservation Division (OCD). These fees were due in May, 1995 and were not received.

In order to be in compliance with Water Quality Control Commission (WQCC) Regulation 3-114 B.6, please remit the remaining balance in full to the OCD by September 15, 1995. The remaining balance on the flat fee for the above referenced facility is one thousand one hundred four dollars ($1,104.00). All checks should be made payable to: NMED-WATER QUALITY MANAGEMENT and addressed to the OCD Santa Fe office.

If there are any questions on this matter, please contact me at (505) 827-7153.

Sincerely,

Chris Eustice
Geologist

cc: OCD-Aztec Office

L CONSERV- ON DIVISION UNITED STATES
RECEIVED DEPARTMENT OF THE INTERIOR
'94 APR 11 AM 8 49 FISH AND WILDLIFE SERVICE
Ecological Services
Suite D, 3530 Pan American Highway, NE
Albuquerque, New Mexico 87107

April 6, 1994

Permit #GW94021

Mr. William J. Lemay
Director, State of New Mexico
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. Lemay:

This responds to the notice of publication received by the U.S. Fish and Wildlife Service (Service) on March 8, 1994, regarding the Oil Conservation Division (OCD) discharge plan applications submitted by P&S Brine Sales (BW-02) and Four Corners Drilling Co. (GW-156) on fish, shellfish, and wildlife resources in New Mexico.

The Service has the following comments on the issuance of the following discharge permits.

> BW-02 P&S Brine Sales, Eunice, New Mexico located in section 34, T. 21 S., R. 37 E., Lea County New Mexico. Fresh water is injected to an approximately depth of 1500 feet and brine is extracted and stored in closed top above ground storage tanks.
>
> GW-156 Four Corners Drilling Co., Farmington Service Facility located in section 29, T. 29 N., R. 12 W., San Juan County. Approximately 200 gallons per day of wastewater is collected in a closed top fiberglass tank and recycled as drilling fiuid.

The above ground tank capacities should be able to contain all the water produced during periods of inclement weather when it is not possible to drain the tank on a regular schedule. The tanks should also exhibit strong corrosion resistance to those fluids the tank will store. The tanks should be exposed entirely to visually detect leaks. If leaks are detected surface soil monitoring and runoff prevention measures should be implemented. The tank described in GW-156 should not be located in the San Juan River floodplain. Accidental spillage or leaks could result in injury to the endangered Colorado squawfish and razorback sucker as well as other species of importance.

If you have any questions concerning our comments, please contact Mary Orms at (505) 883-7877.

Sincerely,

for Jennifer Fowler-Propst
State Supervisor

cc:
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Regional Administrator, U.S. Environmental Protection Agency, Dallas, Texas

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that he is Adv. Director of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Notice Of Publication

and numbered ..... in the ..... Court of Lea County, New Mexico, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, once each week on the same day of the week, for one (1) day consecutive weeks, beginning with the issue of March 10, 19 94 and ending with the issue of March 10, 19 94

And that the cost of publishing said notice is the sum of $ 48.24 which sum has been (Paid) (Assessed) as Court Costs

Joyce Clemens

Subscribed and sworn to before me this 17th day of March, 19 94

Mrs. Jeanie Reaves
Notary Public, Lea County, New Mexico

My Commission Expires Sept. 28, 19 94

LEGAL NOTICE
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505)827-5800:

(BW-02) - P&S Brine Sales, Paul Prather, P.O. Box 7169, Eunice, New Mexico, 88231, has submitted a renewal application for the previously approved discharge plan for their Insitu extraction brine well facility located in the SW/4 SE/4, Section 34, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico. Fresh water is injected to an approximate depth of 1500 feet and brine is extracted and stored in closed top above ground storage tanks. The brine has an approximate total dissolved solids (TDS) concentration of approximately 300,000 mg/l. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 45 feet with a TDS of 1400 mg/l. The discharge plan addresses injection well construction and operation, and how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-156) - Four Corners Drilling Co., Earl Lang, 5651 U.S. Highway 64, Farmington, New Mexico, 87401, has submitted a discharge plan application for their Farmington Service Facility located in Section 29, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 200 gallons per day of waste water is collected in a closed top fiberglass tank and recycled as drilling fluid. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 45 feet with a total dissolved solids concentration of approximately 2200 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Requests for public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March, 1994.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
WILLIAM J. LEMAY
Director

(SEAL)

Published in the Lovington Daily Leader March 10, 1994.

AFFIDAVIT OF PUBLICATION

No. 33014

STATE OF NEW MEXICO,
County of San Juan:

ROBERT LOVETT being duly sworn, says: "That he is the CLASSIFIED ADVERTISING MANAGER of The Farmington Daily Times, a daily newspaper of general circulation published in English in Farmington, said county and state, and that the hereto attached LEGAL NOTICE was published in a regular and entire issue of the said Farmington Daily Times, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for ONE consecutive (DAYS) (//////) on the same day as follows:

First Publication SUNDAY, MARCH 13, 1994

Second Publication

Third Publication

Fourth Publication

and the cost of publication was $ 60.64

Robert Lovett

On March 30, 1994 ROBERT LOVETT appeared before me, whom I know personally to be the person who signed the above document.

