GW- 369



Dec 07

Advertising Hobbs Daily News-Sun 2003 201 N Thorp P O Box 850 **NH** Receipt 17 Hobbs, NM 88241-0850 Phone: (505) 393-2123 ≤ 1 Fax: (505) 397-0610 ∞ Ξ <[]] 8 EDWARD J. HANSEN 01101546-000 Cust#: NM OIL CONSERVATION DIVISION, EMNRD డ్టు 1220 S. SAINT FRANCIS DR. 02597667 Ad#: SANTA FE, NM 87505 Phone: (505)476-3487 Date: 12/26/07

Ad taker: C2 . Salesperson: 08 Classification: 673

Description	Start	Stop	Ins.	Cost/Day	Surcharges	Total
07 07 Daily News-Sun	12/22/07	12/22/07	1	148.02		148.03
Bold						1.00
Affidavit for legals						3.00
Payment Reference:					Total:	□ 152.03
					Tax:	0.00
LEGAL NOTICE					Net:	152.03
December 22, 2007					Prepaid:	0.00
NOTICE OF PUBLICATION						
STATE OF NEW MEXICO					Total Due	152.03

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations (20.6.2.3106 NMAC), the following discharge permit application(s) has been submitted to the Director of the New Mexico Oil Conservation Division ("NMOCD"), 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

Southern Union Gas Services., Bruce Williams, Bruce Williams, Vice President of Operations, 301 Commerce St., Ste 700 Fort Worth, Texas 76102, telephone 817-302-9400, has submitted

O.K. to

AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

I, KATHI BEARDEN

PUBLISHER

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

1 of _

_ weeks.

Beginning with the issue dated

December 22

2007 and ending with the issue dated

December 22

2007 hi Mande

PUBLISHER Sworn and subscribed to before

day of

26th me this_

December 2007

Notary Public.

My Commission expires February 07, 2009 (Seal)



DORA MONTZ NOTARY PUBLIC STATE OF NEW MEXICO My Commission Expires: _

OFFICIAL SEAL

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE December 22, 2007

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 (20.6.2.3106 NMAC), the following discharge permit application(s) has been submitted to the Director of the New Mexico Oil Conservation Division ("NMOCD"), 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

Southern Union Gas Services., Bruce Williams, Bruce Williams, Vice President of Operations, 301 Commerce St., Ste 700 Fort Worth, Texas 76102, telephone 817-302-9400, has submitted discharge plan applications for the following facilities:

(GW-367) Trestle Gas Compressor Station located in Lea Co. approximately 9 miles north of Eunice, NM in SE/4 SE/4 of Section 3, Ts 21S, R 37E, Groundwater depth is 70-100 feet deep with a quality of 700-800 mg/l of Total Dissolved Solids:

(GW-368) Wantz Gas Compressor Station located in Lea Co. approximately 2 miles northwest of Eunice, NM in SW/4 SW/4 of Section 21, Ts 21S, R 37E. Groundwater depth is 70-100 feet deep with a quality of 700-800 mg/l of Total **Dissolved Solids:**

(GW-369) South Eunice Gas Compressor Station located in Lea Co. approximately 2 miles south of Eunice, NM in UL-A of Section 10, Ts 22S, R 37E, Groundwater depth is 70-100 feet deep with a quality of 700-800 mg/l of Total **Dissolved Solids;**

The discharge plan addresses how oilfield products and waste will be property 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 NMOCD has determined that the application is administratively complete and has prepared a draft permit. The NMOCD will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in obtaining further information, submitting comments or requesting to be on a facility-specific mailing list for future notices may contact the Environmental Bureau Chief of the Oil Conservation Division at the address given above. The administrative completeness determination and draft permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday, or may also be viewed at the NMOCD web site http://www.emnrd.state.nm.us/ocd/. Persons interested in obtaining a copy of the application and draft permit may contact the NMOCD at the address given above. Prior to ruling on any proposed discharge permit or major modification, the Director shall allow a period of at least thirty (30) days after the date of publication of this notice, during which interested persons may submit comments or request that NMOCD hold a public hearing. 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 that there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed permit based on information available, including all comments received. If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the permit application and information submitted at the hearing.

Para obtener más información sobre esta solicitud en espan_ol, sirvase comunicarse por favor: New Mexico Energy, Minerals and Natural Resources Department (Depto. Del Energia, Minerals y Recursos Naturales de Nuevo México), Oil Conservation Division (Depto. Conservacio'n Del Petróleo), 1220 South St. Francis Drive, Santa Fe, New México (Contacto: Dorothy Phillips, 505-476-3461)

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 19th day of December 2007.

> STATE OF NEW MEXICO **OIL CONSERVATION DIVISION**

SEAL #23721

Mark Fesmire, Director

01101546000

02597667 NM OIL CONSERVATION DIVISION; 1220 S. SAINT FRANCIS DR. SANTA FE, NM 87505

Alberto A. Gutiérrez, C.P.G.

RECEIVED

2008 JAN 31 PM 1 43

January 30, 2008

Mr. Wayne Price Bureau Chief NMOCD Environmental Bureau 1220 South St. Francis Drive Santa FE, New Mexico, 87505

VIA FEDERAL EXPRESS PRIORITY OVERNIGHT

RE: PUBLIC NOTICES FOR NASH DRAW (GW-366), HARROUN (GW-370), FORTSON (GW-371), TRESTLE (GW-367), SOUTH EUNICE (GW-369) AND WANTZ (GW-368) DISCHARGE PLANS

Dear Mr. Price:

Enclosed are copies of the notices and the Affidavits of Publication from the Carlsbad Current Argus (for Nash Draw, Fortson and Harroun) and the Hobbs Sun (for Trestle, Wantz and South Eunice).

The newspaper notices were published on Thursday, January 17, 2008.

Please give me a call at (505) 842-8000 if you have any questions.

Sincerely, Geolex, Inc.

James C. Hunter, R.G.

JCH/jh

Enclosures

cc w/enclosures: Mr. Tony Savoie, SUGS

G:\06-012\Correspondence\WaynePriceNotices.doc

500 Marquette Avenue NW, Suite 1350 Albuquerque, New Mexico 87102 email: aag@geolex.com web: www.geolex.com

AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

I, KATHI BEARDEN

PUBLISHER

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of

weeks.

_ 2008

Beginning with the issue dated

January 17 _ 2008 and ending with the issue dated

January 17

PUBLISHER Sworn and subscribed to before

17th me this day of

anuary

Notary Public.

My Commission expires February 07, 2009 (Seal)



OFFICIAL SEAL DORA MONTZ NOTARY PUBLIC STATE OF NEW MEXICO My Commission Expires: ____

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE January 17, 2008 Notice of Application by Southern Union Gas Services for Approval of a Discharge Plan (GW-369) for South Eunice Natural Gas Compressor Station: Southern Union Gas Services, whose offices are located at 301 N. Commerce St., Suite 700, Fort Worth, Texas (76102) seeks approval from the New Mexico Oil Conservation Division for a Discharge Plan for the South Eunice Compressor Station, located in the Northeast Quarter of the Northeast Quarter of Section 10, Township 22 South, Range 37 East in Lea County, New Mexico (32o 24.799' North, 103o 8.634'West). This location is at an elevation of 3450 feet; approximately 2 miles south of Eunice, New Mexico. This compressor station is designed to have no intentional liquid discharges. The shallowest groundwater potentially impacted by this facility is at a depth of approximately 70 to 100 feet and has a total dissolved solids content of approximately 700 to 800 milligrams per liter. Additional information, comments or statements should be addressed Mr. James C. Hunter, R.G. of Geolex, Inc., 500 Marquette NW, Suite 1350, Albuquerque, NM 87102, Tel. (505-842-8000).

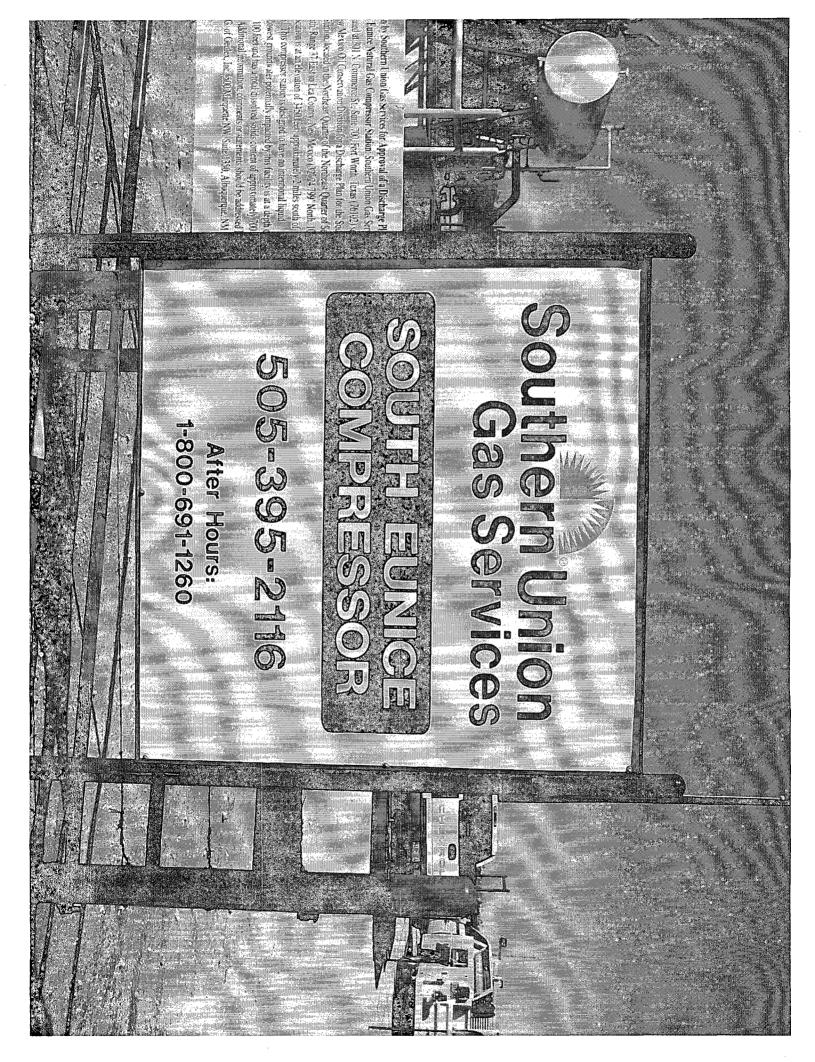
Aviso de Aplicación por parte de Southern Union Gas Services para la aprobación de un plan de la descarga (GW-369) para la estación del compresor del gas natural de South Eunice: Southern Union Gas Services, con oficinas que están situadas en 301 N. Commerce St., Suite 700, Fort Worth, Texas (76102) busca la aprobación de New México Oil Conservation Division para un plan de la descarga para la estación del compresor de South Eunice, situada en el cuarto nordestal del cuarto nordestal de la sección 10, Township 22 South, Range 37 East en el condado de Lea, Nuevo México (32o 24.799 norte, 103o 8.634' oeste). Esta localización está a una elevación de 3450 pies, aproximadamente 2 millas al sur de Eunice, Nuevo México. Esta estación del compresor se diseña para no tener ninguna descarga líquida intencional. El agua subterránea menos profunda potencialmente afectada por esta facilidad está a una profundidad de aproximadamente 70 a 100 pies y tiene un contenido de sólidos disuelto total de aproximadamente 700 a 800 miligramos por litro. Cualquier información, comentario o declaración adicional deben ser dirigidos al Sr. James C. Hunter, R.G. de Geolex, Inc., 500 Marquette Av. NW, habitación 1350, Albuquerque, NM 87102, tel. (505-842-8000).

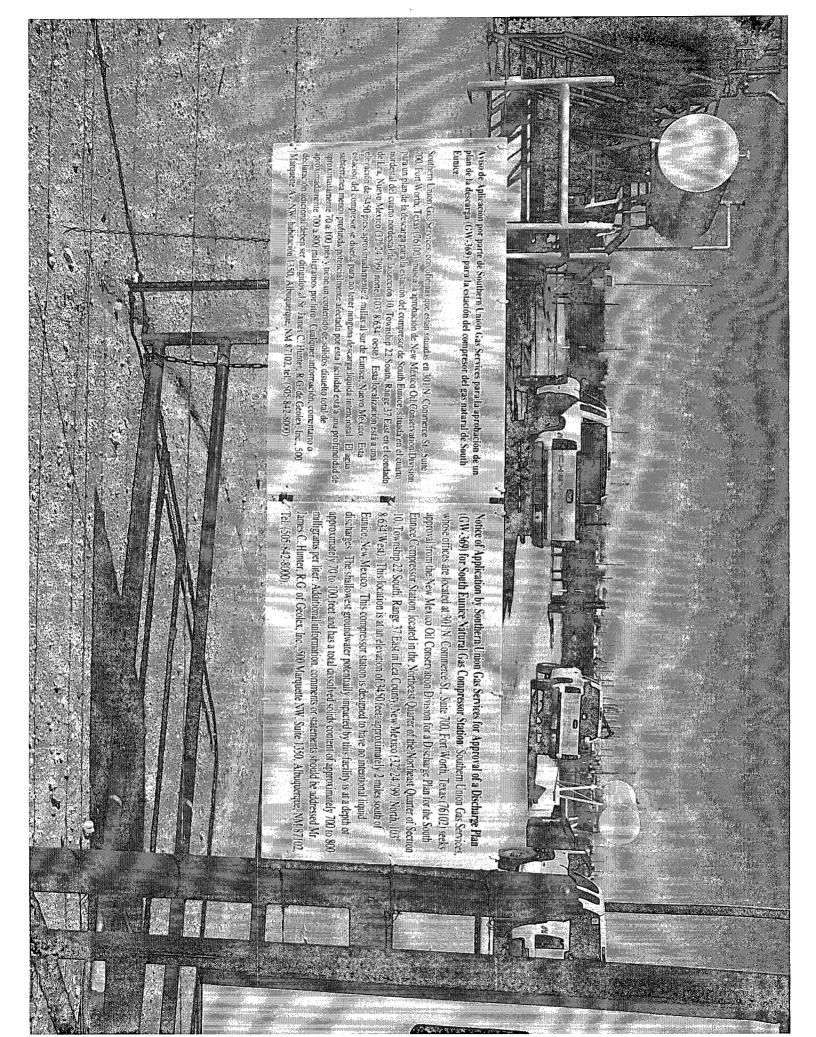
. .

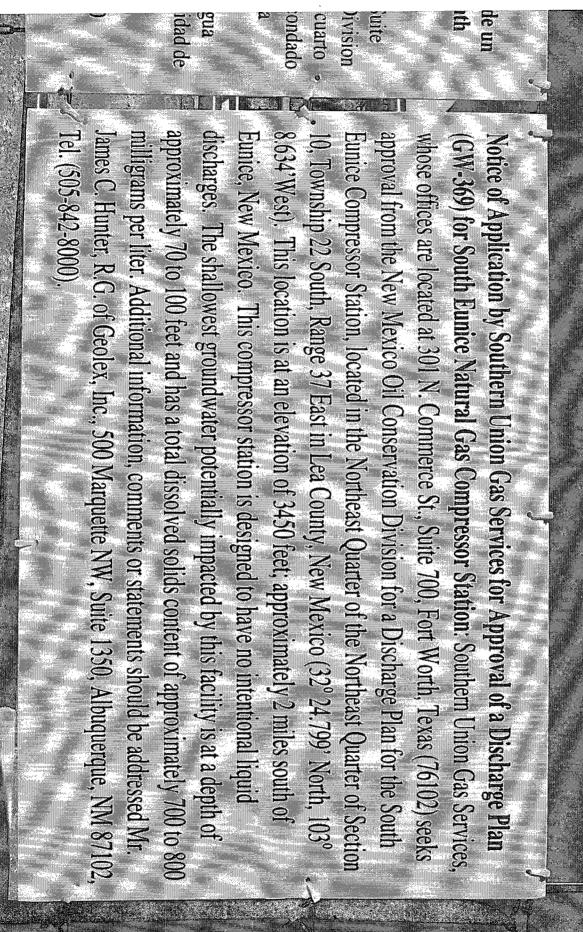
#23775

67101169000 02597967

GEOLEX, INC. 500 MARQUETTE AVE. NW, SUITE 1350 ALBUQUERQUE, NM 87102









301 Commerce St., Ste. 700 Fort Worth, TX 76102

Phone: 817.302.9426 Fax: 817.302.9351

February 1, 2008

Wayne Price Environmental Bureau Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

Subject: Discharge Permit - Approval Conditions South Eunice Gas Compressor Station GW-369 UL A of Section 10, Township 22 South, Range 37 East, NMPM Lea County, New Mexico

Dear Mr. Wayne Price:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 – 20.6.2.3114 NMAC, the Oil Conservation (OCD) has approved the discharge permit for Southern Union Gas Services, Ltd. (SUGS) for the above referenced site contingent upon the conditions specified with the permit. SUGS agrees to the conditions as stated and the conditions agreement has been signed by Bruce M. Williams, VP Gas Operations, with an original copy attached.

We appreciate your efforts in getting this accomplished in an expeditious manner. If there are any questions, please do not hesitate to contact myself at the number above or email <u>robert.gawlik@sug.com</u> or Tony Savoie at 585-395-2085 or email <u>tony.savoie@sug.com</u>.

Regards,

Robert L. Gawlik

Manger, Environmental Health and Safety

C: BMW/RAM/JW/HH Tony Savoie Randall Dunn Alberto Gutierrez w/ Geolex



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

January 23, 2008 GW-369

Mr. Bruce Williams Southern Union Gas Services, Ltd. 301 Commerce St. Ste. 700 Fort Worth, Texas 76102

Re: Discharge Permit South Eunice Gas Compressor Station (GW-369) UL A of Section 10, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico,

Dear Mr. Bruce Williams:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the Southern Union Gas Services, Ltd. (owner/operator) for the above referenced site contingent upon the conditions specified in the enclosed Attachment to the Discharge Permit. Enclosed are two copies of the conditions of approval. Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 15 working days of receipt of this letter including permit fees.

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail carlj.chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price Environmental Bureau Chief

Attachments-1 xc: OCD District Office

ATTACHMENT- DISCHARGE PERMIT APPROVAL CONDITIONS

1. Payment of Discharge Plan Fees: All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of \$100.00, plus a flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required \$100.00 filing fee and the \$1700.00 flat fee.

2. Permit Expiration, Renewal Conditions and Penalties: Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. The permit will expire on January 30, 2013 and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved. *Expired permits are a violation of the Water Quality Act {Chapter 74, Article 6, NMSA1978} and civil penalties may be assessed accordingly.*

3. Permit Terms and Conditions: Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its August 28, 2007 discharge plan application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. Modifications: WQCC Regulation 20.6.2.3107.C, and 20.6.2.3109 NMAC addresses possible future modifications of a permit. The owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. Waste Disposal and Storage: The owner/operator shall dispose of all wastes at an OCDapproved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. OCD Rule 712 Waste: Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. Waste Storage: The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. Process, Maintenance and Yard Areas: The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. Above Ground Tanks: The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. **OCD Inspections:** The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

17. Storm Water: The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. <u>An unauthorized discharge is a violation of this permit.</u>

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions: <u>N/A</u>

21. Transfer of Discharge Permit (WQCC 20.6.2.3111) Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transferor shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to the department a copy of such written notification, together with a certification or other proof that such notification has in fact been received by the transferee. Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the department's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

22. Closure Plan and Financial Assurance: Pursuant to 20.6.2.3107 NMAC an owner/operator shall notify the OCD when any operations of the facility are to be discontinued for a period in excess of six months. Prior to closure, or as a condition of this permit, or request from the OCD, the operator will submit an approved closure plan, modified plan, and/or provide adequate financial assurance.

23. Certification: (Owner/Operator), by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. Owner/Operator further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

<u>Conditions accepted by</u>: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Southern Union Gas Services, Ltd. Company Name-print name above

Bruce M. Williams Company Representative- print name

Company Representative- Signature

Title VP - Gas Operations

Date: January 31, 2008



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E. Director Oil Conservation Division

January 23, 2008 GW-369

Mr. Bruce Williams Southern Union Gas Services, Ltd. 301 Commerce St. Ste. 700 Fort Worth, Texas 76102

Re: Discharge Permit South Eunice Gas Compressor Station (GW-369) UL A of Section 10, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico,

Dear Mr. Bruce Williams:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the Southern Union Gas Services, Ltd. (owner/operator) for the above referenced site contingent upon the conditions specified in the enclosed Attachment to the Discharge Permit. Enclosed are two copies of the conditions of approval. Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 15 working days of receipt of this letter including permit fees.