Jinny Beck

Notary Public, San Juan County, New Mexico

My Comm expires: APRIL 2, 1996

COPY OF PUBLICATI

LEGALS

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March, 1994.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

Legal No. 33014 published in The Daily Times, Farmington, New Mexico on Sunday, March 13, 1994.

NOTICE OF PUBLICATION
STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of March 1994.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
s/WALLIAM J. LEMAY, Director

Journal: March 17, 1994

STATE OF NEW MEXICO
County of Bernalillo ss

OIL CONSERVATION DIVISION
RECEIVED
'94 MAR 24 AM 8 39

Bill Tafoya being duly sworn declares and says that he is Classified Advertising Manager of **The Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made or assessed as court costs; that the notice, copy of which is hereto attached, was published in said paper in the regular daily edition, for 1 times, the first publication being on the 17 day of Mar., 1994 and the subsequent consecutive publications on ,1994

Bill Tafoya

OFFICIAL SEAL
Bernadette Ortiz
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 1-31-98

Sworn and subscribed to before me, a notary Public in and for the County of Bernalillo and State of New Mexico, this 17 day of, Mar 1994.

PRICE $38.47

Statement to come at end of month.

KMB

CLA-22-A (R-1/93) ACCOUNT NUMBER C81184

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87501

DISCHARGE PLAN APPLICATION FOR OILFIELD SERVICE FACILITIES

(Refer to OCD Guidelines for assistance in completing the application.)

I. TYPE: Oil and gas well drilling contractor

II. OPERATOR: Earl Lang

ADDRESS: 5651 U.S. Highway 64, Farmington, N.M. 87401

CONTACT PERSON: Earl Lang PHONE: 505 326-3371

III. LOCATION: 1 /4 1 /4 Section 29 Township 29N Range 12W
Submit large scale topographic map showing exact location.

IV. Attach the name and address of the landowner of the disposal facility site. Not a disposal Facility

V. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

VI. Attach a description of all materials stored or used at the facility.

VII. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.

VIII Attach a description of current liquid and solid waste collection/treatment/disposal procedures.

IX Attach a description of proposed modifications to existing collection/treatment/disposal systems.

X. Attach a routine inspection and maintenance plan to ensure permit compliance.

XI. Attach a contingency plan for reporting and clean-up of spills or releases.

XII. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact fresh water. Depth to and quality of ground water must be included.

XIII. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

XIV. CERTIFICATION
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Earl Lang Title: Vice President

Signature: W. E. Lang Date: 1-24-94

DISTRIBUTION: Original and one copy to Santa Fe with one copy to appropriate Division District Office.

FOUR CORNERS DRILLING CO.
P. O. BOX 1067
5651 U.S. HWY. 64
FARMINGTON, NEW MEXICO 87499
•
TELEPHONE: (505) 326-3371
FAX: (505) 326-3370

VII.

Waste water comes from the wash bays where company vehicles are washed. Water drains into a fiberglass tank. The average daily volume of water draining into the tank is 200 gallons.

VIII.

The waste water described above is lost to evaporation or is taken to a well drilling site where it is used to begin the drilling process and then re-circulated to a reserve pit.

Waste oil is stored in 55 gallon drums and a 25 bbl. tank and is picked up by an oil recycler (D&D oil) and trucked to their oil recycling center.

All empty 55 gallon oil drums are drained, returned to be recycled with new oil or they are crushed by Belt Salvage and recycled through their recycling program. The same method is applicable to used metal oil filters.

IX.

The fiberglass tank which is used to store water, which drains from the wash bays will be dug up and replaced with a 75bbl. (3,150 gal) double bottom, double shell tank, with an expanded metal top. The exterior bottom and interior of the tank are sandblasted and coated with coal tar epoxy and no outlets or drains. See facility diagrams for exact location

For waste oil storage, a 1,000 gal. waste oil tank will be placed in a re-enforced concrete storage area measuring approximately 9'x21' with a 2' high retaining wall. The 200 gal. of Kerosene and 100 gal of solvent will also be stored in this area. The storage area will be able to hold 2,993 gal. of liquid in case of a spill. The concrete will be sloped so that any liquid spilled, or rain water entering the enclosed area will drain into a sump

This liquid would then be suctioned out and taken to a proper disposal site. The storage area should be completed within 90 days upon approval.

X.

A visual inspection of the storage area will be done daily. Maintenance will be done semi-annually on all valving or piping in the storage area.

X. (continued)

A visual inspection of the steal tank where the wash water will be held, will be done daily with a semi-annual tank inspection.

All fluids either precipitation or leaks or spills will be contained in the storage area by the concrete walls and sump and will not leave the facility. This fluid would be suctioned off and transported to a proper disposal site.

XI.

Any spill or leakage would only occur in two areas; and either area is self contained with it being in a re-enforced concrete storage area or the double steel tank. In either case no damage to ground water or to surface water would occur.

a. Containment of any spills would be within the enclosed storage area, and drained into a sump. Any spilled material would be picked up in a vacuum truck and taken to a proper off site disposal site. This would be done after notification of the local OCD director. This notification would be immediate upon detection of any spill.

b. Leak detection would be done by visual inspections being done daily as will as gauging. In the event of any significant leaks, immediate notification to the local OCD director will be made. Immediate usage of vacuum trucks will begin as will the usage of shut off valving. Any material suctioned up would be disposed of at a proper disposal site. Used only during day light, 8:00 a.m. to 5:00 p.m..

XII.

A. The nearest surface water way is the San Juan which is located approximately 1/4 mile away. These are no ground water discharge sites or water wells within 1 mile of this facility.

B. No ground water would be affected by any discharge, as any discharge would be in a self contained area.

C. 1. Soil types for this facility are a sand and clay mixture and a sandstone base being encountered between 3' to 5' depending on the area of the facility in which work is being done.
2. N/A
3. N/A

rjv

EAST FENCE LINE

U.S. HWY 64

PAVED ROAD

PAVED PARKING

OFFICE
+
SHOP BUILDING

NO FLOOR DRAINS

4 WASH BAYS

PAVEMENT
SAND · GRAVEL
CLAY

← DRAIN LINES FROM 4 WASH BAYS.

EPOXEY COATED DOUBLEWALL STEEL TANK WITH NO OUT LETS o-2 Drains.

SEPTIC TANKS PER COUNTY REQUIREMENT REST ROOM DRAINS ONLY

9.15 ACRES
YARD & BUILDINGS

NORTH PROPERTY LINE

SAND STONE BLUFF

STORAGE
YARD

APROX. 48 ACRES

FARM LAND

SAN JUAN RIVER

GUIDELINES FOR THE PREPARATION OF DISCHARGE PLANS AT OIL FIELD SERVICE FACILITIES

(Revised 02-91)

Introduction

The New Mexico Oil Conservation Division (OCD) regulates disposal of non-domestic wastes resulting from the oilfield service industry pursuant to authority granted in the New Mexico Oil and Gas Act and the Water Quality Act. OCD administers, through delegation by the New Mexico Water Quality Control Commission (WQCC), all Water Quality Act regulations pertaining to surface and ground water except sewage. However, if the sewage is in a combined waste stream, the OCD will have jurisdiction.

Sections 3-104 and 3-106 of the WQCC Regulations stipulate that, unless otherwise provided for by the regulations, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into the ground water unless such discharge is pursuant to a discharge plan approved by the director. The Oil and Gas Act (Section 70-2-12.B(22)) authorizes the OCD to regulate the disposition of non-domestic, non-hazardous wastes at oil field facilities to protect public health and the environment. The OCD has combined these requirements into one document, (a "discharge plan") that will provide protection to ground water, surface water and the environment through proper regulation of the transfer and storage of fluids at the facility, and disposal of waste liquids and solids.

A proposed discharge plan shall set forth in detail the methods or techniques the discharger proposes to use which will ensure compliance with WQCC regulations and the Oil and Gas Act. The proposed discharge plan must provide the technical staff and the director of the regulating agency (in this case, the OCD) with sufficient information about the operation to demonstrate that the discharger's activities will not cause state regulations or ground water standards (WQCC Section 3-103) to be violated.

A facility having no intentional liquid discharges still is required to have a discharge plan. Inadvertent discharges of liquids (ie. leaks and spills, or any type of accidental discharge of contaminants) or improper disposal of waste solids still have a potential to cause ground water contamination or threaten public health and the environment. The discharge plan must address surface facility operations including storage pits, tankage and loading areas.

For new or proposed facilities, WQCC Regulation 3-106.B. requires the submittal and approval of a discharge plan prior to the start of discharges. The regulation further specifies that "for good cause shown, the director may allow such a person to discharge without an approved discharge plan for a period not to exceed 120 days."

For existing facilities, WQCC Regulation 3-106.A. provides for submittal of a ground water discharge plan within "120 days of receipt of written notice that a discharge plan is required, or such longer time as the director shall for good cause allow." Dischargers not having an approved discharge plan may continue discharging "without an approved discharge plan until 240 days after written notification by the director that a discharge plan is required or such longer time as the director shall for good cause allow."

After a discharge application plan has been received, the OCD must publish a public notice pursuant to Section 3-108 of the regulations, and allow 30 days for public comment before a discharge plan may be approved or otherwise resolved. If significant public interest is indicated, a public hearing will be held which will delay a decision on plan approval.

Once a plan has been approved, discharges must be consistent with the terms and conditions of the plan. Similarly, if there is any facility expansion or process change that would result in any significant modification of the approved discharge of water contaminants, the discharger is required to notify this agency, and have the modification approved prior to implementation. Approval of a discharge plan application by OCD will not relieve the operator of the necessity to become familiar with other applicable state and federal regulations, especially EPA's Hazardous Waste Regulations.