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail carlj.chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price Environmental Bureau Chief

Attachments-1 xc: OCD District Office

ATTACHMENT- DISCHARGE PERMIT APPROVAL CONDITIONS

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of \$100.00, plus a flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required \$100.00 filing fee and the \$1700.00 flat fee.

2. Permit Expiration, Renewal Conditions and Penalties: Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. The permit will expire on January 30, 2013 and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved. *Expired permits are a violation of the Water Quality Act {Chapter 74, Article 6, NMSA1978} and civil penalties may be assessed accordingly.*

3. Permit Terms and Conditions: Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its August 28, 2007 discharge plan application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. Modifications: WQCC Regulation 20.6.2.3107.C, and 20.6.2.3109 NMAC addresses possible future modifications of a permit. The owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. Waste Disposal and Storage: The owner/operator shall dispose of all wastes at an OCDapproved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. OCD Rule 712 Waste: Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. Waste Storage: The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. Process, Maintenance and Yard Areas: The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. Above Ground Tanks: The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. OCD Inspections: The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

17. Storm Water: The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. <u>An unauthorized discharge is a violation of this permit.</u>

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions: <u>N/A</u>

21. Transfer of Discharge Permit (WQCC 20.6.2.3111) Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transferor shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to the department a copy of such written notification, together with a certification or other proof that such notification has in fact been received by the transferee. Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the department's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

22. Closure Plan and Financial Assurance: Pursuant to 20.6.2.3107 NMAC an owner/operator shall notify the OCD when any operations of the facility are to be discontinued for a period in excess of six months. Prior to closure, or as a condition of this permit, or request from the OCD, the operator will submit an approved closure plan, modified plan, and/or provide adequate financial assurance.

23. Certification: (Owner/Operator), by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. Owner/Operator further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

<u>Conditions accepted by</u>: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Company Name-print name above

Company Representative- print name

Company Representative- Signature

Title

Date:

Price, Wayne, EMNRD

From:	Price, Wayne, EMNRD
Sent:	Wednesday, December 19, 2007 4:07 PM
То:	'Alberto A. Gutierrez, RG'
Cc:	Hansen, Edward J., EMNRD; Chavez, Carl J, EMNRD
Subject:	Southern Union Discharge Permits Gw-366-371
Attachments	:: DraftPermitNoticeGw366-371.DOC; Southern Union Wantz (GW-368)Draft permit_12_2007.doc; Southern Union Nash Draw (GW-366)Draft permit_12_2007.doc; Southern Union S Eunice (GW-369)Draft permit_12_2007.doc; Southern Union S Harroun (GW-370)Draft permit_12_2007.doc; Southern Union Trestle (GW-367)Draft

Dear Mr. Gutierrez and Bruce Williams:

OCD has deemed that the permit applications subject above is hereby administrative complete. Please issue your public notices pursuant WQCC 20.6.2.3108.

Please provide proof of notice once issued. Please find attached OCD's public notice that is going out today and a copy of the draft permits. Please do not sign these drafts. After 30 days and if OCD has not received comment then we will send you the final draft for your sign-off.

permit_12_2007.doc; Southern Union Fortson (GW-371)Draft permit_12_2007.doc

Thank You for your cooperation.

Wayne Price-Environmental Bureau Chief Oil Conservation Division 1220 S. Saint Francis Santa Fe, NM 87505 E-mail <u>wayne.price@state.nm.us</u> Tele: 505-476-3490 Fax: 505-476-3462

GW-369



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor

> Joanna Prukop Cabinet Secretary

> > December 19, 2007

GW-369 **DRAFT**

Mark E. Fesmire, P.E.

Director Oil Conservation Division

Mr. Bruce Williams Southern Union Gas Services, Ltd. 301 Commerce St. Ste. 700 Fort Worth, Texas 76102

Re: Discharge Permit South Eunice Gas Compressor Station (GW-369) SW/4 SW/4 of Section 21, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico,

Dear Mr. Bruce Williams:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the Southern Union Gas Services, Ltd. (owner/operator) for the above referenced site contingent upon the conditions specified in the enclosed Attachment to the Discharge Permit. Enclosed are two copies of the conditions of approval. Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter including permit fees.

Please be advised that approval of this permit does not relieve the owner/operator of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail carlj.chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff For your cooperation during this discharge permit review.

Sincerely,

Wayne Price Environmental Bureau Chief

Attachments-1 xc: OCD District Office

GW-369 **<u>DRAFT</u>**

Mr. Bruce Williams Southern Union Gas Services, Ltd. Page 2

ATTACHMENT- DISCHARGE PERMIT APPROVAL CONDITIONS

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of \$100.00, plus a flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required \$100.00 filing fee and the \$1700.00 flat fee.

2. Permit Expiration, Renewal Conditions and Penalties: Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. The permit will expire on January 30, 2012 and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved. *Expired permits are a violation of the Water Quality Act {Chapter 74, Article 6, NMSA1978} and civil penalties may be assessed accordingly.*

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its August 28, 2007 discharge plan application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. Modifications: WQCC Regulation 20.6.2.3107.C, and 20.6.2.3109 NMAC addresses possible future modifications of a permit. The owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

GW-369 **DRAFT** Mr. Bruce Williams Southern Union Gas Services, Ltd. Page 3

6. Waste Disposal and Storage: The owner/operator shall dispose of all wastes at an OCDapproved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. OCD Rule 712 Waste: Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. Waste Storage: The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. **Process, Maintenance and Yard Areas:** The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. Above Ground Tanks: The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. The owner/operator shall retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

GW-369 **DRAFT** Mr. Bruce Williams Southern Union Gas Services, Ltd. Page 4

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

GW-369 **DRAFT**

Mr. Bruce Williams Southern Union Gas Services, Ltd. Page 5

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: The owner/operator shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. **OCD Inspections:** The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

17. Storm Water: The owner/operator shall implement and maintain run-on and runoff plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. <u>An unauthorized discharge is a violation of this permit.</u>

GW-369 **DRAFT** Mr. Bruce Williams Southern Union Gas Services, Ltd. Page 6

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. Additional Site Specific Conditions: <u>N/A</u>

21. Transfer of Discharge Permit (WQCC 20.6.2.3111) Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transfer or shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to the department a copy of such written notification, together with a certification or other proof that such notification has in fact been received by the transferee. Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the department's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

22. Closure Plan and Financial Assurance: Pursuant to 20.6.2.3107 NMAC an owner/operator shall notify the OCD when any operations of the facility are to be discontinued for a period in excess of six months. Prior to closure, or as a condition of this permit, or request from the OCD, the operator will submit an approved closure plan, modified plan, and/or provide adequate financial assurance.

23. Certification: (Owner/Operator), by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. Owner/Operator further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

GW-369 **DRAFT**

Mr. Bruce Williams Southern Union Gas Services, Ltd. Page 7

<u>Conditions accepted by</u>: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Company Name-print name above

Company Representative- print name

Company Representative- Signature

Title

Date:

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 (20.6.2.3106 NMAC), the following discharge permit application(s) has been submitted to the Director of the New Mexico Oil Conservation Division ("NMOCD"), 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

Southern Union Gas Services., Bruce Williams, Bruce Williams, Vice President of Operations, 301 Commerce St., Ste 700 Fort Worth, Texas 76102, telephone 817-302-9400, has submitted discharge plan applications for the following facilities:

(GW-366) Nash Draw Gas Compressor Station located in Eddy Co. approximately 25 miles SE of Carlsbad, NM in UL I- Section 30, Ts 24S, R 30 E, groundwater depth is 100-300 feet deep with a quality of 2500 mg/l of Total Dissolved Solids;

(GW-370) Harroun Gas Compressor Station located in Eddy Co. approximately 15 miles SE of Carlsbad, NM in UL E- Section 19, Ts 23S, R 29 E, groundwater depth is 10-50 feet deep with a quality of 5000 mg/l of Total Dissolved Solids;

(GW-371) Fortson Gas Compressor Station located in Eddy Co. approximately 28 miles SE of Carlsbad, NM in UL A- Section 25, Ts 24S, R 30 E, groundwater depth is 100-300 feet deep with a quality of 2500 mg/l of Total Dissolved Solids;

(GW-367) Trestle Gas Compressor Station located in Lea Co. approximately 9 miles north of Eunice, NM in SE/4 SE/4 of Section 3, Ts 21S, R 37E, Groundwater depth is 70-100 feet deep with a quality of 700-800 mg/l of Total Dissolved Solids;

(GW-368) Wantz Gas Compressor Station located in Lea Co. approximately 2 miles northwest of Eunice, NM in SW/4 SW/4 of Section 21, Ts 21S, R 37E, Groundwater depth is 70-100 feet deep with a quality of 700-800 mg/l of Total Dissolved Solids;

(GW-369) South Eunice Gas Compressor Station located in Lea Co. approximately 2 miles south of Eunice, NM in UL-A of Section 10, Ts 22S, R 37E, Groundwater depth is 70-100 feet deep with a quality of 700-800 mg/l of Total Dissolved Solids;

The discharge plan 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 NMOCD has determined that the application is administratively complete and has prepared a draft permit. The NMOCD will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in obtaining further information, submitting comments or requesting to be on a facility-specific mailing list for future notices may contact the Environmental Bureau Chief of the Oil Conservation Division at the address given above. The administrative completeness determination and draft permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday, or may also be viewed at the NMOCD web site http://www.emnrd.state.nm.us/ocd/. Persons interested in obtaining a copy of the application and draft permit may contact the NMOCD at the address given above. Prior to ruling on any proposed discharge permit or major modification, the Director shall allow a period of at least thirty (30) days after the date of publication of this notice,

during which interested persons may submit comments or request that NMOCD hold a public hearing. 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 that there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed permit based on information available, including all comments received. If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the permit application and information submitted at the hearing.

Para obtener más información sobre esta solicitud en español, sirvase comunicarse por favor: New Mexico Energy, Minerals and Natural Resources Department (Depto. Del Energia, Minerals y Recursos Naturales de Nuevo México), Oil Conservation Division (Depto. Conservacio'n Del Petróleo), 1220 South St. Francis Drive, Santa Fe, New México (Contacto: Dorothy Phillips, 505-476-3461)

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 19th day of December 2007.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

S E A L

Mark Fesmire, Director



301 Commerce St., Ste. 700 Fort Worth, TX 76102

817.302.9400 Fax: 817.302.9350

August 28, 2007

Mr. Carl Chavez Environmental Engineer New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: APPLICATION BY SOUTHERN UNION GAS SERVICES FOR RENEWAL OF A DISCHARGE PLAN FOR SOUTH EUNICE COMPRESSOR STATION GW - 369

Dear Mr. Chavez:

Southern Union Gas Services, Ltd. ("SUGS") hereby submits the enclosed Discharge Plan Application for the initial discharge plan for the South Eunice Compressor Station. The South Eunice Compressor Station, located in Unit A of Section 10, Township 22 South, Range 37 East in Lea County, New Mexico (32° 24.799' North, 103° 8.634' West).

Enclosed are two checks in the amounts of \$1700.00 for the permit fee and the filing fee of \$100.00, as listed in Section 20.6.2.3144 of the NMWQCC regulations.

Also included for your review as Appendix D to the application is a draft of the public notice required in NMWQCC section 20.6.2.3108. Following NMOCD review and acceptance, we propose to post this notice using a 2'x3' sign, in English and Spanish, at the gate of the above-named facility. Identified adjacent landowners will be provided with copies of this notice by mail, and any owners of any lands the proposed discharge site not owned by SUGS will be notified by certified, receipt requested mailing. The notice will also be advertised, in English and in Spanish, in a 3"x4" display advertisement in the Hobbs Sun.

Please contact our consultant in this matter, Mr. James C. Hunter, RG (Geolex, Inc.) at (505) 842-8000, if you have any questions or require additional information regarding this submittal.

Sincerely, Southern Union Gas Services, Ltd.

mu M. Willin.

Bruce Williams Vice President – Operations

Enclosures

cc: w/o enclosures James C. Hunter, RG – Geolex, Inc. Tony Savoie – SUGS – Jal, NM



Application for New Mexico Oil Conservation Division Discharge Plan SOUTH EUNICE COMPRESSOR STATION (Section 10, Township 22 South, Range 37 East)



April 24, 2007

Prepared For: New Mexico Oil Conservation Division 1200 South Saint Francis Drive Santa Fe, New Mexico 87505

On Behalf of: Southern Union Gas Services, Ltd. 301 Commerce Street, Suite 700 Fort Worth, Texas 76102 Telephone: (817)-302-9400

Prepared By: Geolex, Inc. [®] 500 Marquette Avenue, NE, Suite 1350 Albuquerque, New Mexico 87102 Telephone: (505) 842-8000



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

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Revised June 10, 2003

Submit Original Plus 1 Copy to Santa Fe 1 Copy to Appropriate District Office

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

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

New Renewal Modification

1. Type: South Eunice Gas Compressor Station

2. Operator: Southern Union Gas Services, L.P.

San Alia

10.00

Address: P.O. Box 1226, Jal, New Mexico 88252

Contact Person: Mr. Randall Dunn Phone: (505)-395-2116

3. Location: NE 1/4 NE 1/4 Section 10 Township 22S Range 37E Submit large scale topographic map showing exact location.

4. Attach the name, telephone number and address of the landowner of the facility site.

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

Name:	Mr. Bruce Williams	Title:
Signature:	Brun M. Willim	Date:

Title: _____Vice President, Operations_____ Date: 8-27-07

E-mail: Bruce.Williams@SUGS.com

8/9/2007

Sector Sector

100 M

State of the

開発し

TABLE OF CONTENTS

1.0 TYPE OF OPERATION	1
2.0 OPERATOR AND LEGALLY RESPONSIBLE PARTY	1
3.0 LOCATION OF DISCHARGE/FACILITY	1
4.0 LANDOWNER	1
5.0 SITE CHARACTERISTICS	2
5.1 GEOLOGICAL SETTING	2
5.1.1 Site Area Geology	2
5.1.2 Uppermost Aquifer	2
5.1.3 Depth to Water, Direction of Groundwater Flow and Quality	2
5.1.4 Nearest Potential Groundwater Receptors	
5.2 SURFACE WATER	
6.0 FACILITY DESCRIPTION	4
7.0 MATERIALS STORED AND USED AT FACILITY	5
8.0 SOURCES AND QUANTITIES OF EFFLUENT AND WASTE SOLIDS	
9.0 LIQUID AND SOLID WASTES COLLECTION, STORAGE AND DISPOSAL	8
10.0 INSPECTION, MAINTENCE AND REPORTING	
11.0 SPILL AND LEAK PREVENTION AND REPORTING	9
12.0 CLOSURE PLAN	9

LIST OF FIGURES

FIGURE 1:	Location of Southern Union Gas Services South Eunice Compressor Station
FIGURE 2:	Water Wells Adjacent to South Eunice Compressor Station
FIGURE 3:	Drainage Pathways from South Eunice Compressor Station
FIGURE 4:	Plot Plan, South Eunice Compressor Station
FIGURE 5:	Tanks TK-1, TK-2 and TK-3 in Fiberglass Containment
FIGURE 6:	Compressor Units #1 and Unit #2 and Tanks TK-4 and TK-5
FIGURE 7:	Pig Launcher and Fiberglass Drip Pan (Tanks TK-9, TK-10, and TK-11 in
	Background to Right
FIGURE 8:	Tanks TK-9, TK-10 and TK-11 in Fiberglass Pans
FIGURE 9:	Tank TK-6 Adjacent to Compressor Unit #2
FIGURE 10:	Waste Oil Tank TK-8 in Subgrade Fiberglass Containment

LIST OF APPENDICES

A: Material Data Sheets

- B: Standard Operating Procedures for Wastewater Sampling at Compressor Stations
- C: Analytical Data and Documentation
- D: Proposed Notice of Application, Locations and Newspaper for Publication

8/21/2007

1.0 TYPE OF OPERATION

The South Eunice Compressor Station (South Eunice) is a natural gas compressor station. It uses four compressors to pressurize field gas, removes excess liquids, measures gas volumes, and transports the gas to pipelines.

2.0 OPERATOR AND LEGALLY RESPONSIBLE PARTY

The Operator is:

Southern Union Gas Services, Ltd. (SUGS) Contact: Mr. Randall Dunn P.O. Box 1226 Jal, New Mexico 88252 Telephone: (505)-395-2116

The Responsible Party is:

Southern Union Gas Services, Ltd. Contact: Mr. Bruce Williams 301 Commerce St. Suite 700 Fort Worth, Texas 76102 Telephone: (817)-302-9421

3.0 LOCATION OF DISCHARGE/FACILITY

The South Eunice station is located in Unit A of Section 10, Township 22 South, Range 37 East in Lea County, New Mexico (32^o 24.799' North, 103^o 8.634'West). This location is at an elevation of 3450 feet; approximately 2 miles southeast of Eunice, New Mexico (see Figures 1 and 2).

4.0 LANDOWNER

The land is owned by:

Priscilla Brunson Moody Jal, New Mexico

5.0 SITE CHARACTERISTICS

5.1 GEOLOGICAL SETTING

The site lies in the Delaware Basin region of the Permian Basin, a thick and complex sequence of primarily marine carbonates which extends from southeastern New Mexico into west Texas. The stratigraphy of the Delaware Basin includes the basal Leonard series (Bone Springs Formation), the overlying Guadalupe series (Brushy Canyon, Cherry Canyon and Bell Canyon formations), and the uppermost Ochoan series, including the Castile and Salado evaporites and the clastic Rustler Formation. The Permian Series is overlain by the redbeds of the Triassic Dockum Formation, which is unconformably covered by the Tertiary Ogallala Formation. In the area near the South Eunice facility, the most recent Quaternary deposits are primarily aeolian dunes overlying the Ogallala.

5.1.1 Site Area Geology

The South Eunice Compressor site is situated on a low-relief plain west of Eunice, New Mexico (see Figure 2). Local soils are tan to reddish silt and clay with minor sand and caliche. These deposits range in thickness from zero to over 200 feet, and overlie the Ogallala Formation, a locally important aquifer in the site area.

5.1.2 Uppermost Aquifer

The only regularly used source of potable drinking water in this area is the Ogallala Formation, which overly the redbeds of the Dockum Formation. Within the Dockum units, groundwater occurs in confined conditions, found in more permeable sandstone beds, interbedded with relatively impermeable siltstones and clay.

5.1.3 Depth to Water, Direction of Groundwater Flow and Quality

Depth to water in the area of South Eunice is from 75 to 100 feet. According to maps published by Nicholson and Clebsch (1961), the flow of groundwater in the upper aquifer in the area of South Eunice is southerly to southeasterly at a gradient of 0.005 (approximately 25 feet per mile).

Available information on groundwater quality is limited in the immediate area of South Eunice. The nearest published information is from wells in Section 33, T21S, R37E (approximately 4 miles south of South Eunice. These wells are completed in the Ogallala and have a Total Dissolved Solids of 700 to 800 milligrams per liter (Nicholson and Clebsch, 1961; Table 8, p. 93).

5.1.4 Nearest Potential Groundwater Receptors

As seen in Figure 2, there are 13 water wells listed by the New Mexico State Engineer's Office within one mile of South Eunice. A tabulation of these wells is included in Table 5-1 below. According to the groundwater flow gradient described by Nicholson and Clebsch, 1961 (Plate 2), these wells are cross-gradient or upgradient of South Eunice. This configuration mitigates any potential impacts to these receptors from any possible unintended discharges from South Eunice.

State Engineer's File Number	OWNER	USE	SOURCE	Т	R	S	DEPTH(FT)	WATER DEPTH (FT)
CP00154	HUMBLE OIL	Commercial	Shallow	228	37E	9	No Record	No Record
CP00254	VERSADO	Industrial	No Record	22S	37E	4	164	No Record
CP00255	VERSADO	Industrial	No Record	22S	37E	4	162	No Record
CP00451	SKELLY OIL	Public	No Record	22S	37E	. 4	No Record	No Record
CP00467	L. W. FRISTOE	Domestic	No Record	22S	37E	9	No Record	No Record
CP00468	L. W. FRISTOE	Domestic	No Record	22S	37E	4	No Record	No Record
CP00560	SKELLY OIL	Domestic	No Record	22S	37E	9	No Record	No Record
CP00560	SKELLY OIL	Exploratory	No Record	22\$	37E	9	No Record	No Record
CP00756	CHARLIE BETTIS	Domestic	Shallow	22S	37E	9	125	85
CP00871	BILL OR BARBARA TRULL	Domestic	Shallow	22S	37E	9	167	94
CP00929	STATE OF NM STATE ENGINEER	Exploratory	No Record	228	37E	2	1100	No Record
CP00761	CHEVRON USA	Secondary Recovery	Mixed	22S	36E	1	No Record	No Record
CP00763	CHEVRON USA	Sanitation	Shallow	22\$	36E	1	265	137

Table 5-1: Summary of Water Wells Identified in the New Mexico State E	ngineer's Office
Database	

5.2 SURFACE WATER

N. M. M.

The South Eunice facility is located on a low-relief plane, and there are no perennial bodies of water downslope (east) within one mile of South Eunice (Figure 3). Drainage is generally to the southeast. Due to the integral containment of all liquids and the no-discharge design of the facility, and the lack of adjacent surface water, there is no significant potential for releases to the waters of the State of New Mexico.