The review of a proposed discharge plan often requires several months depending on complexity. This includes time for requests to the discharger for additional information and clarification, in-house information gathering and analysis, and field investigations of the discharge site, and a public notice and comment period. Review time will, to a large extent, be dependent on the extent to which a facility has generally self-contained processes to prevent movement of fluids and leaching of solids from the work area into the environment.

For example, the review process will be expedited when effluent, process or other fluids are routed to tanks, or lined pits with underdrains for leak detection, when accurate monitoring of fluid volumes and pressure and/or integrity testing is performed for leak detection in below grade or underground tanks, and when the possibility of accidental spills and leaks is addressed by adequate contingency plans (e.g. containment by curbing and drainage to properly constructed sumps). Other examples allowing faster review include recycling of waste oils, proper disposal of dried sludges to minimize potential ground water contamination, and closure of previously used ponds. The more rapid review of discharge plans for such facilities is possible because much less geologic and hydrologic study of the site is required in order to delineate impact.

Similarly, longer review times will be required for operators seeking to continue to use unlined ponds or to utilize other procedures that have a high probability of allowing infiltration and movement of effluent and leachate to the subsurface. For these instances large amounts of technical data generally will be required including: 1) detailed information on site hydrogeology, natural and current water quality, and movement of contaminants; 2) processes expected to occur in the vadose and saturated zones to attenuate constituents to meet WQCC standards at a place of present or reasonably foreseeable future use of ground water; and 3) monitoring of ground water (including post operational monitoring as necessary).

If an operator desires to change or modify effluent or solid waste disposal practices it is not necessary to have completed all such changes prior to plan approval. A commitment to make the changes together with submittal of proposed modification details and a timely completion schedule can be included in the plan. These become plan requirements after the plan is approved.

The following discharge plan application guidelines have been prepared for use by the discharger to aid in fulfilling the requirements of Sections 3-106 and 3-107 of the WQCC regulations and to expedite the review process by minimizing OCD requests for additional information. It sets up a logical sequence in which to present the information required in a discharge plan for this type of facility. It is suggested that you read the entire document before preparing your application. Not all information discussed may be applicable to your facility. However, all sections of the application must be completed.

If there are any questions on the preparation of a discharge plan, please contact OCD's Environmental Bureau. (P. O. Box 2088, Santa Fe, New Mexico 87501-2088 or by telephone at (505) 827-5812).

DISCHARGE PLAN GUIDELINES

I. Type of Operation

Indicate the major purpose(s) of the facility.

II. Name of Operator or Legally Responsible Party and Local Representative

Include address and telephone number.

III. Location of Discharge

Give a legal description of the location (i.e. 1/4. 1/4, Section, Township, Range) and county. Use state coordinates or latititude/longitude on unsurveyed land. Submit a large scale topographic map, facility site plan, or detailed aerial photograph for use in conjunction with the written material. If within an incorporated city, town or village provide a street location and map.

IV. Landowners

Attach the name and address of the landowner(s) of record of the facility site.

V. Facility Description

Attach description of the facility with a diagram indicating location of fences, pits, berms, and tanks on the facility. The diagrams of the facility should depict the locations of discharges, storage facilities, disposal facilities, processing facilities and other relevant areas including drum storage. Show the facility/property boundaries on the diagram.

VI. Materials Stored or Used at the Facility

For each category of material listed below provide information on the general composition of the material or specific information (including brand names if requested), whether a solid or liquid, type of container (tank, drum, etc.), estimated volume stored, and location (yard, shop, drum storage, etc.). The Part VI form attached to these guidelines may be used to provide this information. Its use is optional, but the information requested must be provided. MSD sheets need only be provided as requested; sheets for all chemicals should be maintained at the facility.

1. Drilling fluids - include general makeup and types of special additives (e.g. oil, chrome).

2. Brines (KCl, NaCl, etc.)

3. Acids/Caustics (Provide names and MSD sheets)

4. Detergents/soaps

5. Solvents and degreasers (provide names and MSD sheets)

6. Paraffin Treatment/Emulsion breakers (Provide names and MSD sheets)

7. Biocides (Provide names and MSD sheets).

8. Others (Include other liquids and solids such as cement.)

VII. Sources and Quantities of Effluent and Waste Solids Generated at the Facility

For each source include types of major effluent (e.g. salt water, spent completion fluids, hydrocarbons, sewage, etc.) estimated quantities in barrels or gallons per month, and types and volumes of major additives (e.g. acids, biocides, detergents from steam cleaner, degreasers, etc.) The Part VII form attached to these guidelines may be used to provide this information. Its use is optional, but the information requested must be provided.

1. Truck wastes - Describe types of original contents trucked (e.g. brine, produced water, drilling fluids, spent completion fluids, oily wastes, etc.).

2. Truck, tank and drum washing.

3. Steam cleaning of parts, equipment tanks.

4. Solvent/degreaser use.

5. Spent acids or caustics, or completion fluids (Describe).

6. Waste slop oil.

7. Waste lubrication and motor oils.

8. Oil filters.

9. Solids and sludges from tanks (provide description of materials (e.g. crude oil tank bottoms, sand, etc.).

10. Painting wastes.

11. Sewage (Indicate if other wastes are mixed with sewage; if no commingling occurs domestic sewage under jurisdiction of the NMEID.)

12. Other waste liquids (Describe in detail).

13. Other waste solids (e.g. off-spec cement, construction material, used drums etc.).

VIII. Description of Current Liquid and Solid Waste Collection/Storage/Disposal Procedures

A. Summary Information.

For each source listed in Part VII, provide summary information about onsite collection, storage and disposal systems. Indicate whether collection/storage/ disposal location is tank or drums, floor drain or sump, lined or unlined pit, onsite injection well, leach field, or offsite disposal. Use of the attached Part VIII form is encouraged but optional. However, the requested information must be provided.

B. Collection and Storage Systems.

1. For collection and storage systems named in Part A, provide sufficient information to determine what water contaminants may be discharged to the surface and subsurface within the facility. Water and wastewater flow schematics may be used provided they have sufficient detail to show individual treatment units. Information desired includes whether tanks, piping, and pipelines are pressurized, above ground or buried. If fluids are drained to surface impoundments, oil skimmer pits, emergency pits, shop floor drains, sumps, etc. for further transfer and processing, provide size and indicate if these collection units are lined or unlined. If lined describe lining material (e.g. concrete, steel tank, synthetic liner, etc.).

2. Tankage and Chemical Storage Areas - Storage tanks for fluids other than fresh water must be bermed to contain a volume one-third more than the largest tank. If tanks are interconnected, the berm must be designed to contain a volume one-third more than the total volume of the interconnected tanks. Chemical and drum storage areas must

be paved, curbed and drained such than spills or leaks from drums are contained on the pads or in lined sumps.

3. Facilities over 25 years of age must demonstrate the integrity of buried piping. If the facility contains underground process or wastewater pipelines (i.e., produced water pipelines), the age and specifications (i.e., wall thickness, fabrication material, etc.) of said pipelines should be submitted. Upon evaluation of such information, mechanical integrity testing of said pipelines may be necessary as a condition for discharge plan approval. If such testing (e.g. hydrostatic tests) has already been conducted, details of the program should be submitted.

C. Existing Effluent and Solids Disposal.

1. On-Site Facilities

a. Describe existing on-site facilities used for effluent or solids disposal of water, sludges, waste oils, solvents, etc., including surface impoundments, disposal pits, leach fields, floor drains, injection wells, etc. (If effluents and solids are shipped off-site for recycling or disposal, see C.2. below.) Locate the various disposal areas on the facility site plan or topographic map. Provide technical data on the design elements of each disposal method:

(1) Surface impoundments - date built, use, type and volume of effluent stored, area, volume, depth, slope of pond sides, sub-grade description, liner type and thickness, compatibility of liner and effluent, installation methods, leak detection methods and frequency checked, freeboard, runoff/runon protection.

(2) Leach fields - Type and volume of effluent, leach field area and design layout. If non-sewage or mixed flow from any process units or internal drains is, or has been, sent to the leach fields, include dates of use and disposition of septic tank sludges.

(3) Injection wells - Describe effluent injected, volume, depth, formation, OCD order number and approval date. The effluent must not be classified as a hazardous waste at the time of injection. (Note - Any sump, floor drain or hole deeper than wide used for subsurface emplacement of fluids may be considered an injection well unless its integrity to contain fluids can be

demonstrated). Class II injection wells are required to have an OCD permit and can only inject produced water or other waste fluids brought to the surface from an oil or gas well. Part 5 WQCC discharge plan approval will be required if the injection well is used to dispose of industrial effluent from service companies, and it can not be classified as a hazardous waste.

(4) Drying beds or other pits - Types and volumes of waste, area, capacity, liner, clean-out interval and method, and ultimate disposal location.

(5) Solids disposal - Describe types volumes frequency and location of on-site solids dried disposal. Types solids include sands, sludges, filters, containers, cans and drums.

b. For leach fields, pits, and surface impoundments having single liners of any composition, clay liners or that are unlined and not proposed to be modified or closed as part of this discharge plan:

(1) Describe the existing and proposed measures to prevent or retard seepage such that ground water at any place of present or future use will meet the WQCC Standards of Section 3-103, and not contain any toxic pollutant as defined in Section 1-101.UU.

(2) Provide the location and design of site(s) and method(s) to be available for effluent sampling, and for measurement or calculation of flow rates.

(3) Describe the monitoring system existing or proposed in the plan to detect leakage or failure of the discharge system. If ground water monitoring exists or is proposed, provide information on the number, location, design, and installation of monitoring wells.

(4) If operations at the facility are expected to be discontinued during the period that this discharge plan is in effect, describe the measures proposed to prevent ground water contamination after the cessation of operation, including possible post-operational monitoring.