Although there are no available FEMA flood maps for this area, the lack of surface water nearby indicates that the facility is well outside any described 100-year floodplains.

 $C: \label{eq:lass} C: \label{eq:lass} South Eunice \label{eq:lass} C: \label{eq:lass} South \end{tabular} with \end{tabular} and \end{ta$

6.0 FACILITY DESCRIPTION

South Eunice is a self-contained facility. All wastes, including stormwater which may come in contact with the units, are properly contained for off-site recycling or disposal. The design and operation of the facility was developed to ensure that that no solid or liquid industrial wastes or discharges are released to the water of the State of New Mexico.

A schematic plan of the facility is included as Figure 4. Field gas passes through the inlet scrubbers, vessels which allow liquids (hydrocarbon liquids and produced water) to settle and accumulate. These liquids are carried to storage tanks (tanks TK-1 and TK-2) by internal piping. These liquids are separated by gravity in the tanks, after which the petroleum liquids are removed by tank truck for recycling and the produced water is removed by tank truck for permitted disposal facilities (see Section 7).

From the inlet scrubbers, the gas is directed by piping to a second series of separators, the suction scrubbers, attached to the inlets of the four compressors. The suction scrubbers are employed to remove any liquids which might have passed through the Inlet Scrubbers. The liquids from the Suction Scrubbers are piped to the same storage tanks as the liquids from the inlet scrubbers.

South Eunice uses two compressors (Units #1 and #2; Figure 4). These units can operate either singly or in parallel. The compressor engines are cooled by liquid-cycle radiators, filled with a mixture of ethylene glycol antifreeze and water, and is sump-lubricated by conventional motor oil. Supplemental tanks of these fluids, which are automatically replenished as needed, are stored on site. The compressors are powered by natural gas, supplied from commercial processed-gas pipelines.

Compressed gas leaving the site is routed through a pig launcher, used to insert "pigs", a plug passed through the pipeline to remove waste solids and fluids which accumulate in the lines (Figure 4). This cleaning process is used at irregular intervals, depending on the conditions of the field gas and the pipelines. Liquids and solids generated by this process are removed from the pipeline at other locations away from the South Eunice facility.

Drainage and wash water from the compressors is collected in sumps under the concrete pads underlying the compressors. The wastewater is conveyed by piping to a holding tank (TK-3).

6.636

「「「

「「「

125.0

7.0 MATERIALS STORED AND USED AT FACILITY

The materials used at the facility are listed in Table 7-1 below. Photographs of the tanks are shown in Figures 5 through 10. Although not regularly or permanently stored on the site, other miscellaneous materials are used at the facility for maintenance and pipeline service. These include detergents for equipment cleaning, similar detergents for pipeline cleaning during pigging. Applicable MSDS are included in Appendix A.

ТҮРЕ	ID	MATERIAL	FORM	VOLUME	LOCATION	CONTAINMENT
AGT Steel	TK-1	Scrubber Liquids	Liquid	200 bbl	N Center of	Fiberglass Basin
					Facility	
AGT Steel	TK-2	Scrubber Liquids	Liquid	200 bbl	N Center of	Fiberglass Basin
					Facility	Common w/TK-1
AGT Poly	TK-3	Wastewater	Liquid	100 bbl	N Center of	Fiberglass Basin
					Facility	Common w/TK-1
AGT Poly	TK-4	Antifreeze	Liquid	500 gal	By Unit #1	Steel Pan
AGT Steel	TK-6	Engine Oil	Liquid	350 gal	By Unit #1	Steel Pan
AGT Steel	TK-7	Antifreeze	Liquid	500 gal	By Unit #2	Steel Pan
AGT Steel	TK-8	Waste Oil	Liquid	350 gal	By Unit #2	Fiberglass
			_			subgrade container
AGT Steel	TK-9	Pipeline	Liquid	150 gal	NE Corner	Fiberglass Pan
		Cleaners			of Facility	
	TK-	Pipeline		150 gal	NE Corner	Fiberglass Pan
	10	Cleaners			of Facility	
AGT Steel	TK-	Pipeline	Liquid	150 gal	NE Corner	Fiberglass Pan
	111	Cleaners			of Facility	

Table 7-1: Materials Stored at South Eunice Compressor Station

 $C:\label{eq:c:main} C:\label{eq:c:main} SouthEunice\end{tabular} SouthEunice\end{tabular} C:\label{eq:c:main} C:\label{eq:c:$

8.0 SOURCES AND QUANTITIES OF EFFLUENT AND WASTE SOLIDS

The sources and quantities of effluents and solid wastes generated from processes at the South Eunice Compressor Station are summarized in Table 8-1 below.

Exempt wastes are generated from the production and processing of petroleum hydrocarbons and gasses and are exempted from hazardous waste regulations under Subtitle C. Non-exempt wastes must be characterized, either by chemical analysis or knowledge of process, to determine their status under all applicable and appropriate hazardous waste regulations. The South Eunice Compressor facility's waste management system is designed to prevent the commingling of exempt and non-exempt wastes.

SOURCE	TYPE OF WASTE	VOLUME	REGULATORY STATUS	STATUS DETERMINATION
Compressor	Used Engine Oil	100-200 gal/month	Non-Exempt	Non-Hazardous per 40 CFR 279.11
	Used Filters	4 per month	Non-Exempt	Non-Hazardous per 40 CFR 261.4
	Wash and storm water from Compressor pad	Washdown 75 to 100 gal/month; stormwater varies	Non-Exempt	Chemical Analysis, knowledge of process
	Sorbent/Rags	Varies	Non-Exempt	Non-Hazardous per 40 CFR 279.11
Scrubbers	Gas Liquids	Varies; 50 to 100 bbl/month	Exempt	EPA Subtitle C
Misc. Trash	Solid Wastes	Varies	Non-Exempt	Knowledge of process

Table 8-1: Waste Sources,	Ouantities and Re	gulatory at South Euni	ce Compressor Station
	C		·

The quality and constituents of the washwater and stormwater from the compressor pad may vary if the types or brands of materials used on the pad (lube oil, antifreeze, and soaps) are changed. For this reason, an initial TCLP analysis of the wastewater has been performed, as a grab sample from the pad sump. The Sampling and Analysis Standard Operating Procedure is included in Appendix B.

The most recent analysis, from a sample collected on May 24, 2006 is summarized below in Table 8-2. The complete laboratory analytical report for the May 24, 2006 sample analysis is included in Appendix C. If there are any significant changes in the materials used on the pad, an additional analysis will be performed; using the same collection and analytical methods, prior to the disposal of the wastewater, and the method(s) of disposal will be modified as necessary.

10 M

な調整

C. C. C.

に変換

interest

Sector 1

にある

がなる

Date Sampled	5/24/2006		
location	South Eunice Compressor Station		
Report #	6E25015		
Matrix	Sludge		
<u> </u>	Analytical	Reg limit (TCLP)	
Toxicity	mg/kg	mg/kg	Determination
Benzene	J(18.3)	0.5	Non-hazardous
Mercury	ND	0.2	Non-hazardous
Arsenic	J(0.0205)	5.0	Non-hazardous
Barium	ND	100.0	Non-hazardous
Cadmium	ND	1.0	Non-hazardous
Chromium	0.393	5.0	Non-hazardous
Lead	0.0112	5.0	Non-hazardous
Selenium	J(0.0438)	1.0	Non-hazardous
Silver	ND	5.0	Non-hazardous
Reactive			
Cyanide	ND	250.0	Non-hazardous
рН	9.94 pH units	<2 or >12.5 pH units	Non-hazardous
Sulfide	ND	500.0	Non-hazardous
Ignitability	>100 deg. C	<60 deg C	Non-hazardous
	Analytical	Reg limit	
ТРН	mg/kg	mg/kg	Determination
C6-C12	NT		
C12-C35	NT	·····	
C-6-C-35	NT		

Table 8-2: Wastewater Analyses From South Eunice Compressor Station

C:\My Shared Folders\Projects\06-012\CompressorStationDischargePlans\SouthEunice\Reports\SEuniceDischargePlan.doc

6

9.0 LIQUID AND SOLID WASTES COLLECTION, STORAGE AND DISPOSAL

The collection, storage, removal and disposal of wastes generated at South Eunice are summarized in Table 9-1 below. As determined in Section 8.0 above, the facility does not generate any RCRA hazardous wastes; therefore all wastes are ultimately recycled or by disposed of, in licensed, permitted non-hazardous waste disposal or recycling facilities.

				· · · · · · · · · · · · · · · · · · ·
TYPE OF WASTE	COLLECTION	STORAGE	REMOVED BY	DISPOSAL
Scrubber Liquids	Piped to TK-1 and TK-2	TK-1 (210 bbl) TK-2 (210 bbl)	Varies ¹	SUGS Jal #4 for separation and sales.
Used Oils	Drained from Compressor pad or drained from engine sump	TK-2 (1000 gal)	Quail Petroleum Services	Available Permitted Recycler
Used Filters/Sorbents	Filters drained to container on pad; rags and sorbents to dumpster.	Dumpster	Quail Petroleum Services	Available Permitted Recycler
Wash Water	Piped to TK-3	TK-3 (100 bbl)	Varies ¹	Nearest Available Permitted Facility
Spent Antifreeze	Disposal Truck	Not stored on site	Quail Petroleum Services	Available Permitted Recycler
Solid Wastes	Dumpster	Dumpster	SUGS	Lea County Solid Waste Authority

Table 9-1: Collection, Storage, Removal and Disposal of Wastes at South Eunice Compressor Station

1: Scrubber liquids are transported by either (depending on availability) Quality Transports, Chaparral Services, Riverside Trucking, FULCO Services, or Rapid Transports.

10.0 INSPECTION, MAINTENCE AND REPORTING

In accordance with SUGS policy, South Eunice and all other active compressor stations are inspected each working day (Monday-Friday) by an appropriately trained technician. This individual visually inspects the waste management systems, including the levels in all tanks and the presence of any liquids in any containment structures.

Based on the knowledge of the operations at South Eunice, regular visits are scheduled for removal of wastes. Any apparent problems noted in daily inspections are notified immediately to the SUGS environmental director, who then dispatches the necessary employees, equipment and contractors to address the problem.

The compressor station is also monitored by telemetry (powered by solar batteries) to the SUGS control facility. This telemetry transmits operating parameters including system pressure, temperature, inlet and outlet flows, and other information. This provides an early warning in the event that any equipment is out of its operating parameters, allowing an immediate inspection if warranted.

Due to the non-discharge design of the system, no groundwater monitoring is required or employed at South Eunice.

Current TCLP analyses of wastewaters from the compressor pad indicate that the water is nonhazardous (see Table 8-2, Appendix C). Compressor pad wastewater will be reanalyzed for TCLP parameters if significantly different materials (e.g., oils, antifreeze, soaps) are used on the pad to reestablish the water's status.

11.0 SPILL AND LEAK PREVENTION AND REPORTING

As described in Section 11.0 above, the facility is inspected on a daily basis. Any spills will be addressed in accordance with NMOCD Rule 116 and 20.6.2.1203 NMAC.

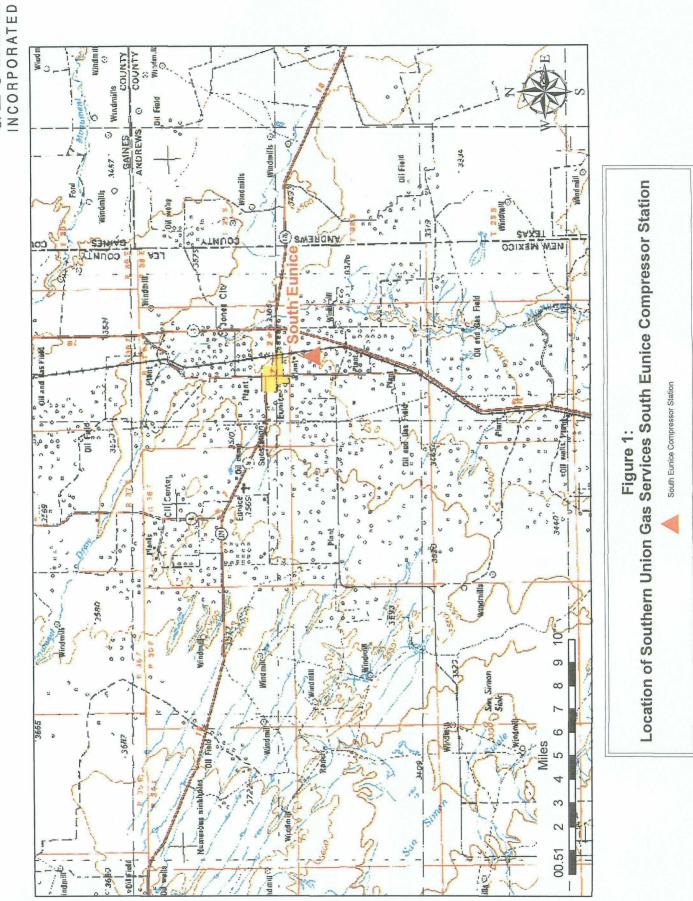
12.0 CLOSURE PLAN

Upon removal from service, the South Eunice facility will be closed by:

- Disconnect and close all pipelines, gas, electrical and other utilities,
- Dismantle and remove all equipment,
- Collect and analyze an appropriate number of soil samples to verify that no contaminated soils exist,
- Regrade and revegetate the site in accordance with any applicable bonds and/or other regulations.

A report will be developed documenting the closure, and will be provided to NMOCD upon request.

C:\My Shared Folders\Projects\06-012\CompressorStationDischargePlans\SouthEunice\Reports\SEuniceDischargePlan.doc



GEOLEX[®] Incorporated

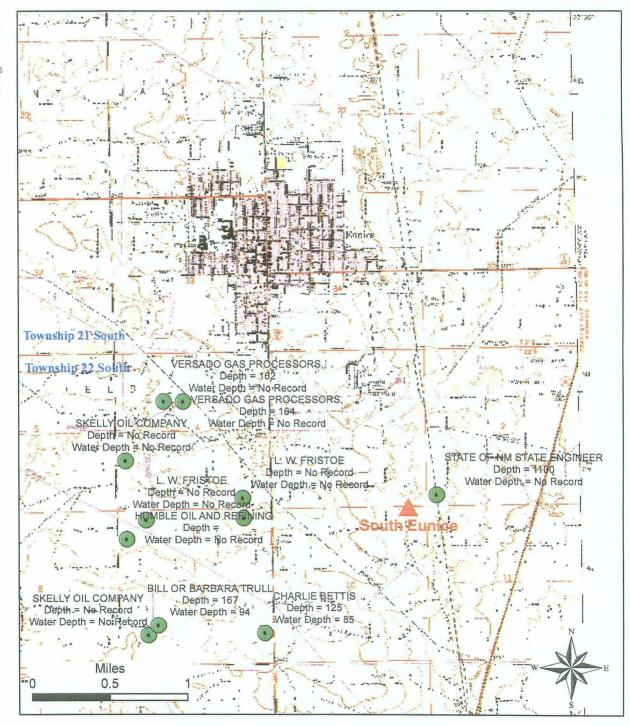
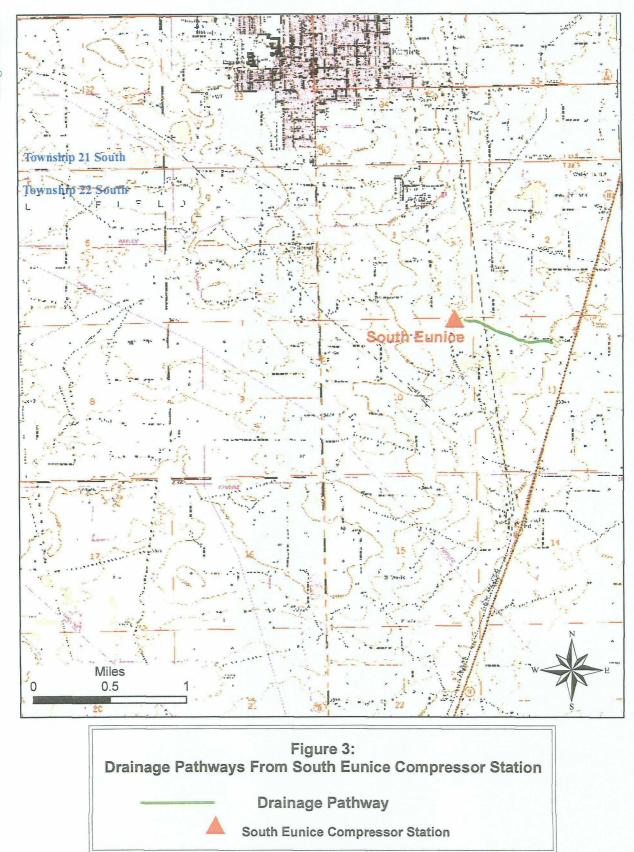


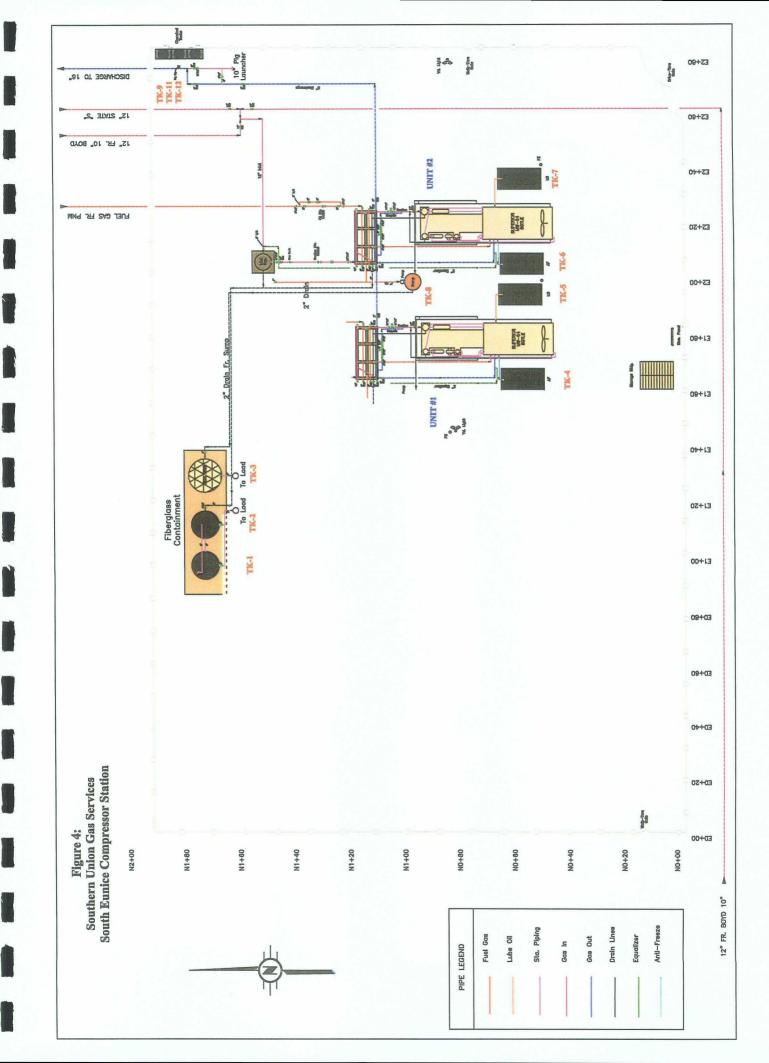
Figure 2: Water Wells Adjacent to South Eunice Compressor Station South Eunice Compressor Station Water Wells

Range 37 East

GEOLEX[®] Incorporated



Range 37 East



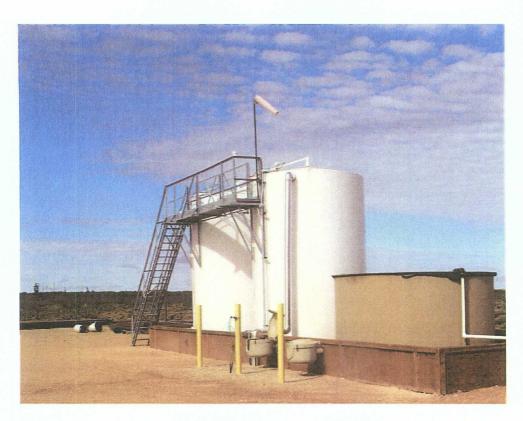


Figure 5: Tanks TK-1, TK-2 and TK-3 in Fiberglass Containment

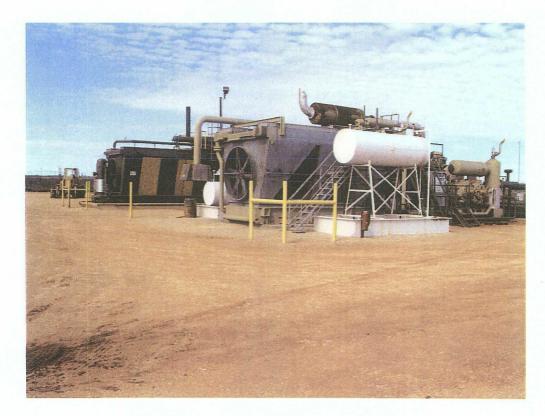


Figure 6: Compressor Units #1 and Unit #2 and Tanks TK-4 and TK-5



Figure 7: Pig Launcher and Fiberglass Drip Pan (Tanks TK-9, TK-10 and TK-11 in Background to Right)



Figure 8: Tanks TK-9, TK-10 and TK-11 in Fiberglass Pans

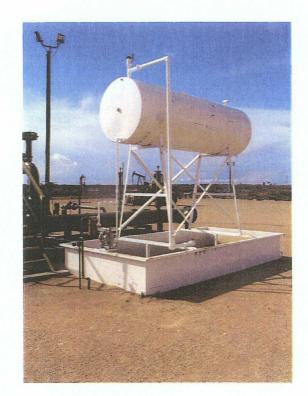


Figure 9: Tank TK-6 Adjacent to Compressor Unit #2

ľ



Figure 10: Waste Oil Tank TK-8 in Subgrade Fiberglass Containment

APPENDIX A:

a the

が正常

47175

2000

South States

Service .

の語の語

/• ·

MATERIAL SAFETY DATA SHEETS

Product Name: Natural gas

MSDS# E-4550-B

EYE CONTACT:

Vapour may cause irritation:

EFFECTS OF REPEATED (CHRONIC) OVEREXPOSURE:

None

and the

1.100

OTHER EFFECTS OF OVEREXPOSURE:

None known.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

None known.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION: None.

CARCINOGENICITY:

Not listed as carcinogen by OSHA, NTP or IARC.

4. First Aid Measures

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SKIN CONTACT:

Abrasions: clean with soap and water then bandage.

Burns: seek medical attention.

SWALLOWING:

Not applicable (gas).

EYE CONTACT:

Flush with water. If irritation persists, call a physician.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of over-exposure should be directed at the control of symptoms and the clinical condition.

5. Fire Fighting Measures				
FLAMMABLE :	Yes.	IF YES, UNDER WHAT CONDITIONS?	Forms explosive mixtures with air and oxidizing agents.	
FLASH POINT (test method)	Not appli	cable.	AUTOIGNITION 482°C (899.6°F) TEMPERATURE	
FLAMMABLE LII IN AIR, % by voi		LOWER: 3.8	UPPER: 17	

EXTINGUISHING MEDIA:

CO2, dry chemical, water spray or fog.

SPECIAL FIRE FIGHTING PROCEDURES:

DANGER! Evacuate all personnel from danger area. Immediately cool cylinders with water spray from maximum distance taking care not to extinguish flames. Remove ignition source if without risk. If flames are accidentally extinguished. Explosive re-ignition may occur; therefore, appropriate measures should be taken; e.g., total evacuation. Re-approach with extreme caution. Use self-contained breathing apparatus. Stop flow of gas if without risk while continuing cooling water spray. Remove all containers from area if without risk. Allow fire to burn out.

UNUSUAL FIRE AND EXPLOSION HAZARD:

Extremely flammable gas in presence of open flame and sparks. Slightly flammable in presence of heat.

Copyright © 2004, Praxair Canada Inc.

Product Name: Natural gas

HAZARDOUS COMBUSTION PRODUCTS: These products are carbon oxides (CO, CO2).

SENSITIVITY TO IMPACT:

Avoid impact against container.

SENSITIVITY TO STATIC DISCHARGE:

Possible.

1.22

Sec. 10

A State of the second

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

DANGER! Flammable, high-pressure gas. Forms explosive mixtures with air. Immediately evacaute all personnel from danger area. Use self-contained breathing apparatus where needed. Remove all sources of ignition if without risk. Reduce gas with fog or fine water spary. Shut off flow if without risk. Ventilate area or move cylinder to a well-ventilated area. Flammable gas may spread from leak. Before entering area, especially confied areas, check atmosphere with an appropriate device.

WASTE DISPOSAL METHOD:

Prevent waste from contaminating the surrounding environment. Keep personnel away. Discard and product, residue, disposable container, or liner in an environmentally acceptable manner, infull compliance with federal, provincial, and local regulations. If necessary, call your local supplier for assistance.

7. Handling and Storage

PRECAUTIONS TO BE TAKEN IN STORAGE:

Store and use with adequate ventilation. Separate flammable cylinders from oxygen, chlorine, and other oxidizers by at least 6 m or use a barricade of non-combustible material. This barricade should be at least 1.5 m high and have a fire resistance rating of at least ½ hour. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Post "No Smoking or Open Flames" signs in storage and use areas. There must be no sources of ignition. All electrical equipment in storage areas must be explosion-proof. Storage areas must meet national electric codes for Class 1 hazardous areas. Store only where temperature will not exceed 52 C. Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

PRECAUTIONS TO BE TAKEN IN HANDLING:

Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact your supplier. For other precautions, see Section 16.

For additional information on stroage and handling, refer to Compressed Gas Association (CGA) pamphlet P-1, Safe Handling of Compressed Gases in Containers, available from the CGA. Refer to Section 16 for the address and phone number along with a list of other available publications.

OTHER HAZARDOUS CONDITIONS OF HANDLING, STORAGE, AND USE:

Flammable high-pressure gas. Use only in a closed system. Use piping and equipment adequately designed to withstand pressures to be encountered. Use only spark-proof tools and explosion-proof equipment. Keep away from heat, sparks, and open flame. May form explosive mixtures with air. Ground all equipment. Gas can cause rapid suffocation due to oxygen deficiency. Store and use with adequate ventilation. Close valve after each use; keep closed even when empty. Prevent reverse flow. Reverse flow into cylinder may cause rupture. Use a check valve or other protective device in any line or piping from the cylinder. When returning cylinder to supplier, be sure valve is closed, then install valve outlet plug tightly. Never work on a pressurized system. If there is a leak, close the cylinder valve. Vent the system down in a safe and environmentally sound manner in compliance with all federal, provincial, and local laws; then repair the leak. Never place a compressed gas cylinder where it may become part of an electrical circuit.

Product Name:	Natural gas	MSDS#	£ E-4550-B	Date: 10/15/200
	8. E	Exposure Controls/	Personal Protection	
VENTILATION/E	NGINEERING CONTR	OLS:		
	LOCAL	EXHAUST: An explo SPECIA		st system is acceptable. See
	MECHANICA	L (general): Inadequ	ate. See SPECIAL.	
		SPECIAL: Use only	in a closed system.	
		OTHER: None.		
PERSONAL PRO	OTECTION:		· .	
		based o	n the current CSA stand espirators". Respirators	delines. Selection should also be dards Z94.4, "Selection, care and s should be approved by NIOSH
	SKIN PR	OTECTION: Wear wo	ork gloves when handlin	ng cylinders.
	EYE PR	OTECTION: Wear sa	fety glasses when hand	lling cylinders.
		"Industri		urrent CSA standard Z94.3, tion", and any provincial lelines.
0	THER PROTECTIVE E	needed. Select in "Protecti	Cuffless trousers shoul accordance with the cu	andling. Protective clothing where Id be worn outside the shoes. urrent CSA standard Z195, y provincial regulations, local
	·····			
-	9	9. Physical and Che	emical Properties	

PHYSICAL STATE:	Gas. (Compressed Gas.)	FREEZING POINT:	Not available.	pH:	Not applicable.
BOILING POINT	-164°C (-263.2°F)	VAPOUR PRESSURE	Not applicable.	MOLECULAR WEIGHT:	17.66 g/mole
SPECIFIC GRAVITY: LIQUID (Water = 1)	Not applicable.	SOLUBILITY IN WATER,	Very slightly solub	le in cold water.	
SPECIFIC GRAVITY: VAPOUR (air = 1)	0.55	EVAPORATION RATE (Butyl Acetate=1):	Not available.	COEFFICIENT OF WATER/OIL DISTRIBUTION:	Not applicable.
VAPOUR DENSITY:	0.615	% VOLATILES BY VOLUME:	100% (v/v).	ODOUR THRESHOLD:	0.001 ppm

APPEARANCE & ODOUR: Colourless.

でない

200

1.2 Martin

Odour: Faint, disagreeable, (Slight.)

Product Name: Natural gas

ないの

MSDS# E-4550-B

10. Stability and Reactivity				
STABILITY:	The product is stable.			
CONDITIONS OF CHEMICAL INSTABILITY:	Not available.			
INCOMPATIBILITY (materials to avoid):	Oxidizing agents in the presence of ignition source.			
HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal decomposition or burning may produce carbon monoxide/carbon dioxide and possible trace amounts of sulphur dioxide and oxides of nitrogen.			
HAZARDOUS POLYMERIZATION:	Will not occur.			
CONDITIONS OF REACTIVITY:	None known.			
11. Toxicological	I Information			
See section 3.	· · ·			
12. Ecological	Information			

No adverse ecological effects expected. This product does not contain any Class I or Class II ozone-depleting chemicals. The components of this mixture are not listed as marine pollutants by TDG Regulations.

13. Disposal Considerations

WASTE DISPOSAL Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier. METHOD:

14. Transport Information

TDG/IMO SHIPPING	Natural Gas, Compressed
NAME:	

HAZARD			IDENTIFICATION		PRODUC	CT RQ:
CLASS:		SS2.1: able gas.	#:	1971		100 L
SHIPPING L	ABEL(s):	Flammable ga	S			
PLACARD (w	vhen	Flammable ga	S		-	

SPECIAL SHIPPING INFORMATION:

required):

Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, nonventilated compartment of vehicle can present serious safety hazards.

15. Regulatory Information

The following selected regulatory requirements may apply to this product. Not all such requirements are identified. Users of this product are solely responsible for compliance with all applicable federal, provincial, and local regulations.

Product Name: MSDS# E-4550-B Date: 10/15/2004 Natural gas WHMIS (Canada) CLASS A: Compressed gas. CLASS B-1: Flammable gas. **International Regulations** EINECS Not available. This product is not classified according to the EU regulations. DSCL (EEC) International Lists No products were found. 16. Other Information **MIXTURES:** When two or more gases, or liquefied gases are mixed, their hazardous properties may combine to create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an Industrial Hygienist, or other trained person when you make your safety evaluation of the end product. Remember, gases and liquids have properties which can cause serious injury or death. HAZARD RATING SYSTEM: HMIS RATINGS: HEALTH 0 FLAMMABILITY 4 PHYSICAL HAZARD 0 STANDARD VALVE CONNECTIONS FOR U.S. AND CANADA: THREADED: 0 - 3000 psig: CGA-350 **PIN-INDEXED YOKE:** Not applicable. **ULTRA-HIGH-INTEGRITY** Not applicable. CONNECTION: Use the proper CGA connections. DO NOT USE ADAPTERS. Additional limited-standard connections may apply. See CGA pamphlets V-1 and V-7 listed below. Ask your supplier about free Praxair safety literature as referred to in this MSDS and on the label for this product. Further information about this product can be found in the following pamphlets published by the Compressed Gas Association, Inc. (CGA), 4221 Walney Road, 5th Floor, Chantilly, VA 20151-2923, Telephone (703) 788-2700, Fax (703) 961-1831, website: www.cganet.com. AV-1 Safe Handling and Storage of Compressed Gas P-1 Safe Handling of Compressed Gases in Containers P-14 Accident Prevention in Oxygen-Rich, Oxygen-Deficient Atmospheres SB-2 **Oxygen-Deficient Atmospheres** V-1 Compressed Gas Cylinder Valve Inlet and Outlet Connections Standard Method of Determining Cylinder Valve Outlet Connections for Industrial Gas Mixtures V-7 Handbook of Compressed Gases, Fourth Edition ---**PREPARATION INFORMATION:** DATE: 10/15/2004 **DEPARTMENT:** Safety and Environmental Services TELEPHONE: 905-803-1600

特徴の

Product Name: Natural gas

A CONTRACTOR

MSDS# E-4550-B

Date: 10/15/2004

The opinions expressed herein are those of qualified experts within Praxair Canada Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Praxair Canada Inc., it is the user's obligation to determine the conditions of safe use of the product.

Praxair Canada Inc. requests the users of this product to study this Material Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product hazards and safety information.

Praxair and the Flowing Airstream design are trademarks of Praxair Canada Inc.

Other trademarks used herein are trademarks or registered trademarks of their respective owners.



Praxair Canada Inc. 1 City Centre Drive Suite 1200 Mississauga, ON L5B 1M2 Page 7 of 7

Copyright © 2004, Praxair Canada Inc.



国語語

Material Safety Data Sheet

NATURAL GAS CONDENSATE

April 28, 1995

PHILLIPS PETROLEUM COMPANYEmergency:(918) 661-8118Bartlesville, Oklahoma 74004General MSDS Information:
(918) 661-8327For Additional MSDSs:(918) 661-5952

A. Product Identification

Synonyms: Drip; Hydrocarbon gas drip; Gas drip Chemical Name: Natural gas condensate Chemical Family: Mixture Chemical Formula: Mixture CAS Reg. No.: 68919-39-1 Product No.: Not Established

Product and/or Components Entered on EPA's TSCA Inventory: YES

This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.

B. Components

Ingredients	CAS Number	% By Wt.	OSHA PEL	ACGIH TLV			
Hydrogen sulfide C2 Hydrocarbons (As ethane) Asphyxiant	7783-06-4 Various	0-20 0-5	10 ppm NE	l0 ppm Simple			
C3 Hydrocarbons (As propane) Asphyxiant	Various	0-15	1000 ppm	Simple			
C4 Hydrocarbons (As butane)	Various	0-45	800 ppm	800 ppm			
C5 Hydrocarbons (As pentane)	Various	5-70	600 ppm	600 ppm			
C6 Hydrocarbons (As n-hexane)	Various	25-95	50 ppm(1)	50 ppm(1)			
may include: Cyclohexane	110-82-7	NE	300 ppm	300 ppm			
C7 Hydrocarbons (As heptane)	Various	25-95	400 ppm	400 ppm			
C8 Hydrocarbons (As octane)	Various	25-95	300 ppm	300 ppm			
Aromatic Hydrocarbons	Various	0-10	NE	NE			
may include: Benzene	71-43-2	NE	1 ppm(2)	10 ppm			
Toluene	108-88-3	NÉ	100 ppm	100 ppm			
Mixed xylene	1330-20-7	NE	100 ppm	100 ppm			
Ethylbenzene	100-41-4	NE	100 ppm	100 ppm			
 (1) As n-Hexane. As Hexane isomers 500 ppm. (2) Areas exempted by the Benzene Standard, 29 CFR 1910.1028, will have a 10 ppm 8 hour TWA. 							

の語を

ALASTA SU

1.00

C. Personal Protection Information

Ventilation: Use adequate ventilation to control exposure below recommended levels.

Respiratory Protection: For concentrations exceeding the recommended exposure level, use NIOSH/MSHA approved air supplied respirator. In case of spill or leak resulting in unknown concentrations, use NIOSH/MSHA approved supplied air respirator.

Eye Protection: Use chemical goggles.

Skin Protection: Use full-body, long-sleeved garments. Use polyvinyl alcohol or Buna-N gloves.

NOTE: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. Handling and Storage Precautions

Do not get in eyes, on skin or on clothing. Do not breathe vapor, mist, fume or dust. May be harmful. Proper personal protective equipment must be used when handling this chemical. Launder contaminated clothing before reuse. Wash thoroughly after handling. Use only with adequate ventilation. Do not swallow. May be aspirated into lungs.

Store in a well-ventilated area. Store in tightly closed container. Keep away from heat, sparks, and flames. Bond and ground during transfer.

E. Reactivity Data

Stability: Conditions to Avoid: Incompatibility (Materials to Avoid):	Stable Not Applicable Oxygen and strong oxidizing materials
Hazardous Polymerization: Conditions to Avoid: Hazardous Decomposition Products:	Will Not Occur Not Applicable Carbon oxides and various hydrocarbons formed when burned. Sulfur oxides may be formed if hydrogen sulfide is present.

F. Health Hazard Data

Recommended Exposure Limits:

See Section B.

Acute Effects of Overexposure:

Eye: May cause irritation including pain, blurred vision,

ALL PARTY

A. O. 1. 2010

and the second

にある

and the second

18 A.

redness, tearing and superficial corneal turbidity.

- Skin: May cause slight irritation. Extreme exposure may produce discoloration, muscle weakness, breathing difficulties and other central nervous system effects.
- Inhalation: Toxic by this route of exposure. May cause nausea, diarrhea, loss of appetite, dizziness, disorientation, headache, excitation, rapid respiration, drowsiness, labored breathing, anesthesia and other central nervous system effects. Hydrogen sulfide may cause lung paralysis and asphyxiation. Extreme overexposure may cause rapid unconsciousness and respiratory arrest.
- Ingestion: May be mildly irritating to intestines. If swallowed, may be aspirated resulting in inflammation and possible fluid accumulation in the lungs.

Subchronic and Chronic Effects of Overexposure:

Benzene has been designated as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), and the Occupational Safety and Health Administration (OSHA). Benzene may produce blood changes which include reduced platelets, reduced red blood cells, reduced white blood cells, aplastic anemia, and acute nonlymphocytic leukemia. Benzene has produced fetal death in laboratory animals and caused chromosome changes in humans and mutation changes in cells of other organisms.

Chronic high level n-hexane exposure damages the nervous system initially producing a lack of feeling in the extremities and possibly progressing to a more severe nerve damage.

Inhalation of high levels (1000 and 5000 ppm) of n-hexane has produced testicular damage in rats. Mice exposed to the same dose levels showed no testicular effects.

Other Health Effects:

The odor of hydrogen sulfide may not be recognized after prolonged inhalation due to paralysis of the sense of smell. Effects from inhaling the fume may lead to chronic bronchitis, respiratory irritation, increased loss of pulmonary function, and tearing of the eyes.

Some isoparaffins have produced kidney damage in male rats only. No comparable kidney disease is known to occur in humans.

Health Hazard Categories:

	Animal	Human			Animal	Human
Known Carcinogen Suspect Carcinogen	_X_	_x_	Toxic Corrosive		_X	
Mutagen Teratogen	_X	·	Irritant Target Organ	Toxin	X	x
Allergic Sensitize Highly Toxic	r		Specify -	Nerve Toxin; Toxin; Lung-J		

First Aid and Emergency Procedures:

States of

AND AND

S. States

Self-star

Standard

20.00

States -

Eye:	Flush ey	yes with	running	water fo	r at	least	fifteen	minutes.
	If irrit	ation or	adverse	symptom	is de	velop,	seek med	lical
	attentic	on.						

- Skin: Wash skin with soap and water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.
- Inhalation: Immediately remove from exposure. If breathing is difficult, give oxygen. If breathing ceases, administer artificial respiration followed by oxygen. Seek immediate medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

Note to Physician: Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

G. Physical Data

Appearance:	Colorless to dark liquid		
Odor:	Rotten egg odor if hydrogen		
	sulfide is present.		
Boiling Point:	Not Established		
Vapor Pressure:	< 40 psia @ 70F (21C) (Estimated)		
Vapor Density (Air = 1):	>1		
Solubility in Water:	Negligible		
Specific Gravity (H2O = 1):	0.5-0.7 (Estimated)		
Percent Volatile by Volume:	100		
Evaporation Rate (Butyl Acetate = 1):	>1		
Viscosity:	< 40 SUS @ 68F (20C)		

H. Fire and Explosion Data

Flash Point (Method Used): Flammable Limits (% by Volume in Air):	<-100F (<-73C)(Estimated) LEL - Not Established UEL - Not Established
Fire Extinguishing Media:	Dry chemical, foam or carbon dioxide (CO2)
Special Fire Fighting Procedures:	Evacuate area of all unnecessary personnel. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments described in Section C if conditions warrant. Shut off source, if possible. Water fog or spray may be used to cool exposed equipment and containers Allow fire to burn until gas flow is shut off, if possible.
Fire and Explosion Hazards:	Carbon oxides and possibly sulfur oxides formed when burned. Highly flammable vapors which are heavier than air may accumulate in low areas and/or spread along ground away from handling site.