2. Off-Site Disposal.

If wastewaters, sludges, solids etc. are pumped or shipped off-site, indicate general composition (e.g. waste oils), method of shipment (e.g. pipeline, trucked), and final disposition (e.g. recycling plant, OCD permitted Class II disposal well, or domestic landfill). Include name, address, and location of receiving facility, If receiving facility is a sanitary or modified landfill show operator approval for disposal of the shipped wastes.

IX. Proposed Modifications

A. If collection and storage systems do not the criteria of Section VIII B. above, or if protection of ground water cannot be demonstrated pursuant to Section VIII C.1.b.(1) above, describe what modification of that particular method (including closure), or what new facility, is proposed to meet the requirements of the Regulations. Describe in detail the proposed changes. Provide the information requested in VIII B, and C.1.a. and b. above for the proposed facility modifications and proposed time schedule for construction and completion. (Note: OCD has developed specific guidelines for lined surface impoundments that are available on request.)

B. For ponds, pits, leach fields, etc. where protection of ground water cannot be demonstrated, describe the proposed closure of such units so that existing fluids are removed, and emplacement of additional fluids and runoff/runon of precipitation are prevented. Provide a proposed time schedule for closure.

X. Inspection, Maintenance and Reporting

A. Describe proposed routine inspection procedures for surface impoundments and other disposal units having leak detection systems. Include frequency of inspection, how records are to be maintained and OCD notification in the event of leak detection.

B. If ground water monitoring is used to detect leakage on failure of the surface impoundments, leach fields, or other approved disposal systems provide:

1. The frequency of sampling, and constituents to be analyzed.

2. The proposed periodic reporting of the results of the monitoring and sampling.

3. The proposed actions and procedures (including OCD notification) to be undertaken by the discharger in the event of detecting leaks or failure of the discharge system.

C. Discuss general procedures for containment of precipitation and runoff such that water in contact with process areas does not leave the facility, or is released only after testing for hazardous constituents. Include information on curbings, drainage, disposition, notification, etc.

XI. Spill/Leak Prevention and Reporting Procedures (Contingency Plans)

It is necessary to include in the discharge plan submittal a contingency plan that anticipates where any leaks or spills might occur. It must describe how the discharger proposes to guard against such accidents and detect them when they have occurred. The contingency plan also must describe the steps proposed to contain and remove the spilled substance or mitigate the damage caused by the discharge such that ground water is protected, or movement into surface waters is prevented. The discharger will be required to notify the OCD Director of significant leaks and spills, and this commitment and proposed notification threshold levels must be included in the contingency plan.

A. Describe proposed procedures addressing containment, cleanup and reporting in case of major and minor spills at the facility. Include information as to whether areas are curbed, paved and drained to sumps; final disposition of spill material; proposed schedule for OCD notification of spills; etc.

B. Describe methods used to detect leaks and ensure integrity of above and below ground tanks, and piping. Discuss frequency of inspection and procedures to be undertaken if significant leaks are detected.

C. If an injection well is used for on-site effluent disposal, describe the procedures to be followed to prevent unauthorized discharges to the surface or subsurface in the event the disposal well or disposal line is shut-in for workover or repairs (e.g. extra storage tanks, emergency pond, shipment offsite, etc.). Address actions to be taken in the event of disposal pipeline failure, extended disposal well downtime, etc.

XII. Site Characteristics

A. The following hydrologic/geologic information is required to be submitted with all discharge plan applications. Some information already may be on file with OCD and can be provided to the applicant on request.

1. Provide the name, description, and location of any bodies of water, streams (indicate perennial or intermittent), or other watercourses (arroyos, canals, drains, etc.); and ground water discharges sites (seeps, springs, marshes, swamps) within one mile of the outside perimeter of the facility. For water wells, locate wells within one-quarter mile and specify use of water (e.g. public supply, domestic, stock, etc.).

2. Provide the depth to and total dissolved solids (TDS) concentration (in mg/l) of the ground water most likely to be affected by any discharge (planned or unplanned). Include the source of the information and how it was determined. Provide a recent water quality analysis of the ground water, if available, including name of analyzing laboratory and sample date.

3. Provide the following information and attach or reference source information as available (e.g. driller's logs):

   a. Soil type(s) (sand, clay, loam, caliche);

   b. Name of aquifer(s);

   c. Composition of aquifer material (e.g. alluvium, sandstone, basalt, etc.); and

   d. Depth to rock at base of alluvium (if available).

4. Provide information on:

   a. The flooding potential at the discharge site with respect to major precipitation and/or run-off events; and

   b. Flood protection measures (berms, channels, etc.), if applicable.

B. Additional Information

Provide any additional information necessary to demonstrate that approval of the discharge plan will not result in concentrations in excess of the standards of WQCC Section 3-103 or the presence of any toxic pollutant (Section 1-101.UU.) at any place of withdrawal of water for present or reasonably foreseeable future use. Depending on the method and location of discharge, detailed technical information on site hydrologic and geologic conditions <u>may</u> be required to be submitted for discharge plan evaluation. This material is most likely to be required for unlined surface impoundments and pits, and leach fields. Check with OCD before providing this information. However, if required it could include but not be limited to:

1. Stratigraphic information including formation and member names, thickness, lithologies, lateral extent, etc.

2. Generalized maps and cross-sections;

3. Potentiometric maps for aquifers potentially affected;

4. Porosity, hydraulic conductivity, storativity and other hydrologic parameters of the aquifer;

5. Specific information on the water quality of the receiving aquifer; and

6. Information on expected alteration of contaminants due to sorption, precipitation or chemical reaction in the unsaturated zone, and expected reactions and/or dilution in the aquifer.