Ι.

Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled: Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Shut off source, if possible. Protect from ignition. Ventilate area thoroughly.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations): Incinerate or otherwise manage at a RCRA permitted waste management facility.

J. DOT Transportation

For Natural Gas Condensate with an IBP < 68F Shipping Name: Hydrocarbon gases mixtures, liquefied, n.o.s. (contains Propanes and Butanes) Hazard Class: 2.1 (Flammable gas) ID Number: UN 1965 Packing Group: Not applicable Marking: Hydrocarbon gases mixtures, liquefied,, n.o.s. (contains Propanes and Butanes), UN 1965, RQ* Label: Flammable gas Placard: Flammable gas/1965 Hazardous Substance/RQ: Benzene/10#; Toluene/1000#; Cyclohexane/1000#; Xylene/1000#; Ethylbenzene/1000# Shipping Description: Hydrocarbon gases mixtures, liquefied, n.o.s. (contains Propanes and Butanes), 2.1 (Flammable gas), UN 1965, RQ* Packaging References: 49 CFR 173.304, 173.306, 173.314, 173.315

*Enter the letters "RQ" and the name of the hazardous substance as shown only if the hazardous substance is present in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) shown for the hazardous substance.

For Natural Gas Condensate with an IBP > 68F
Shipping Name: Natural gasoline
Hazard Class: 3 (Flammable liquid)
ID Number: UN 1257
Packing Group: I (if IBP < 95F) or II (if IBP > 95F)
Marking: Natural gasoline, Un 1257, RQ*
Label: Flammable liquid
Placard: Flammable liquid/1257
Hazardous Substance/RQ: Benzene/10#; Toluene/1000#; Cyclohexane/1000#;
Xylene/1000#; Ethylbenzene/1000#
Shipping Description: Natural gasoline, 3 (Flammable liquid),
UN 1257, PG I or II, RQ*
Packaging References: 49 CFR 173.150, 173.201, 173.202, 173.242, 173.243

*Enter the letters "RQ" and the name of the hazardous substance as shown only if the hazardous substance is present in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) shown for the hazardous substance.

K. RCRA Classification - Unadulterated Product as a Waste

Ignitable (D001)

L. Protection Required for Work on Contaminated Equipment

Contact immediate supervisor for specific instructions before work is initiated. Wear protective equipment and/or garments described in Section C if exposure conditions warrant.

M. Hazard Classification

X This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

izer	Combustible Liquid	Flamma	able Aerosol		Oxid
	Compressed Gas Flammable Gas Flammable Liquid Flammable Solid		sive n Hazard (Section F) ic Peroxide	·	Pyrophoric Unstable Water Reactive
	Based on information	recently :	available this produ	ict de	hes not meet

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

N. Additional Comments

SARA 313

This product contains the following chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. (See Section B).

Hexane Benzene Toluene Mixed xylene Ethylbenzene Cyclohexane

Phillips Petroleum Company (references to Phillips Petroleum Company or Phillips includes its divisions, affiliates and subsidiaries) believes that the information contained herein (including data and statements) is accurate as of the date hereof. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE AS CONCERNS THE INFORMATION HEREIN PROVIDED. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and information referred to herein are beyond the control of Phillips, Phillips expressly disclaims any and all liability as to any results obtained or arising from any use of the product or such information. No statement made herein shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents.

ExanMobil

Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 1 of 8

の時間

Same S

な時間

1. A. A.

SECTION 1	PRODUCT AND COMPANY IDENTIFICATION
PRODUCT	· · ·
Product Nar	
	cription: Base Oil and Additives
Product Coo Intended Us	
intenueu US	e: Engine oil
COMPANY IDENTIF	ICATION
Supplier:	Canada Imperial Oil Limited, An Affliate of Exxon Mobil Corporation
	P.O. Box 4029, Station A Calgary, ALBERTA. T2P 3M9 Canada
24 Hour Healt	th Emergency 519-339-2145
	n Emergency Phone 519-339-2145
Supplier Gen	eral Contact 1-800-567-3776
	COMPOSITION / INFORMATION ON INCREDIENTS
SECTION 2	COMPOSITION / INFORMATION ON INGREDIENTS
	· · · · · · · · · · · · · · · · · · ·
	rdous Substance(s) or Complex Substance(s).
No Reportable Haza	· · · · · · · · · · · · · · · · · · ·
No Reportable Haza SECTION 3	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION
No Reportable Haza SECTION 3	rdous Substance(s) or Complex Substance(s).
No Reportable Haza SECTION 3	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION
No Reportable Haza SECTION 3	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION
No Reportable Haza SECTION 3 This material is not co	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of injection unde	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure er skin may cause serious damage.
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of injection unde	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure er skin may cause serious damage. Health: 0 Flammability: 1 Reactivity: 0
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of injection unde	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure or skin may cause serious damage.
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of injection unde NFPA Hazard ID: HMIS Hazard ID:	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure or skin may cause serious damage. Health: 0 Flammability: 1 Reactivity: 0 Health: 0 Flammability: 1 Reactivity: 0
SECTION 3 This material is not co POTENTIAL HEALTI Low order of injection unde NFPA Hazard ID: HMIS Hazard ID: HMIS Hazard ID:	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure or skin may cause serious damage. Health: 0 Flammability: 1 Reactivity: 0 Health: 0 Flammability: 1 Reactivity: 0 should not be used for any other purpose than the intended use in Section 1 without expert
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of injection unde NFPA Hazard ID: HMIS Hazard ID: NOTE: This materia advice. Health studies	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure er skin may cause serious damage. Health: 0 Flammability: 1 Reactivity: 0 should not be used for any other purpose than the intended use in Section 1 without expertence and the shown that chemical exposure may cause potential human health risks which may variable
No Reportable Haza SECTION 3 This material is not co POTENTIAL HEALTI Low order of injection unde NFPA Hazard ID: HMIS Hazard ID: HMIS Hazard ID:	rdous Substance(s) or Complex Substance(s). HAZARDS IDENTIFICATION onsidered to be hazardous according to regulatory guidelines (see (M)SDS Section 15). HEFFECTS toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure er skin may cause serious damage. Health: 0 Flammability: 1 Reactivity: 0 should not be used for any other purpose than the intended use in Section 1 without expertence and the shown that chemical exposure may cause potential human health risks which may variable

adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

ExonMobil

Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 2 of 8

SKIN CONTACT

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

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

SECTION 5

FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Sulfur oxides, Incomplete combustion products, Oxides of carbon, Aldehydes, Smoke, Fume

FLAMMABILITY PROPERTIES

Flash Point [Method]: 200C (392F) [ASTM D-92] Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0 Autoignition Temperature: 315°C (599°F)

SECTION 6

ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. U.S. regulations require reporting releases of this material to the environment which exceed the reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other



Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 3 of 8

shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 HANDLING AND STORAGE

HANDLING

と言語

Avoid contact with used product. Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is a static accumulator.

STORAGE

Do not store in open or unlabelled containers.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits/standards for materials that can be formed when handling this product: When mists / aerosols can occur, the following are recommended: 5 mg/m³ - ACGIH TLV, 10 mg/m³ - ACGIH STEL, 5 mg/m³ - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.



Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 4 of 8

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly effect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

SECTION 9

総理が

PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION Physical State: Liquid Form: Clear Color: Amber Odor: Characteristic Odor Threshold: N/D IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION Relative Density (at 15 C): 0.86 Flash Point [Method]: 200C (392F) [ASTM D-92] Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0 Autoignition Temperature: 315°C (599°F) Boiling Point / Range: 340C (644F) - 600C (1112F) Vapor Density (Air = 1): > 2 at 101 kPa Vapor Pressure: [N/D at 20 °C] | < 1 kPa (7.5 mm Hg) at 38C Evaporation Rate (n-butyl acetate = 1): < 0.1 pH: N/A Log Pow (n-Octanol/Water Partition Coefficient): > 3.5 Solubility in Water: Negligible Viscosity: >20 cSt (20 mm2/sec) at 40 C | 10.7 cSt (10.7 mm2/sec) at 100C Oxidizing Properties: See Sections 3, 15, 16,

ExonMobil

Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 5 of 8

OTHER INFORMATION Freezing Point: N/D

Melting Point: N/A -30°C (-22°F) Pour Point: DMSO Extract (mineral oil only), IP-346: < 3 %wt

SECTION 10

14.44

202

STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11

TOXICOLOGICAL INFORMATION

۸	CI	JTE	TΟ	Y	C	Tν
А		ᇧᇆ	10	~		

Route of Exposure	Conclusion / Remarks	
Inhalation		
Toxicity (Rat): LC50 > 5000 mg/m3	Minimally Toxic. Based on test data for structurally similar materials.	
Irritation: No end point data.	Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components.	
Ingestion		
Toxicity (Rat): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.	
Skin		
Toxicity (Rabbit): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.	
Irritation (Rabbit): Data available.	Negligible irritation to skin at ambient temperatures. Based on test data for structurally similar materials.	
Eye		
Irritation (Rabbit): Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.	

CHRONIC/OTHER EFFECTS

For the product itself:

Diesel engine oils: Not carcinogenic in animals tests. Used and unused diesel engine oils did not produce any carcinogenic effects in chronic mouse skin painting studies.

Oils that are used in gasoline engines may become hazardous and display the following properties: Carcinogenic in animal tests. Caused mutations in vitro. Possible allergen and photoallergen. Contains polycyclic aromatic compounds (PAC) from combustion products of gasoline and/or thermal degradation products.

Contains:

ExconMobil

Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 6 of 8

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

Additional information is available by request.

The following ingredients are cited on the lists below: None.

REGULATORY LISTS SEARCHED		
1 = NTP CARC	3 = IARC 1	5 = IARC 2B
2 = NTP SUS	4 = IARC 2A	6 = OSHA CARC

SECTION 12

ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

MOBILITY

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Base oil component -- Expected to be inherently biodegradable

BIOACCUMULATION POTENTIAL

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Dispose of waste at an appropriate treatment & disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration.

REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous



Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 7 of 8

waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrositivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

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

SECTION 14 TRANSPORT INFORMATION

- LAND (DOT) : Not Regulated for Land Transport
- LAND (TDG) : Not Regulated for Land Transport
- SEA (IMDG) : Not Regulated for Sea Transport according to IMDG-Code
- AIR (IATA) : Not Regulated for Air Transport

SECTION 15

REGULATORY INFORMATION

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

NATIONAL CHEMICAL INVENTORY LISTING: DSL, TSCA

EPCRA: This material contains no extremely hazardous substances.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The Following Ingredients are Cited on the Lists Below:

Chemical Name	CAS Number	List Citations
DIPHENYLAMINE	122-39-4	5, 9, 18
ZINC ALKYLDITHIOPHOSPHATE	68649-42-3	15

	REGULAT	ORY LISTS SEARCHED	
1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK

ExonMobil

Product Name: ESSOLUBE XDI 5W-30 PROPANE/CNG ENGINE OIL Revision Date: 09Nov2006 Page 8 of 8

4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK	
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293		

OTHER INFORMATION

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16

1.1

No.

12.202

N/D = Not determined, N/A = Not applicable

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

No revision information is available.

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, republication or retransmission of this document, in whole or in part, is not permitted. The term, "ExxonMobil" is used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliates in which they directly or indirectly hold any interest.

Internal Use Only MHC: 0, 0, 0, 0, 0, 0

PPEC: A

DGN: 5013285 (1002629)

Copyright 2002 Exxon Mobil Corporation, All rights reserved

USED OIL

No. of Contraction

State of the

Sec. 1



MATERIAL SAFETY INFORMATION SHEET

SEC	TION 1: PRODUCT AND CO		
PRODUCT NAME:	USED OIL		
SYNONYMS:	Waste oil; Used lubricating oil; Oil and water mixture		
PRODUCT PART NUMBER(S):	Not applicable.		
PRODUCT USE:	F USE: Oil or water mixture for re-refining or reprocessing. If this product is used in combination with other products, refer to the Material Safety Data Sheets for those products.		
These numbers are f emergency use only you desire non-emer	for MEDICAL:	NCY PHONE NUMBERS TRANSPORTATION (SPILL): 1-800-468-1760	
product information, please call a phone number listed below	 ,		
please call a phone number listed below	 ,	tems, Inc. e g 3 D24	
please call a phone number listed below MANUFACTURER/ S	UPPLIER: Safety-Kleen Syst 5400 Legacy Driv Cluster II, Building Plano, Texas 750 USA 1-800-669-5740 www.Safety-Klee	tems, Inc. e g 3 D24	
please call a phone number listed below MANUFACTURER/ S TECHNICAL INFORM	UPPLIER: Safety-Kleen Syst 5400 Legacy Driv Cluster II, Building Plano, Texas 750 USA 1-800-669-5740 www.Safety-Klee IATION: 1-800-669-5740 Pre	tems, Inc. e g 3 D24 en.com	
please call a phone number listed below MANUFACTURER/ S	UPPLIER: Safety-Kleen Syst 5400 Legacy Driv Cluster II, Building Plano, Texas 750 USA 1-800-669-5740 www.Safety-Klee IATION: 1-800-669-5740 Pre	tems, Inc. e g 3 D24 en.com ess 1 then 1 then Extension 7500	

1943

R.

4° 2.37

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

				OSH	<u>IA PEL</u>	ACG	<u>h tlv®</u>		
<u>WT%</u>	NAME	SYNONYM	<u>CAS NO</u> .	TWA	STEL	TWA	<u>STEL</u>	<u>LD</u> a	<u>LC</u> b
80 to 100	Lubricating oils, used	Used oil	70514-12-4	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av
0 to 20*	Water/solids	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av
0 to 10*	Hydrocarbon solvents. May include gasoline, diesel fuel, jet fuel, mineral spirits, etc.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. A v .	N. Av.	N. Av
0 to 1.5*	Metals. May include lead, iron, zinc, copper, chromium, arsenic, nickel, and others: each below 1.0 WT%.	N. Av.	N. Av	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av
0 to 1.0*	Polynuclear aromatics. May include naphthalene, fluoranthene, phenanthrene, pyrene, and others: each below 0.3 WT%.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av
) to 0.5*	Chlorinated solvents.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av

^bInhalation-Rat LC₅₀

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE Liquid, black and viscous (thick), petroleum odor.

WARNING! PHYSICAL HAZARDS Combustible liquid.

HEALTH HAZARDS

May be harmful if inhaled. May be harmful if absorbed through skin. May be harmful or fatal if swallowed. May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin. Suspect cancer hazard. Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure. Contains material which can cause birth defects. Contains material which can cause lung, liver, kidney, skin, and/or central nervous system damage.

ENVIRONMENTAL HAZARDS

Product may be toxic to fish, plants, wildlife, and/or domestic animals.

POTENTIAL HEALTH EFFECTS Effects may vary depending on material composition. Typical effects may include: INHALATION High concentrations of vapor or mist may be harmful if inhaled. High (BREATHING): concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death. EYES: May cause irritation. SKIN: May cause irritation. Product may be absorbed through the skin and cause harm as noted under INHALATION (BREATHING). INGESTION May be harmful or fatal if swallowed. May cause throat irritation. (SWALLOWING): nausea, vomiting, and central nervous system effects as noted under INHALATION (BREATHING). Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death. **MEDICAL CONDITIONS** Individuals with pre-existing cardiovascular, liver, kidney, AGGRAVATED BY respiratory tract (nose, throat, and lungs), central nervous EXPOSURE: system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure. CHRONIC: Prolonged or repeated inhalation may cause oil pneumonia, lung tissue inflammation, fibrous tissue formation, and/or toxic effects as noted under **INHALATION (BREATHING).** Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis), CANCER This product contains mineral oils, untreated or mildly treated, which can **INFORMATION:** cause cancer. This product may contain hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics which can cause cancer. Risk of cancer depends on duration and level of exposure. For more information, see SECTION 11: CARCINOGENICITY.

POTENTIAL ENVIRONMENTAL EFFECTS

Product may be toxic to fish, plants, wildlife, and/or domestic animals. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

学校など

and the second

Carlor and

ALC: NO.

ない

	SE	ECTION 4: FIRST AID MEASURES		
INHALATION: (BREATHING)	is difficult, g personnel.	fresh air. If not breathing, give artificial respiration. If breathin give oxygen. Oxygen should only be administered by qualified Someone should stay with victim. Get medical attention if ifficulty persists.		
EYES:	If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.			
SKIN:		fected clothing and shoes. Wash skin thoroughly with soap an medical attention if irritation or pain develops or persists.		
INGESTION: (SWALLOWING)	1-800-752- If spontane	Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person		
NOTE TO PHYSICIANS:	Treat symptomatically and supportively. Treatment may vary with conditio of victim and specifics of incident. Call 1-800-752-7869 for additional information.			
	SECT	TION 5: FIRE FIGHTING MEASURES		
FLASH POINT:		>200°F (93°C) (minimum) Pensky-Martens Closed Cup		
FLAMMABLE LIM	ITS IN AIR:	Not available.		
AUTOIGNITION TEMPERATURE:		Not available.		
HAZARDOUS COI PRODUCTS:	MBUSTION	Decomposition and combustion materials may be toxic. Burning may produce phosgene gas, nitrogen oxides, carbo monoxide, and unidentified organic compounds.		
		, 5		
CONDITIONS OF LAMMABILITY:		Heat, sparks, or flame. Product may burn but does not ignite readily.		

Revision 5/04; MSDS Form No. 81451 - Page 4 of 10

NFPA 704 HAZARD IDENTIFICATION:	This information is intended sole trained in this system.	ely for the use by individuals
. · · ·	HEALTH HAZARD (BLUE)	
	SPECIFIC HAZARD (WHITE)	REACTIVITY (YELLOW)
FIRE FIGHTING INSTRUCTIONS:	Keep storage containers cool wi A positive-pressure, self-contain (SCBA) and full-body protective fire emergencies.	ed breathing apparatus
FIRE AND EXPLOSION HAZARDS:	Heated containers may rupture. retain residue and can be dange to mechanical impact. Product r discharge, which could result in	erous. Product is not sensitive may be sensitive to static

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface waters and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION.**

	SECTION 7: HANDLING AND STORAGE
HANDLING:	Keep away from heat, sparks, or flame. Where flammable mixtures may here sent, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, storage tanks, tanker trucks, and rail tank cars should be ground and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product.
SHIPPING AND STORING:	Keep container tightly closed when not in use and during transport. Do no pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other source of ignition. Empty product containers may retain product residue and can be dangerous. See SECTION 14: TRANSPORT INFORMATION for Packing Group information.
SEC	TION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
ENGINEERING CONTROLS:	Use general ventilation, process enclosures, local exhaust ventilation, or other engineering controls to control air-borne levels. Where explosive mixtures may be present, equipment safe for such locations should be used.
PERSONAL PRO RESPIRATORY PROTECTION:	TECTIVE EQUIPMENT A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.
EYE PROTECTION:	Wearing chemical goggles is recommended. Contact lens may be worn with eye protection.
SKIN PROTECTION:	Where prolonged or repeated skin contact is likely, wear neoprene, nitrile (4 mil minimum), PVC (polyvinyl chloride), or equivalent protective gloves; wearing natural rubber or equivalent gloves is not recommended.
	When product is heated and skin contact is likely, wear heat-insulating gloves, boots, and other protective clothing.
	To avoid prolonged or repeated contact with product where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.
	Revision 5/04 MSDS Form No. 81451 - Page 6 of 10

No.

Sime and

HYGIENE: eating, drinki and protectiv and/or protectiv leather article		ughly with soap and water after handling product and before king, or using tobacco products. Clean affected clothing, shoes, ive equipment before reuse. Discard affected clothing, shoes, ective equipment if they cannot be thoroughly cleaned. Discard cles, such as shoes, saturated with the product.	
PROTECTIVE should be e		s and splashes are likely, facilities storing or using this product quipped with an emergency eyewash and shower, both ith clean water, in the immediate work area.	
SE	CTION 9:	PHYSICAL AND CHEMICAL PROPERTIES	
PHYSICAL STATE, APPEARANCE, AND	ODOR:	Liquid, black and viscous (thick), petroleum odor.	
ODOR THRESHOLD:		Not available.	
MOLECULAR WEIGH	łT:	Not applicable	
SPECIFIC GRAVITY:		0.8 to 1.0 at 60°F (15.6°C) (water = 1)	
DENSITY:		6.7 to 8.3 LB/US gal (800 to 1000 g/l) (approximately)	
VAPOR DENSITY:		greater than 1 (air = 1) (based on kerosene)	
VAPOR PRESSURE:		Not available.	
BOILING POINT:		Not available.	
FREEZING/MELTING	POINT:	Not available.	
pH:		Not applicable.	
EVAPORATION RATI	E:	less than 1 (butyl acetate = 1)	
SOLUBILITY IN WAT	ER:	Slight.	
FLASH POINT:		>200°F (93°C) (minimum) Pensky-Martens Closed Cup	
FLAMMABLE LIMITS	IN AIR:	Not available.	
AUTOIGNITION TEMPERATURE:		Not available.	

No.

STABILITY:	Stable under normal temperatures and pressures. Avoid heat, sparks, flame.
INCOMPATIBILITY:	Avoid acids, alkalies, oxidizing agents, reducing agents, reactive halogens, or reactive metals.
REACTIVITY:	Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.
HAZARDOUS DECOMPOSITION PRODUCTS:	None under normal temperatures and pressures. Also see SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.
	SECTION 11: TOXICOLOGICAL INFORMATION
SENSITIZATION:	Based on best current information, there may be known human sensitization associated with this product.
MUTAGENICITY:	Based on best current information, there may be mutagenicity associated with this product.
CARCINOGENICITY:	Mineral oils, untreated or mildly treated are listed by IARC as a known carcinogen. Mineral oils, untreated or mildly treated are classified by NTP as having limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.
	There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are listed by OSHA as known carcinogens. There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are listed by IARC as known, probable, or possible carcinogens. There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are classified by NTP as known carcinogens or as having limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are recognized by ACGIH as confirmed or suspected human carcinogens.

のなたがある

REPRODUCTIVE TOXICITY:	Based on best current information, there may be reproductive toxicity associated with this product.			
TERATOGENICITY:	Based on best current information, there may be teratogenicity associated with this product.			
TOXICOLOGICALL SYNERGISTIC PRODUCT(S):	Based on best current information, there may be toxicologically synergistic products associated with this product.			
	SECTION 12: ECOLOGICAL INFORMATION			
ECOTOXICITY:	Not available.			
OCTANOL/WATER PARTITION COEFFI	CIENT: Not available.			
VOLATILE ORGANI COMPOUNDS:	C Not available. As per 40 CFR Part 51.100(s).			
	SECTION 13: DISPOSAL CONSIDERATIONS			
also apply to empty c	e with federal, state, provincial, and local regulations. Regulations may			
also apply to empty c	e with federal, state, provincial, and local regulations. Regulations may ontainers. The responsibility for proper waste disposal lies with the owner			
also apply to empty c of the waste. Contac	e with federal, state, provincial, and local regulations. Regulations may ontainers. The responsibility for proper waste disposal lies with the owner t Safety-Kleen regarding proper recycling or disposal.			
also apply to empty c of the waste. Contac DOT: N	e with federal, state, provincial, and local regulations. Regulations may ontainers. The responsibility for proper waste disposal lies with the owner t Safety-Kleen regarding proper recycling or disposal. SECTION 14: TRANSPORT INFORMATION			
also apply to empty c of the waste. Contac DOT: N TDG: N	e with federal, state, provincial, and local regulations. Regulations may ontainers. The responsibility for proper waste disposal lies with the owne t Safety-Kleen regarding proper recycling or disposal. SECTION 14: TRANSPORT INFORMATION lot regulated.			
also apply to empty c of the waste. Contac DOT: N TDG: N EMERGENCY RESP	e with federal, state, provincial, and local regulations. Regulations may ontainers. The responsibility for proper waste disposal lies with the owne t Safety-Kleen regarding proper recycling or disposal. SECTION 14: TRANSPORT INFORMATION lot regulated. lot regulated. ONSE Not applicable.			
also apply to empty c of the waste. Contac DOT: N TDG: N EMERGENCY RESP	e with federal, state, provincial, and local regulations. Regulations may ontainers. The responsibility for proper waste disposal lies with the owne t Safety-Kleen regarding proper recycling or disposal. SECTION 14: TRANSPORT INFORMATION lot regulated. lot regulated. ONSE Not applicable. Reference North American Emergency Response Guidebook SECTION 15: REGULATORY INFORMATION			

調査を

and the

「ないない」

ALC: NOT ALC: NOT

ですない

新た時

311 AND 312:	defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA): Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard			
SARA SECTION 313:	This product may contain "toxic" chemicals subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.			
CERCLA:	This product may contain "hazardous substances" listed pursuant to Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.			
TSCA:	Not available.			
CALIFORNIA:	This product is not for sale or use in the State of California.			
CANADIAN REGULA WHMIS:	ATIONS Not regulated			
CANADIAN ENVIRONMENTAL PROTECTION ACT				
(CEPA):	Not available.			
	SECTION 16: OTHER INFORMATION			
REVISION INFORMA	TION: Update to Section 2.			
LABEL/OTHER INFC	RMATION: Not available.			
However, Safety-Kleen assumes representations or warranties, eit	o the use of this product. To the best of our knowledge, the information contained herein is accurate. In a liability whatsoever for the accuracy or completeness of the information contained herein. <u>No</u> ther express or implied, or merchantability, fitness for a particular purpose or of any other nature are made ation or the product to which information refers. The data contained on this sheet apply to the product as			
	WE CARE.			

©2004 Safety-Kleen Systems, Inc.

ETHYLENE GLYCOL	Page
MSDS Number: E5125 * * * * Effective Da	ie: 11/09/06 * * * * * Supercedes: 03/15/04
	MSDS Material Safety Data Sheet CANTE types in Comment Comment Systems
	Frem: Nalline word Baker, Inc. I Mallinck Crock JLBaker Antropy Colling Control and Contro
	יאשייש אישייעסאייג אישייעסאייגעער אישייעסאייגעער אישיער אישיער אישיער אישיער אישיער אישיער אישיער אישיער אישיער און רער אישיער
	ETHYLENE GLYCOL
1. Product Identification	
Synonyms: 1,2-Ethanediol; glycol; 1,2-I CAS No.: 107-21-1	Dihydroxyethane; Ethylene Alcohol; Ethulene Dihydrate
CAS No.: 107-21-1 Molecular Weight: 62.07 Chemical Formula: CH2OHCH2OH	
Product Codes: J.T. Baker: 5387, 5845, 9140, 9298, 9300	0 9346 9356 1.715
Mallinckrodt: 5001, 5037	
2. Composition/Information or	n Ingredients
Ingredient	CAS No Percent Hazardous
Ethylene Glycol	107-21-1 99 - 100% Yes
3. Hazards Identification Emergency Overview	
Emergency Overview WARNING! HARMFUL OR FATAL	IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC SKIN ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life)	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE IRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE IRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects Unhalation: Vapor inhalation is generally not a proble vomiting, dizziness and drowsiness. Pulm	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects Inhalation: Vapor inhalation is generally not a proble vomiting, dizziness and drowsiness. Pulm movement and coma. Ingestion:	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. 'e for your convenience) ELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES age) In unless heated or misted. Exposure to vapors over an extended time period has caused throat irritation and headache. May cause nause ionary edema and central nervous system depression may also develop. When heated or misted, has produced rapid, involuntary eye
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE IRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor 	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. re for your convenience) ELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES age) m unless heated or misted. Exposure to vapors over an extended time period has caused throat irritation and headache. May cause nause
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided het Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects Inhalation: Vapor inhalation is generally not a proble vomiting, dizziness and drowsiness. Pulm movement and coma. Ingestion: Initial symptoms in massive dosage parall stupor, collapse, and unconsciousness wit Skin Contact: Minor skin irritation and penetration may	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. 'e for your convenience)
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided het Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Storage Color Code) (General Storage Color Code) (General Storage Color Code) (General Storage Code) (General C	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. re for your convenience) ELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES age) In unless heated or misted. Exposure to vapors over an extended time period has caused throat irritation and headache. May cause nause ionary edema and central nervous system depression may also develop. When heated or misted, has produced rapid, involuntary eye lel alcohol intoxication, progressing to CNS depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, h convulsions. Death from respiratory arrest or cardiovascular collapse may follow. Lethal dose in humans: 100 ml (3-4 ounces). occur.
WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided het Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects Potential Health Effects Inhalation: Vapor inhalation is generally not a proble vomiting, dizziness and drowsiness. Pulm movement and coma. Ingestion: Initial symptoms in massive dosage parall stupor. collapse, and unconsciousness wit Skin Contact: Minor skin irritation and penetration may Eye Contact: Splashes may cause irritation, pain, eye di Chronic Exposure:	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. re for your convenience) ELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES age) m unless heated or misted. Exposure to vapors over an extended time period has caused throat irritation and headache. May cause nause ionary edema and central nervous system depression may also develop. When heated or misted, has produced rapid, involuntary eye lel alcohol intoxication, progressing to CNS depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, h convulsions. Death from respiratory arrest or cardiovascular collapse may follow. Lethal dose in humans: 100 ml (3-4 ounces). occur. amage. n cause severe kidney problems. Brain damage may also occur. Skin allergy can develop. May damage the developing fetus.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided het Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Storage Colarses and drowsiness. Pulm movement and coma. Ingestion: Initial symptoms in massive dosage parall stupor. collapse, and unconsciousness wit Skin Contact: Minor skin irritation and penetration may Eye Contact: Splashes may cause irritation, pain, eye de Chronic Exposure: Repeated small exposures by any route ca Aggravation of Pre-existing Conditions Persons with pre-existing Skin disorders, co	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. 'e for your convenience) ELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES age) m unless heated or misted. Exposure to vapors over an extended time period has caused throat irritation and headache. May cause nause nonary edema and central nervous system depression may also develop. When heated or misted, has produced rapid, involuntary eye lel alcohol intoxication, progressing to CNS depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, h convulsions. Death from respiratory arrest or cardiovascular collapse may follow. Lethal dose in humans: 100 ml (3-4 ounces). occur. amage. n cause severe kidney problems. Brain damage may also occur. Skin allergy can develop. May damage the developing fetus. typ problems, or impaired liver, kidney, or respiratory function may be more susceptible to the effects of this substance.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Contact Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects Inhalation: Vapor inhalation is generally not a proble vomiting, dizziness and drowsiness. Pulm movement and coma. Ingestion: Initial symptoms in massive dosage parall stupor, collapse, and unconsciousness wit Skin Contact: Minor skin irritation and penetration may Eye Contact: Splashes may cause irritation, pain, eye da Chronic Exposure: Repeated small exposures by any route ca Aggravation of Pre-existing Conditions Persons with pre-existing skin disorders, co	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. 'e for your convenience)
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided het Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects Inhalation: Vapor inhalation is generally not a proble vomiting, dizziness and drowsiness. Pulm movement and coma. Ingestion: Initial symptoms in massive dosage parall stupor, collapse, and unconsciousness wit Skin Contact: Minor skin irritation and penetration may Eye Contact: Splashes may cause irritation, pain, eye de Chronic Exposure: Repeated small exposures by any route ca Aggravation of Pre-existing Skin disorders, c First Aid Measures Inhalation:	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. e for your convenience)
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided her Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. e for your convenience) ELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES age) m unless heated or misted. Exposure to vapors over an extended time period has caused throat irritation and headache. May cause nause ionary edema and central nervous system depression may also develop. When heated or misted, has produced rapid, involuntary eye lel alcohol intoxication, progressing to CNS depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, h convulsions. Death from respiratory arrest or cardiovascular collapse may follow. Lethal dose in humans: 100 ml (3-4 ounces). occur. amage. n cause severe kidney problems. Brain damage may also occur. Skin allergy can develop. May damage the developing fetus. ye problems, or impaired liver, kidney, or respiratory function may be more susceptible to the effects of this substance. artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Emergency Overview WARNING! HARMFUL OR FATAL REACTION. MAY CAUSE JRRITAT SAF-T-DATA ^(tm) Ratings (Provided het Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Contact Rating: 3 - Severe (Life) Lab Protective Equip: GOGGLES & SHI Storage Color Code: Green (General Stor Potential Health Effects Inhalation: Vapor inhalation is generally not a proble vomiting, dizziness and drowsiness. Pulm movement and coma. Ingestion: Initial symptoms in massive dosage parall stupor, collapse, and unconsciousness wit Skin Contact: Splashes may cause irritation, pain, eye di Chronic Exposure: Repeated small exposures by any route ca Aggravation of Pre-existing Conditions Persons with pre-existing skin disorders, of First Aid Measures Induce vomiting immediately as directed I Skin Contact:	ION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. e for your convenience)

Note to Physician:

2444

のないで

いないまで

なる

ないない

No.

Sec. Mar

語の説

の語の語

Give sodium bicarbonate intravenously to treat acidosis. Urinalysis may show low specific gravity, proteinuria, pyuria, cylindruria, hematuria, calcium oxide, and hippuric acid crystals. Ethanol can be used in antidotal treatment but monitor blood glucose when administering ethanol because it can cause hypoglycemia. Consider infusion of a diuretic such as mannitol to help prevent or control brain edema and hemodialysis to remove ethylene glycol from circulation.

5. Fire Fighting Measures

100

Fire: Flash point: 111C (232F) CC Autoignition temperature: 398C (748F) Flammable limits in air % by volume: lel: 3.2; uel: 15.3 Slight to moderate fire hazard when exposed to heat or flame. Explosion: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Containers may explode when involved in a fire. Fire Extinguishing Media: Dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Water spray may be used to extinguish surrounding fire and cool exposed containers. Water spray will also reduce fume and irritant gases. Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved sclf-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Toxic gases and vapors may be released if involved in a fire.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Separate from acids and oxidizing materials. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: -OSHA Permissible Exposure Limit (PEL): 50 ppm Ceiling

-ACGIH Threshold Limit Value (TLV): 50 ppm Ceiling (vapor)

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved);

If the exposure limit is exceeded, a half-face respirator with an organic vapor cartridge and particulate filter (NIOSH type P95 or R95 filter) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece respirator with an organic vapor cartridge and particulate filter (NIOSH P100 or R100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. Please note that N series filters are not recommended for this material. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing. Eve Protection

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Clear oily liquid. Odor: Odorless Solubility: Miscible in water. Specific Gravity: 1.1 @20C/4C pH: No information found. % Volatiles by volume @ 21C (70F): 100 **Boiling Point:** 197.6C (388F) Melting Point: -13C (9F) Vapor Density (Air=1): 2.14 Vapor Pressure (mm Hg): 0.06 @ 20C (68F) Evaporation Rate (BuAc=1): No information found

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition. May produce acrid smoke and irritating fumes when heated to decomposition.

Hazardous Polymerization:

Will not occur. Incompatibilities:

Strong oxidizing agents. Reacts violently with chlorosulfonic acid, oleum, sulfuric acid, perchloric acid. Causes ignition at room temperature with chromium trioxide, potassium permanganate and sodium peroxide; causes ignition at 212F(100C) with ammonium dichromate, silver chlorate, sodium chloride and uranyl nitrate. Conditions to Avoid:

Heat, flames, ignition sources, water (absorbs readily) and incompatibles.

11. Toxicological Information

Toxicological Data:

Oral rat LD50: 4700 mg/kg; skin rabbit LD50: 9530 mg/kg.	
Irritation - skin rabbit: 555mg(open), mild; eye rabbit: 500mg/24H	I, mild.
Investigated as a tumorigen, mutagen, reproductive effector.	
Reproductive Toxicity:	
Has shown teratogenic effects in laboratory animals.	
\Cancer Lists\	
NTP Carcinog	

Ingredient	NTP Known	Carcinogen Anticipated	IARC Category
Ethylene Glycol (107-21-1)	NO	No	None

12. Ecological Information

Environmental Fate:

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is expected to readily biodegrade. When released into the water, this material is expected to have a half-life between 1 and 10 days. This material is not expected to significantly bioaccumulate. This material has a log octanol-water partition coefficient of less than 3.0. When released into water, this material is not expected to evaporate significantly. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life between 1 and 10 days. Environmental Toxicity:

The LC50/96-hour values for fish are over 100 mg/l.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

Ingredient					Australia
Ethylene Glycol (107-21-1)					Yes
	2\				
Ingredient			DSL		Phil.
Ethylene Glycol (107-21-1)				No	
\Federal, State & International Re	- SARA RQ	302- TPQ	Lis	st Che	A 313 mical Catg
Ethylene Glycol (107-21-1)				 5	
\Federal, State & International Re	CERCL	A	-RCRA- 261.33	т. 8 8	SCA- (d)
Ethylene Glycol (107-21-1)				N	

Australian Hazchem Code: None allocated Poison Schedule: None allocated.

WHMIS

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

語の語

16. Other Information

NFPA Ratings: Health: 1 Flammability: 1 Reactivity: 0

Label Hazard Warning: WARNING! HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. Label Precautions: Do not breathe vapor or mist. Use only with adequate ventilation. Keep container closed.

Avoid contact with eyes, skin and clothing, Wash thoroughly after handling.

Label First Aid:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush skin or eves with plenty of water for at least 15 minutes. Call a physician if irritation develops or persists. If swallowed, give water or milk to drink and induce vomiting. Never give anything by mouth to an unconscious person. In all cases call a physician.

Product Use: Laboratory Reagent. Revision Information: No Information Found.

Disclaimer:

Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is Intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCIIANTA BILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Prepared by: Environmental Health & Safety Phone Number: (314) 654-1600 (U.S.A.)

Section 1

1922.

の調査

のない

認識に

10 A.

である

「「「「



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION						
PRODUCT NAME:	USED ANTIFREEZE					
SYNONYMS:	1,2-Ethanediol; 1,2-Ethylen	1,2-Ethanediol; 1,2-Ethylene glycol; 2-Hydroxyethanol; Ethylene alcohol				
PRODUCT CODE:	Prefix 95P	Prefix 95P				
PRODUCT USE:Used automotive coolant.If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.						
These numbers are	for MEDICAL:	NCY PHONE NUMBERS TRANSPORTATION (SPILL):				
emergency use only	rgency 1-800-752-7869 ,	1-800-468-1760				
emergency use only you desire non-eme product information please call a phone	rgency 1-800-752-7869 ,	1-800-468-1760				
emergency use only you desire non-eme product information please call a phone number listed below SUPPLIER:	rgency 1-800-752-7869 , Safety-Kleen 5400 Legacy Drive Cluster II, Building 3 Plano, Texas 75024 USA					
emergency use only you desire non-eme product information please call a phone number listed below SUPPLIER:	rgency 1-800-752-7869 Safety-Kleen 5400 Legacy Drive Cluster II, Building 3 Plano, Texas 75024 USA 1-800-669-5740 MATION: 1-800-669-5740 Pre					
emergency use only you desire non-eme product information please call a phone number listed below SUPPLIER: TECHNICAL INFORM	rgency 1-800-752-7869 , , Safety-Kleen 5400 Legacy Drive Cluster II, Building 3 Plano, Texas 75024 USA 1-800-669-5740 MATION: 1-800-669-5740 Pre ER: 82912	ss 1 then Enter 7500				

USED ANTIFREEZE MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

				OSHA	<u>PEL</u> **	ACGI	<u>⊣ TLV®</u>		
WT%	NAME	SYNONYM	CAS NO.	TWA	STEL	TWA	STEL	<u>LD</u> ^a	<u>LC</u> b
30-87	Water	N.Av.	7732-18-5	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
2-68	Ethylene glycol	1,2-Ethanediol; 1,2- Dihydroxyethane	107-21-1	N.Av.	N.Av.	N.Av.	N.Av.	4700 mg/kg (9530 uL/kg) °	10876 mg/kg
4-44	1,2-Propylene glycol	N.Av.	57-55-6	N.Av. ^d	N.Av.	N.Av.	N.Av.	20 gm/kg (20800 mg/kg) °	N.Av.
1-2	Diethylene glycol	2,2'-oxybis-ethanol	111-46-6	N.Av. ^e	N.Av.	N.Av.	N.Av.	12565 mg/kg (11890 mg/kg) °	N.Av.