XIII. Other Compliance Information

Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders. Examples include previous Division orders or letters authorizing operation of the facility or any surface impoundments at the location.

DISCHARGE PLAN APPLICATION

Oilfield Service Facilities

Part VI. Form (Optional)

Materials Stored or Used at the Facility - For each category of material listed below provide information on the general composition of the material or specific information (including brand names if requested), whether a solid or liquid, type of container, estimated volume stored and location. Submit MSD information for chemicals as requested. Use of this form is oprtional, but the information requested must be provided.

Name	*General Makeup or Specific Brand Name (if requested)*	*Solids(S) or Liquids(L)?*	*Type of Container (tank drum, etc.)*	*Estimated Volume Stored*	*Location (yard, shop, drum storage, etc.)*
1. Drilling Fluids (include general makeup & types special additives [e.g. oil, chrome, etc.])					
2. Brines - (KCl, NaCl, etc.)					
3. Acids/Caustics (Provide names & MSD sheets)					
4. Detergents/Soaps	Premium truck cleaner	S	Drum	100lbs.	Shop
	Power	L	Drum	55gal.	Shop
5. Solvents & Degreasers (Provide names & MSD sheets)	Stoddard Solvent	L	Drum	100gal.	yard
6. Paraffin Treatment/ Emulsion Breakers (Provide names & MSD sheets)					
7. Biocides (Provide names & MSD sheets)					
8. Others - (Include other liquids & solids, e.g. cement etc.)	Conoco Super Sta Grease	S	Drum	120lbs.	Shop
	Conoco A.S.M.O. 10-30 wt.	L	Drum	130gal.	Shop
	Conoco Anti-freeze	L	Drum	55gal.	Shop
	Fleet Supreme 15w40 oil	L	Drum	200gal.	Shop

Universal Gear Lube 80w-90	L	Drum	200gal.	Shop
Kerosene	L	Drum	200gal.	Yard

DISCHARGE PLAN APPLICATION

Oilfield Service Facilities

Part VII. Form (Optional)

Sources and Quantities of Effluent and Waste Solids Generated at the Facility - For each source include types of effluents (e.g. salt water, hydrocarbons, sewage, etc.), estimated quantities in barrels or gallons per month, and types and volumes of major additives (e.g. acids, biocides, detergents, degreasers, etc.). Use of this form is optional, but the information requested must be provided.

Waste Type	*General Composition and Source (solvents from small parts cleaning, oil filters from trucks, etc.)*	*Volume Per Month (bbl or gal)*	*Major Additives (e.g. degreaser fluids from truck washing, soap in steam cleaners)*
1. *Truck Wastes (Describe types of original contents trucked [e.g. brine, produced water, drilling fluids, oil wastes, etc])*			
2. *Truck, Tank & Drum Washing*	Mud, soap, water	1000gal.	Soap
3. *Steam Cleaning of Parts, Equipment, Tanks*			
4. *Solvent/Degreaser Use*			
5. *Spent Acids, Caustics, or Completion Fluids (Describe)*			

Waste Type	*General Composition and Source (solvents from small parts cleaning, oil filters from trucks, etc.)*	*Volume Per Month (bbl or gal)*	*Major Additives (e.g degreaser fluids from truck washing, soap in steam cleaners)*
6. Waste Slop Oil			
7. Waste Lubrication and Motor Oils 50 gal. Auto Shop 80-100 Truck Shop		14	
8. Oil Filters 14 Truck Shop 100 Auto Shop		100	
9. Solids and Sludges from Tanks (Describe types of materials [e.g. crude oil tank bottoms, sand, etc.])			
10. Painting Wastes			
11. Sewage (Indicate if other wastes mixed with sewage; if no commingling, domestic sewage under jurisdiction of the NMEID)			
12. Other Waste Liquids (Describe in detail)			
13. Other Waste Solids (Cement, construction materials, used drums)	used oil drums	12	empty oil drums

DISCHARGE PLAN APPLICATION

Oilfield Service Facilities

Part VIII. Form (Optional)

Summary Description of Existing Liquid and Solids Waste Collection and Disposal - For each waste type listed in Part VII, provide summary information about onsite collection and disposal systems. Information on basic construction features, specific descriptions, and wastewater schematics should be provided as required in the Guidelines. The use of this form is optional, but the summary information requested must be provided.