**OSHA Final PEL value (enforceable). Some States have adopted more stringent values. N.Av. = Not Available b Inhalation-Rat LC₅₀ °Oral-Rat LD₅₀ °Skin-Rabbit LD₅₀

^dAIHA recommended TWA 50 ppm ^eAIHA recommended TWA 10mg/m³

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE

Liquid, green, sweet odor. Syrupy.

DANGER!

C. Carlos

HEALTH HAZARDS

May be harmful if inhaled. May be fatal if swallowed. May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin. Contains material which may cause birth defects. Contains material which may cause lung, kidney, liver, central nervous system, and eye damage.

POTENTIAL HEALTH EFFECTS

INHALATION (BREATHING): This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may cause liver, lung, and kidney damage. High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

EYES: May cause irritation. May cause inflammation of the iris, ciliary body, and the membrane lining the eyelids and covering the eyeball (conjunctivitis). May cause corneal damage.

1. A. A. A. A.

「「「

Sec. 1

MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

SKIN: May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

INGESTION
(SWALLOWING):May be fatal if swallowed. The estimated lethal dose is 100 ml (3.4
ounces). May damage lung, liver, and kidneys. May cause throat irritation,
nausea, vomiting, central nervous system effects as noted under
INHALATION (BREATHING), unconsciousness, coma, and death.
Breathing product into the lungs during ingestion or vomiting may cause
lung injury and possible death.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing liver, kidney, respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

CHRONIC: Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated eye contact may cause blindness. Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis). Prolonged or repeated exposure may have reproductive toxicity, teratogenic, or mutagenic effects.

CANCER No known carcinogenicity. For more information, see SECTION 11: INFORMATION: CARCINOGENICITY.

POTENTIAL ENVIRONMENTAL EFFECTS Not available. Also see SECTION 12: ECOLOGICAL INFORMATION.

	SECTION 4: FIRST AID MEASURES
INHALATION (BREATHING):	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.
EYES:	If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.
SKIN:	Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.
INGESTION (SWALLOWING):	Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.

200

MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

NOTE TO Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. PHYSICIANS: Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869 for additional information. Ethylene glycol is metabolized by alcohol dehydrogenase to various metabolites including glycoaldehyde, glycolic acid, and oxalic acid. The signs and symptoms in ethylene glycol poisoning are those of metabolic acidosis, central nervous system depression, and kidney damage. The currently recommended medical management of ethylene glycol poisoning includes elimination of ethylene glycol and metabolites, correction of metabolic acidosis, and prevention of kidney injury. As a competitive substrate for alcohol dehydrogenase, ethanol is antidotal when given in the early stages of intoxication because it blocks the formation of nephrotoxic metabolites. A more effective intravenous antidote is 4-methylpyrazole, a potent inhibitor of alcohol dehydrogenase, which effectively blocks the formation of toxic metabolites. Pulmonary edema with hypoxia has been described in a number of patients following ethylene glycol poisoning. Respiratory support with mechanical ventilation and positive end expiratory pressure may be required. There may be cranial nerve involvement in the later stages of toxicity from swallowing ethylene glycol. Effects have been reported presenting bilateral facial paralysis, diminished hearing, and dysphagia.

SECTION 5: FIRE FIGHTING MEASURES

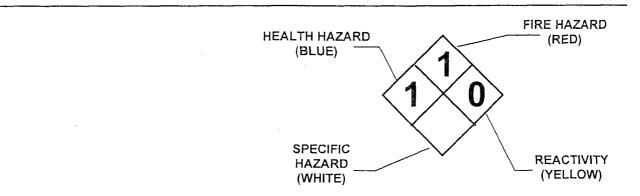
FLASH POINT:

>200°F (>93.3°C)

FLAMMABLE LIMITS IN AIR:	LOWER: 3.2 VOL% (ethylene glycol)	UPPER: 15.3 VOL% (ethylene glycol)
AUTOIGNITION TEMPERATURE: HAZARDOUS COMBUSTION PRODUCTS:	748°F (398°C) (ethylene glycol) Decomposition and combustion Burning may produce carbon m organic compounds.	n materials may be toxic.
CONDITIONS OF FLAMMABILITY:	Heat, sparks, or flame. Product readily.	s may burn, but do not ignite
EXTINGUISHING MEDIA:	Carbon dioxide, alcohol-resistan spray, or water fog. Water or fo	
HAZARD IDENTIFICATION:	This information is intended solution that the solution of the system.	ely for the use by individuals

が読む

MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA



FIRE FIGHTING INSTRUCTIONS:

FIRE AND EXPLOSION HAZARDS:

Keep storage containers cool with water spray. A positivepressure, self-contained breathing apparatus (SCBA) and fullbody protective equipment are required for fire emergencies.

Vapors will spread along the ground and collect in low or confined areas. Heated containers may rupture or be thrown into the air. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

SECTION 7: HANDLING AND STORAGE				
HANDLING:	Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.			
SHIPPING AND STORING:	Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources or ignition. Empty product containers may retain product residue and can be			
	Revision 2/03: MSDS Form No. 82912 - Page 5 of 10			

USED ANTIFREEZE MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

dangerous. See **SECTION 14: TRANSPORTATION INFORMATION** for Packing Group information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY Use NIOSH-certified, full-face, air-purifying respirators with P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1920.134; or in Canada with CSA Standard Z94.4.

EYE Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

SKIN Where skin contact is likely, wear Polyvinyl Chloride (PVC), neoprene, butyl rubber, nitrile, or equivalent protective gloves; use of polyvinyl alcohol (PVA) or equivalent gloves is not recommended. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

PERSONAL
HYGIENE:Use good personal hygiene. Wash thoroughly with soap and water after
handling product and before eating, drinking, or using tobacco products.
Clean affected clothing, shoes, and protective equipment before reuse.
Discard affected clothing, shoes, and/or protective equipment if they cannot
be thoroughly cleaned. Discard leather articles, such as shoes, saturated
with this product.

OTHERWhere spills and splashes are likely, facilities storing or using this productPROTECTIVEshould be equipped with an emergency eyewash and shower, bothEQUIPMENT:equipped with clean water, in the immediate work area.

ない

a second

ALC: NO. OF STREET, ST

1. 2. C. 1. C. 1.

MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

SE	CTION 9: PHY	SICAL AND CHEMICAL PROPERTIES	5	
PHYSICAL STATE, APPEARANCE, AND ODOR:		Liquid, green, sweet odor. Syrupy.		
ODOR THRESHOLD		Not available.		
MOLECULAR WEIGHT: SPECIFIC GRAVITY: DENSITY:		106.		
		>1 (water = 1)		
		Not available.		
VAPOR DENSITY:		>1 (air = 1) <0.1 mmHg at 68°F (20°C)		
VAPOR PRESSURE	:			
BOILING POINT:		>300°F (148.9°C)		
FREEZING/MELTING	G POINT:	Not available.		
pH:		6-10		
EVAPORATION RAT	TE:	Not available.		
SOLUBILITY IN WAT	TER:	Complete		
FLASH POINT:		>200°F (>93.3°C)		
FLAMMABLE LIMITS	S IN AIR:	LOWER: 3.2 VOL% (ethylene glycol) VOL% (ethylene glycol)	UPPER: 15.3	
AUTOIGNITION TEM	IPERATURE:	748°F (398°C) (ethylene glycol)		
	SECTION 1	0: STABILITY AND REACTIVITY		
STABILITY:	Stable under flame.	normal temperatures and pressures. Avo	oid heat, sparks,	
INCOMPATIBILITY:	Avoid acids, a	alkalies, oxidizing agents, or reactive met	als.	
REACTIVITY:		on is not known to occur under normal ter ot reactive with water.	mperature and	
HAZARDOUS DECOMPOSITION PRODUCTS:	HAZARDOUS None under normal temperatures and pressures. See also SECTION 5: DECOMPOSITION HAZARDOUS COMBUSTION PRODUCTS.			

Revision 2/03; MSDS Form No. 82912 - Page 7 of 10

1. 100 C

Sec. and

が花を

1. N. S.

1. A. A. A.

State of the second

のない

B. Marine

MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

	SECTION 11: TOXICOLOGI	CAL INFORMATIO	N	
SENSITIZATION:	Ethylene glycol has demons	strated human effect	s of skin sensitizatio	
	Based on best current inform SECTION 2 are not sensitized as the sensitized of the		mponents listed in	
MUTAGENICITY:	Ethylene glycol and diethylene glycol have demonstrated human effects of mutagenicity.			
CARCINOGENICITY:	Based on best current inform as categorized by ACGIH A IARC Group 1, Group 2A, o either known carcinogens o evidence of carcinogenicity carcinogenicity in experiment	1 or A2 substances; r Group 2B agents; r substances for whi in humans or suffici	as categorized by or as listed by NTP a ch there is limited	
REPRODUCTIVE	Ethylene glycol and diethyle effects of reproductive toxic		onstrated animal	
TERATOGENICITY:	Ethylene glycol and diethyle effects of teratogenicity.	ene glycol have dem	onstrated animal	
TOXICOLOGICALLY	Based on best current inforr	nation, there are no	known toxicological	
	synergistic products associa	ated with this produc		
	Synergistic products associa			
PRODUCT(S):	SECTION 12: ECOLOGICA Ethylene glycol Test & Species 96 Hr LC50	AL INFORMATION (107-21-1)		
PRODUCT(S):	SECTION 12: ECOLOGICA Ethylene glycol Test & Species 96 Hr LC50 rainbow trout 96 Hr LC50	AL INFORMATION (107-21-1)	t.	
PRODUCT(S):	SECTION 12: ECOLOGICA Ethylene glycol Test & Species 96 Hr LC50 rainbow trout	(107-21-1) 41000 mg/L	t.	
PRODUCT(S):	SECTION 12: ECOLOGICA Ethylene glycol Test & Species 96 Hr LC50 rainbow trout 96 Hr LC50 bluegill 96 Hr LC50 goldfish 1,2-Propylene gly 24 Hr LC50 goldfish	AL INFORMATION (107-21-1) 41000 mg/L 27500 mg/L 27500 mg/L 27500 mg/L (57-55-6) 5000 mg/L	t.	
SYNERGISTIC PRODUCT(S): ECOTOXICITY:	SECTION 12: ECOLOGICA Ethylene glycol Test & Species 96 Hr LC50 rainbow trout 96 Hr LC50 bluegill 96 Hr LC50 goldfish 1,2-Propylene gly 24 Hr LC50	AL INFORMATION (107-21-1) 41000 mg/L 27500 mg/L 27500 mg/L 27500 mg/L (57-55-6) 5000 mg/L	t.	

USED ANTIFREEZE MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

OCTANOL/WATER PARTITION COEFFICIENT: **VOLATILE ORGANIC** Not available. COMPOUNDS:

の

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS DISPOSAL: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal. This product, if discarded, is not expected to be a characteristic or listed **USEPA WASTE** CODES(S): hazardous waste. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

	SECTION 14: TRANSPORT INFORMATION
DOT:	Shipping Name: Not regulated as a hazardous material for transportation.
TDG:	Shipping Name: Not regulated as a dangerous good for transportation.

EMERGENCY RESPONSE GUIDE NUMBER:

Not applicable. Reference North American Emergency Response Guidebook

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS Based on the ingredient(s) listed in SECTION 2, this product does not contain any "extremely hazardous substances" listed pursuant to Title III 302 AND 304: of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS This product poses the following health hazard(s) as defined in 40 CFR 311 AND 312: Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard

SARA SECTION The following component is subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 313: (SARA) and 40 CFR Part 372.

Revision 2/03; MSDS Form No. 82912 - Page 9 of 10

福橋

MATERIAL SAFETY INFORMATION SHEET FOR USA AND CANADA

Ethylene glycol (107-21-1) 1.0 percent de minimis concentration Based on the ingredient(s) listed in SECTION 2, this product contains the CERCLA: following "hazardous substance(s)" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ): Ethylene glycol (107-21-1) 5000 lb final RQ; 2270 kg final RQ All the components of this product are listed on, or are automatically TSCA: included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory. This product does not contain detectable amounts of any chemical CALIFORNIA: known to the State of California to cause cancer This product does not contain detectable amounts of any chemical known to the State of California to cause birth defects or other reproductive harm. CANADIAN REGULATIONS This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR. Class D2A - Contains component that may cause cancer. WHMIS: Class D2B - Irritating to eves and skin. CANADIAN All the components of this product are listed on, or are automatically

CANADIANAll the components of this product are listed on, or are automaticallyENVIRONMENTALincluded as "substance occurring in nature" on, or are exempted from the
requirements to be listed on, the Canadian Domestic Substances ListPROTECTION(DSL).

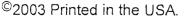
SECTION 16. OTHER INFORMATION

REVISION INFORMATION:

New product.

LABEL/OTHER INFORMATION: Not available.

User assumes all risks incident to the use of this(these) product(s). To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. <u>No</u> representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product(s) as supplied to the user.





Revision 2/03; MSDS Form No. 82912 - Page 10 of 10

122.00

のならい

Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Chevron HDAX® NG Screw Compressor Oil

Product Number(s): CPS255204, CPS255205, CPS259135

Synonyms: Chevron HDAX® NG Screw Compressor Oil ISO 100, Chevron HDAX® NG Screw Compressor Oil ISO 150, Chevron HDAX® NG Screw Compressor Oil ISO 68

Company Identification

ChevronTexaco Global Lubricants A Division of Texaco Products Inc. 6975-A Pacific Circle Mississauga, ONT L5T 2H3 Canada www.chevronlubricants.com

Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

Health Emergency

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

Product Information

email : lubemsds@Chevron.com Product Information: (800) LUBE TEK MSDS Requests: (800) 414-6737

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS		
COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	80 - 100 %weight

Information on ingredients that are considered Controlled Products and/or that appear on the WHMIS Ingredient Disclosure List (IDL) is provided as required by the Canadian Hazardous Products Act (HPA, Sections 13 and 14). Ingredients considered hazardous under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, are also listed. See Section 15 for additional regulatory information.

SECTION 3 HAZARDS IDENTIFICATION

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

1.1

100

SECTION 4 FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Note to Physicians: In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

SECTION 5 FIRE FIGHTING MEASURES

Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

FLAMMABLE PROPERTIES:

Flashpoint: (Cleveland Open Cup) 210 °C (410 °F) (Min)

Autoignition: No Data Available

Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not Applicable

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames. **PROTECTION OF FIRE FIGHTERS:**

Fire Fighting Instructions: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of

Static, Lightning, and Stray Currents'.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

がに続

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Special note: Do not use in breathing air apparatus or medical equipment.

ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton. Respiratory Protection: No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	Country/ Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m3	10 mg/m3		

NOTE ON OCCUPATIONAL EXPOSURE LIMITS: Consult local authorities for acceptable provincial values in Canada. Consult the Canadian Standards Association Standard 94.4-2002 Selection, Use and Care of Respirators.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Amber Physical State: Liquid
Odor: Petroleum odor
pH: Not Applicable
Vapor Pressure: <0.01 mmHg @ 37.8 °C (100 °F)
Vapor Density (Air = 1): >1
Boiling Point: >315°C (599°F)
Solubility: Soluble in hydrocarbons; insoluble in water
Freezing Point: Not Applicable
Specific Gravity: 0.87 - 0.88 @ 15.6°C (60.1°F) / 15.6°C (60.1°F)
Viscosity: 61.2 cSt @ 40°C (104°F) (Min)
Odor Threshold: No Data Available
Coefficient of Water/Oil Distribution: No Data Available

https://www.cbest.chevron.com/msdsServer/controller?module=com.chevron.lubes.msds.b... 4/16/2007

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: None known (None expected) Hazardous Polymerization: Hazardous polymerization will not occur. Sensitivity to Mechanical Impact: No.

SECTION 11 TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.

Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.

Skin Sensitization: No product toxicology data available.

Acute Dermal Toxicity: LD50: >5g/kg (rabbit). The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: LD50: >5 g/kg (rat) The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components. For additional information on the acute toxicity of the components, call the technical information center.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE

This material is not expected to be readily biodegradable.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods. (See B.C. Reg. GY/92 Waste Management Act; R.R.O. 1990, Reg. 347 General-Waste Management; C.C.SM.c. W40 The Waste Reduction and Prevention Act; N.S. Reg. 51/95 and N.S. Reg.

179/96 for examples of Provincial legislation.)

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

121.22

TC Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER TDG REGULATIONS

IMO/IMDG Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

DOT Shipping Description: PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR Additional Information: NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE. SECTION 15 REGULATORY INFORMATION

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1 01-2A=IARC Group 2A 01-2B=IARC Group 2B 35=WHMIS IDL

No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), TSCA (United States).

One or more components does not comply with the following chemical inventory requirements: PICCS (Philippines).

WHMIS CLASSIFICATION:

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations. (See Hazardous Products Act (HPA), R.S.C. 1985, c.H-3,s.2).

MSDS PREPARATION:

This Material Safety Data Sheet has been prepared by the Toxicology and Health Risk Assessment Unit, ERTC, P.O. Box 1627, Richmond, CA 94804, (888)676-6183.

Revision Date: 03/08/2006

SECTION 16 OTHER INFORMATION

HMIS RATINGS: Health: 1 Flammability: 1 Reactivity: 0

LABEL RECOMMENDATION:

Label Category : INDUSTRIAL OIL 1

REVISION STATEMENT: This revision updates the following sections of this Material Safety Data Sheet: 2,8,14,15,16

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

https://www.cbest.chevron.com/msdsServer/controller?module=com.chevron.lubes.msds.b... 4/16/2007

Material Safety Data Sheet

1.00

ないである

の言語

Sec.

Ŀ

TLV - Threshold Limit Value	TWA - Time Weighted Average	
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit	
	CAS - Chemical Abstract Service Number	
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code	
API - American Petroleum Institute	MSDS - Material Safety Data Sheet	
CVX - Chevron	NFPA - National Fire Protection Association (USA)	
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)	
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration	

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Material Safety Data Sheet Methyl Alcohol, Reagent ACS, 99.8% (GC)

ACC# 95294

語語

Section 1 - Chemical Product and Company Identification

MSDS Name: Methyl Alcohol, Reagent ACS, 99.8% (GC) Catalog Numbers: AC423950000, AC423950010, AC423950020, AC423955000, AC9541632, AC423952

Synonyms: Carbinol; Methanol; Methyl hydroxide; Monohydroxymethane; Pyroxylic spirit; Wood alcohol; Wood naptha; Wood spirit; Monohydroxymethane; Methyl hydrate.

Company Identification:

Acros Organics N.V. One Reagent Lane Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
67-56-1	Methyl alcohol	99+	200-659-6

Hazard Symbols: T F Risk Phrases: 11 23/24/25 39/23/24/25

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless. Flash Point: 11 deg C. Poison! Cannot be made nonpoisonous. Causes eye and skin irritation. May be absorbed through intact skin. This substance has caused adverse reproductive and fetal effects in animals.

Danger! Flammable liquid and vapor. Harmful if inhaled. May be fatal or cause blindness if swallowed. May cause central nervous system depression. May cause digestive tract irritation with nausea, vomiting, and diarrhea. Causes respiratory tract irritation. May cause liver, kidney and heart damage. **Target Organs:** Kidneys, heart, central nervous system, liver, eyes.

Potential Health Effects

Eye: Produces irritation, characterized by a burning sensation, redness, tearing,

inflammation, and possible corneal injury. May cause painful sensitization to light. **Skin:** Causes moderate skin irritation. May be absorbed through the skin in harmful amounts. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis.

周辺の

Ingestion: May be fatal or cause blindness if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause cardiopulmonary system effects.

Inhalation: Harmful if inhaled. May cause adverse central nervous system effects including headache, convulsions, and possible death. May cause visual impairment and possible permanent blindness. Causes irritation of the mucous membrane. **Chronic:** Prolonged or repeated skin contact may cause dermatitis. Chronic

inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Chronic exposure may cause reproductive disorders and teratogenic effects. Laboratory experiments have resulted in mutagenic effects. Prolonged exposure may cause liver, kidney, and heart damage.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. **Skin:** Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Effects may be delayed. Ethanol may inhibit methanol metabolism.

Section 5 - Fire Fighting Measures

General Information: Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly

http://avogadro.chem.iastate.edu/MSDS/methanol.htm

toxic gases may be generated by thermal decomposition or combustion. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May be ignited by heat, sparks, and flame.