Waste Type	Tank(T)/ Drum(S)	Floor Drain/(F) Sump(S)	Pits- Lined(L) or Unlined(U)	Onsite Injection Well	Leach Field	Offsite Disposal
1. Truck Wastes						
2. Truck, Tank and Drum Washing						
3. Stream Cleaning of Parts, Equipment, Tanks						
4. Solvent/Degreaser Use						
5. Spent Acids, Caustics, or Completion Fluids						
6. Waste Slop Oil						

Waste Type	Tank(T)/ Drum(S)	Floor Drain/(F) Sump(S)	Pits- Lined(L) or Unlined(U)	Onsite Injection Well	Leach Field	Offsite Disposal
7. *Waste Lubrication and Motor Oils*	T					D&D Oil Recycling Bloomfield NM (trucked)
8. *Oil Filters*	S					Belt Salvaged Cortez, CO (trucked)
9. *Solids and Sludges from Tanks*						
10. *Painting Wastes*						
11. *Sewage*						
12. *Other Waste Liquids*						
13. *Other Waste Solids*						
Used oil drums- crushed + RETURNED TO SUPPLIER						Belt Salvage Cortez, CO (Trucked)

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time	Date
		March 10, 19

Originating Party	Other Parties
Denny Foust - OCD Aztec	Kathy Brown - OCD Santa Fe

Subject: Four Corners Drilling Discharge Plan - Missing Information

Discussion: In Four Corners ~~drilling~~ discharge plan application they did not include antifreeze and lubrication oils on the spread sheet listing the various chemicals/products stored, but they did include the MSDS sheets. Currently those are stored in drums outside the building. Inspection in 1993 by OCD discovered numerous spills around these drums. Denny has reported that all of the spills have been cleaned up. Four corners is also planning on building a cement holding pad for the drums.

Conclusions or Agreements: Discharge plan needs to address the proposed concrete pad and propose a schedule for ~~is~~ construction.

Distribution

Signed K. M. Brown

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

October 26, 1993

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-241-141

Mr. Earl Lang, Vice President
Four Corners Drilling Company
5651 U.S. Hwy. 64
Farmington, New Mexico 87401

RE: DISCHARGE PLAN REQUIREMENT
FOUR CORNERS DRILLING COMPANY
SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Lang:

Under the provisions of the New Mexico Water Quality Control Commission (WQCC) Regulations, you are hearby notified that the filing of a discharge plan is required for your existing Four Corners Drilling Company Service Facility located at 5651 U.S. Hwy 64, San Juan, County, New Mexico.

This notification of discharge plan requirement is pursuant to Part 3-104 and Part 3-106 of the WQCC Regulations. The discharge plan, defined in Part 1.101.P. of the WQCC Regulations, should cover all discharges of effluent or leachate at the facility or adjacent to the facility site. Included in the application should be plans for controlling spills and accidental discharges at the facility (including detection of leaks in below grade sumps, buried underground process tanks and/or piping), and closure plans for any pits or ponds whose use will be discontinued.

A copy of the regulations is enclosed for your convenience. Also enclosed is an application and a copy of OCD Guidelines for the Preparation of Discharge Plans at Oil Field Service Facilities. Two copies of your discharge plan application should be submitted to the OCD Santa Fe Office and one copy to the Aztec District Office for review purposes.

Section 3-106.A. of the regulations requires a submittal of the discharge plan within 120 days of receipt of this notice unless an extension of this time period is sought and approved for good cause. Part 3-106.A. also allows the discharge to continue without an approved discharge plan until 240 days after written notification by the Director of the OCD that a discharge plan is required. An extension of this time may be sought and approved for good cause.

Pursuant to the New Mexico Water Quality Control Commission (WQCC) Regulation 3-114 "every billable facility submitting a discharge plan for approval, modification or renewal shall pay the fees specified in this section to the Water Quality Management Fund". WQCC Rule 3-114 became effective as of August 18, 1991, and is found on page 33.1 of the enclosed WQCC Rules and Regulations.

Every billable facility submitting a new discharge plan will be assessed a fee equal to the filing fee plus either a flat fee or discharge fee. The filing fee is fifty (50) dollars and shall be submitted with the discharge plan application (nonrefundable). The remainder of the "total fee" for oil and gas service companies falls under the "flat fee" category and is equal to one-thousand, three-hundred and eighty dollars ($1380). The flat fee for an approved discharge plan may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge plan, with the first payment due at the time of approval. Please make all checks out to the **NMED - Water Quality Management.**

If there are any questions on this matter, please feel free to contact Kathy Brown at (505) 827-5884 as she is assigned responsibility for review of service facility discharge plans.

Sincerely,

William J. LeMay
Director

WJL/kmb

xc: Denny Foust, OCD Aztec Office

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

November 24, 1992

Four Corners Drilling Co.
Attn: Earl Lang
5651 Hwy 64
Farmington, NM 87401

Dear Mr. Lang:

The Oil Conservation Division will conduct a pre-discharge plan inspection of the Four Corners Drilling Company facilities at 2:00 PM on December 7, 1992. This inspection is for the benefit of the operator. Please find "Guidelines for the Preparation of Discharge Plans at Oil Field Service Facilities" enclosed.

Yours truly,

Denny G. Foust
Environmental Geologist

XC: OCD-Environmental Bureau