Number of States

A. A. C.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. For large fires, use water spray, fog or alcohol-resistant foam. Do NOT use straight streams of water.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Scoop up with a nonsparking tool, then place into a suitable container for disposal. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as saw dust. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep containers tightly closed. Do not store in aluminum or lead containers.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities

storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use only under a chemical fume hood.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Methyl alcohol	200 ppm TWA; 250 ppm STEL; skin - potential for cutaneous absorption	200 ppm TWA; 260 mg/m3 TWA 6000 ppm IDLH	200 ppm TWA; 260 mg/m3 TWA

OSHA Vacated PELs: Methyl alcohol: 200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL

Personal Protective Equipment

Eyes: Wear chemical goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR □1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: clear, colorless
Odor: alcohol-like - weak odor
pH: Not available.
Vapor Pressure: 128 mm Hg @ 20 deg C
Vapor Density: 1.11 (Air=1)
Evaporation Rate: 5.2 (Ether=1)
Viscosity: 0.55 cP 20 deg C
Boiling Point: 64.7 deg C @ 760.00mm Hg
Freezing/Melting Point:-98 deg C
Autoignition Temperature: 464 deg C (867.20 deg F)
Flash Point: 11 deg C (51.80 deg F)
Decomposition Temperature: Not available.
NFPA Rating: (estimated) Health: 1; Flammability: 3; Reactivity: 0
Explosion Limits, Lower:6.0 vol %
Upper: 36.00 vol %
Solubility: miscible
Specific Gravity/Density: 7910g/cm3
Molecular Formula:CH40
Molecular Weight: 32.04

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. **Conditions to Avoid:** High temperatures, incompatible materials, ignition sources, oxidizers.

源に

語語が

本法

Incompatibilities with Other Materials: Acids (mineral, non-oxidizing, e.g. hydrochloric acid, hydrofluoric acid, muriatic acid, phosphoric acid), acids (mineral, oxidizing, e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), acids (organic, e.g. acetic acid, benzoic acid, formic acid, methanoic acid, oxalic acid), azo, diazo, and hydrazines (e.g. dimethyl hydrazine, hydrazine, methyl hydrazine), isocyanates (e.g. methyl isocyanate), nitrides (e.g. potassium nitride, sodium nitride), peroxides and hydroperoxides (organic, e.g. acetyl peroxide, benzoyl peroxide, butyl peroxide, methyl ethyl ketone peroxide), epoxides (e.g. butyl glycidyl ether), Oxidants (such as barium perchlorate, bromine, chlorine, hydrogen peroxide, lead perchlorate, perchloric acid, sodium hypochlorite)., Active metals (such as potassium and magnesium)., acetyl bromide, alkyl aluminum salts, beryllium dihydride, carbontetrachloride, carbon tetrachloride + metals, chloroform + heat, chloroform + sodium hydroxide, cyanuric chloride, diethyl zinc, nitric acid, potassium-tert-butoxide, chloroform + hydroxide, water reactive substances (e.g. acetic anyhdride, alkyl aluminum chloride, calcium carbide, ethyl dichlorosilane).

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, formaldehyde. Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 67-56-1: PC1400000 LD50/LC50: CAS# 67-56-1: Draize test, rabbit, eye: 40 mg Moderate; Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, skin: 20 mg/24H Moderate; Inhalation, rat: LC50 = 64000 ppm/4H; Oral, mouse: LD50 = 7300 mg/kg; Oral, rabbit: LD50 = 14200 mg/kg;Oral, rat: LD50 = 5628 mg/kg; Skin, rabbit: LD50 = 15800 mg/kg;**Carcinogenicity:** CAS# 67-56-1: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. Epidemiology: Methanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Specific developmenta l abnormalities include cardiovascular, musculoskeletal, and urogenital systems.

Teratogenicity: Effects on Newborn: Behaviorial, Oral, rat: TDLo=7500 mg/kg (female 17-19 days after conception). Effects on Embryo or Fetus: Fetotoxicity, Inhalation, rat: TCLo=10000 ppm/7H (female 7-15 days after conception). Specific Developmental Abnormalities: Cardiovascular, Musculoskeletal, Urogenital, Inhalation, rat: TCLo=20000 ppm/7H (7-14 days after conception).

Reproductive Effects: Paternal Effects: Spermatogenesis: Intraperitoneal, mouse TDLo=5 g/kg (male 5 days pre-mating). Fertility: Oral, rat: TDLo = 35295 mg/kg (female 1-15 days after conception). Paternal Effects: Testes, Epididymis, Sperm duct: Oral, rat: TDLo = 200 ppm/20H (male 78 weeks pre-mating). **Neurotoxicity:** No information available.

Mutagenicity: DNA inhibition: Human Lymphocyte = 300 mmol/L. DNA damage: Oral, rat = 10 umol/kg. Mutation in microorganisms: Mouse Lymphocyte = 7900 mg/L. Cytogenetic analysis: Oral, mouse = 1 gm/kg.

Other Studies: Standard Draize Test(Skin, rabbit) = 20 mg/24H (Moderate) S tandard Draize Test: Administration into the eye (rabbit) = 40 mg (Moderate). Standard Draize test: Administration int o the eye (rabbit) = 100 mg/24H (Moderate).

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: 29.4 g/L; 96 Hr; LC50 (unspecified) Goldfish: 250 ppm; 11 Hr; resulted in death Rainbow trout: 8000 mg/L; 48 Hr; LC50 (unspecified) Rainbow trout: LC50 = 13-68 mg/L; 96 Hr.; 12 degrees C Fathead Minnow: LC50 = 29400 mg/L; 96 Hr.; 25 degrees C, pH 7.63 Rainbow trout: LC50 = 8000 mg/L; 48 Hr.; Unspecified ria: Phytobacterium phosphoreum: EC50 = 51,000-320,000 mg/L; 30 minutes; Microtox test No data available. **Environmental:** Dangerous to aquatic life in high concentrations. Aquatic toxicity rating: TLm 96>1000 ppm. May be dangerous if it enters water intakes. Methyl alcohol is expected to biodegrade in soil and water very rapidly. This product will show high soil mobility and will be degraded from the ambient atmosphere by the reaction with photochemically produced hyroxyl radicals with an estimated half-life of 17.8 days. Bioconcentration factor for fish (golden ide) < 10. Based on a log Kow of -0.77, the BCF value for methanol can be estimated to be 0.2. **Physical:** No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

ġ

い。

RCRA U-Series: CAS# 67-56-1: waste number U154; (Ignitable waste).

Section 14 - Transport Information

	US DOT	ΙΑΤΑ	RID/ADR	IMO	Canada TDG
Shipping Name:	METHANOL				METHANOL
Hazard Class:	3				3(6.1)
UN Number:	UN1230				UN1230
Packing Group:	II			• •	II
Additional Info:					FLASHPOIN 11 C

Section 15 - Regulatory Information

US FEDERAL

TSCA

Sec. 1

and the second

CONTRACTOR

CAS# 67-56-1 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

CAS# 67-56-1: final RQ = 5000 pounds (2270 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 67-56-1: acute, flammable.

Section 313

This material contains Methyl alcohol (CAS# 67-56-1, 99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 67-56-1 is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

時間が

State of the

実際リ

S. S. Salar S. S.

Star Bar

None of the chemicals in this product are considered highly hazardous by OSHA. **STATE**

CAS# 67-56-1 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are

listed. European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols:

ΤF

Risk Phrases:

R 11 Highly flammable.

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 39/23/24/25 Toxic : danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 7 Keep container tightly closed.

WGK (Water Danger/Protection)

CAS# 67-56-1: 1

Canada

CAS# 67-56-1 is listed on Canada's DSL List. CAS# 67-56-1 is listed on Canada's DSL List.

This product has a WHMIS classification of B2, D1A, D2B.

CAS# 67-56-1 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 67-56-1: OEL-ARAB Republic of Egypt:TWA 200 ppm (260 mg/m3);Ski n OEL-AUSTRALIA:TWA 200 ppm (260 mg/m3);STEL 250 ppm;Skin OEL-BELGIU M:TWA 200 ppm (262 mg/m3);STEL 250 ppm;Skin OEL-CZECHOSLOVAKIA:TWA 10

0 mg/m3;STEL 500 mg/m3 OEL-DENMARK:TWA 200 ppm (260 mg/m3);Skin OEL-FINLAND:TWA 200 ppm (260 mg/m3);STEL 250 ppm;Skin OEL-FRANCE:TWA 200 ppm (260 mg/m3);STEL 1000 ppm (1300 mg/m3) OEL-GERMANY:TWA 200 ppm (2 60 mg/m3);Skin OEL-HUNGARY:TWA 50 mg/m3;STEL 100 mg/m3;Skin JAN9 OEL -JAPAN:TWA 200 ppm (260 mg/m3);Skin OEL-THE NETHERLANDS:TWA 200 ppm

260 mg/m3);Skin OEL-THE PHILIPPINES:TWA 200 ppm (260 mg/m3) OEL-POLA ND:TWA 100 mg/m3 OEL-RUSSIA:TWA 200 ppm;STEL 5 mg/m3;Skin OEL-SWEDEN

:TWA 200 ppm (250 mg/m3);STEL 250 ppm (350 mg/m3);Skin OEL-SWITZERLAN D:TWA 200 ppm (260 mg/m3);STEL 400 ppm;Skin OEL-THAILAND:TWA 200 ppm (260 mg/m3) OEL-TURKEY:TWA 200 ppm (260 mg/m3) OEL-UNITED KINGDOM:TW

A 200 ppm (260 mg/m3);STEL 250 ppm;Skin OEL IN BULGARIA, COLOMBIA, JO RDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM ch eck ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 7/21/1999 **Revision #4 Date:** 3/14/2001

State All

R. Salar

記録

A CONTRACT

14-10-12 15

2002

(

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied; with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

APPENDIX B:

1999

12.5

Salar a

が正し

12 July

21.67

and the second

学びた

Sec. 2

Same a

語語語

STANDARD OPERATING PROCEDURE FOR WASTEWATER SAMPLING AT COMPRESSOR STATIONS

4/20/2007

APPENDIX B

SOUTHERN UNION GAS SERVICES STANDARD OPERATING PROCEDURE

WASTEWATER SAMPLING AND ANALYSIS FOR SE NM GAS COMPRESSOR STATIONS

1.0 Scope

This procedure is designed to direct the sampling and analytical methods used to determine the applicable RCRA characteristics of wastewater (wash water and/or storm water) collected at Southern Union Gas Services (SUGS) compressor stations located in SE New Mexico. These procedures are to be used when changes in materials and/or processes at compressor stations are modified to any degree which might significantly alter the chemical or physical characteristics of wastewaters generated at the facility.

2.0 Equipment

Sampling of wastewater will require:

- 1. Sample containers (prepreserved, from laboratory)
- 2. Chain of Custody forms
- 3. Shipping Cooler
- 4. Shipping labels
- 5. Packing Tape
- 6. Ice or "blue ice"
- 7. Poly or latex gloves
- 8. Small plastic sheet or tarp
- 9. Site-specific safety equipment (e.g., hard hat, coveralls, safety glasses)
- 10. Paper towels
- 11. Ziplock bags
- 12. Hand washer or towelettes
- 13. Trash bags
- 14. Notebook
- 15. Camera

3.0 Laboratory

The selected laboratory is:

Environmental Laboratory of Texas 12600 W. I-20 E Odessa, Texas 79765 (432) 563-1800

 $G:\label{eq:compressorStationDischargePlans} SouthEunice \label{eq:compressorStationDischargePlans} G:\label{eq:compressorStationDischargePlans} G:\label{$

Contact the laboratory at least 24 hours before the sampling date and arrange to have shipped the appropriate sample containers (pre-preserved), chain of custody forms, sample labels, and shipping labels shipped to the appropriate location.

4.0 Analytes, Containers and Preservatives

The analytes and their containers, preservatives, and handling are summarized in Table 1 below.

Toxicity	Regulatory Limit (TCLP) mg/kg	Analytical Method	Container	Preservation	Holding Time
Benzene	0.5	8240A (GC/MS)	2x 40 ml VOA	Cool to 4 [°] C.	14 Days
Mercury	0.2	7471 (Cold Vapor)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Arsenic	5.0	7060 (AA)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Barium	100.0	7080 (AA)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Cadmium	1.0	7130 (AA)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Chromium	5.0	7190 (AA)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Lead	5.0	7420 (AA)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Selenium	1.0	7740 (AA)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Silver	5.0	7760A (AA)	1 L HDPE	Nitric Acid to $pH < 2$, Cool to 4° C.	6 Months
Reactive					
Cyanide	250.0	9010A	1 L HDPE	Cool to 4 [°] C.	14 Days
рН	<2 or >12.5 pH units	9040	250 ml HDPE	Cool to 4 [°] C.	24 Hours
Sulfide	500.0	9031	250 ml HDPE	Cool to 4 [°] C.	6 Months
Ignitability	<60 deg C	1010	250 ml Glass	Cool to 4 [°] C.	6 Months

VOA - Volatile Organic Analysis vial

HDPE – High Density Polyethylene

Two identical samples are collected for Benzene in the two 40 milliliter VOAs. One 1-liter HDPE container is used for all of the metals (mercury, arsenic, barium, cadmium, chromium, lead, selenium and silver). Individual containers are used for cyanide, pH and sulfide.

5.0 Methods

After obtaining the sample materials from the laboratory and the field equipment listed in Section 2.0, schedule the site visit and proceed to the facility.

Upon reaching the site, document the location, date, time, personnel involved and the purpose of the sampling visit. Also note any environmental conditions (weather, condition of equipment, adjacent activities) which might influence the sampling. Photograph the site and areas where samples will be taken.

Unpack and review the completeness and condition of the sampling equipment.

After selecting the points for sample collection, proceed as follows:

- 1. Put on a clean pair of gloves
- 2. Spread the plastic sheet on a flat, level surface near the sampling point and lay out the cooler and containers
- 3. Fill out the appropriate labels, and place then in a location secure from weather
- 4. If two phases (e.g., oil and water) are present, collect separate containers (VOAs) of each phase for each organic analysis sample.
- 5. Begin by filling the VOAs, making sure that the vials are completely full and that no air bubbles are present.
- 6. Then collect the other parameters, filling them to within ¹/₄" of the top and securely closing the containers.
- 7. Clean the containers with paper towels and apply the labels
- 8. Place the labeled containers in zipped bags and place in the cooler with bagged ice or "blue ice"
- 9. Clean up the area to remove paper trash and towels, etc.
- 10. Remove your gloves, wash your hands, and put the gloves in the trash bag
- 11. Complete the information required on the Chain of Custody form, sign the form, and remove the sampler's copy.
- 12. Place the Chain of Custody form in a sealed plastic bag and place it in the cooler
- 13. Fill and attach the shipping label, and secure the cooler with packing tape
- 14. Keep the cooler in your custody until it is shipped to the laboratory
- 15. Contact the laboratory to notify them that the samples are en route, and request that you be notified when the samples are received. Arrange for e-mail notification directly from the shipper (i.e., Federal Express) to the laboratory contact and the sampler.
- 16. After returning from the sampling site, appropriately file your notes, photographs and Chain of Custody forms.
- 17. Copy all notes, photographs and chain of custody forms and attach to results when received and forward to:

Mr. Tony Savoie Southern Union Gas Services, LLP 160 Commerce Street Jal NM 88252

APPENDIX C:

and the second

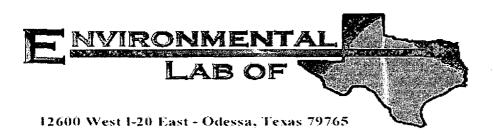
13 Miles

N. B

Solution of the

構築

ANALYTICAL DATA AND DOCUMENTATION



 $p_{\rm eff}$

語線

Analytical Report

Prepared for:

Tony Savoie Southern Union Gas Services- Jal P.O. Box 1226 Jal, NM 88252

Project: South Eunice Compressor Project Number: None Given Location: South of Eunice

Lab Order Number: 6E25014

Report Date: 06/05/06

Southern Union Gas Services- Jal P.O. Box 1226 Jal NM, 88252	Project: South Eun Project Number: None Give Project Manager: Tony Savo	n		Fax: 505-395-2326 Reported: 06/05/06 14:37
	ANALYTICAL REPORT FOR SA	MPLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Receive
Station Sump	6E25014-01	Sludge	05/24/06 07:35	05/25/06 12:4
<i>,</i>				
				r
				·

State of the

San Bara

1000 C

STOCK STOCK

and a second

1. 1. 1. 1. 1. 1. 1. 1. 1. 1.

100.000

155 A.M. 16

Project: South Eunice Compressor Project Number: None Given Project Manager: Tony Savoie Fax: 505-395-2326

Reported: 06/05/06 14:37

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Station Sump (6E25014-01) Sludge									
Reactive Cyanide	ND	0.0900	mg/kg	1	EE63024	05/30/06	05/30/06	SW846 9010B	
Ignitability by Flashpoint	>100		°C	н	EE63026	**	"	ASTM D93-80	
pH	7.68	0.10	pH Units	n	EE63109	05/30/06	05/30/06	EPA 9045B	
Reactive Sulfide	0.150	0.0500	mg/kg		EE63025	05/30/06	05/30/06	SW846 9030B	

Environmental Lab of Texas

The results in this report apply to the sample's analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

and the second

Southern Union Gas Services- Jal P.O. Box 1226 Jal NM, 88252

States States

ALL ALL ALL

100.000

2000 C

Contraction of the

Contraction of

ないない

ないので

1

N.S. Salar

Service.

である

Project: South Eunice Compressor Project Number: None Given Project Manager: Tony Savoie Fax: 505-395-2326

Reported: 06/05/06 14:37

TCLP Metals 1311 by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Extracted	Prepared	Analyzed	Method	Notes
Station Sump (6E25014-01) Sludge						· · · ·	_			
Mercury	ND	0.000250	mg/L	1	EF60206	TCLP5/30/06	06/01/06	06/02/06	EPA 7470A	
Chromium	ND	0.00975	н	10	EF60201	TCLP 5/30/06	05/31/06	06/02/06	EPA 6020A	
Arsenic	ND	0.0170	н ("	н	"	"	"		
Selenium	J [0.0129]	0.0300	п	н	"	"	н	**	11	J
Silver	ND	0.00405	н	11		"	"	'n	н	
Cadmium	ND	0.00692	н	н	"	н	n	"		
Barium	0.0121	0.00489	п	. "	ų	1	"	и	**	
Lead	ND	0.00296	**	11	"	u	11	u	"	

Environmental Lab of Texas

	Southern Union Gas Services- Jal	Project:	South Eunice Compressor	Fax: 505-395-2326
	P.O. Box 1226	Project Number:	None Given	Reported:
I	Jal NM, 88252	Project Manager:	Tony Savoie	06/05/06 14:37

TCLP Volatile Organic Compounds by EPA Method 1311/8260B

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Extracted	Prepared	Analyzed	Method	Notes
Station Sump (6E25014-01) Sludge										
Benzene	79.0	25.0	ug/l	25	EF60211	05/29/06 TCLP	06/02/06	06/02/06	EPA 8260B	
Toluene	147	25.0		"	"	"	u.	"	u	
Ethylbenzene	64.7	25.0	м	n	"	"	н	n	"	
Xylene (p/m)	103	25.0	*	11	Ħ	п	"	н	n	
Xylene (0)	39.8	25.0	"	Ħ	n	н	"	"	и	
Surrogate: Dibromofluoromethane		109 %	68	-129	"	"	. <i>n</i>	"	"	
Surrogate: 1,2-Dichloroethane-d4		86.4 %	72	-132	"	"	"	"	n	
Surrogate: Toluene-d8		90.8 %	74	-118	"	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		77.8 %	65	-140	"	"	n	п	"	

The second

の調整で

Sec. 1

いたいない

Sale of

言語な

の書類

5. A. S.

Parties and

and a state

Southern Union Gas Services- Jal		р	roject Sc	outh Eunice C	ompressor				Fax: 505-	395-2326
P.O. Box 1226		Project Nu			r				Repo	rted:
Jal NM, 88252		Project Ma							06/05/0	6 14:37
Concercial	hemistry Para	motovo br	FDA /	Standard	Matha	da Oua	lity Con	trol		
General Cl	•	Environn				18 - Qua	my Con	1101		
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Note
Batch EE63024 - 9010B SW846										
Blank (EE63024-BLK1)				Prepared &	Analyzed:	05/30/06				
Reactive Cyanide	ND	0.0900	mg/kg							
LCS (EE63024-BS1)	•			Prepared &	Analyzed:	05/30/06				
Reactive Cyanide	0.156	0.0900	mg/kg	0.167		93.4	50-150			
Calibration Check (EE63024-CCV1)				Prepared &	: Analyzed:	05/30/06				
Reactive Cyanide	0.0940		mg/kg	0.100		94.0	80-120			
Matrix Spike (EE63024-MS1)	Sou	rce: 6E24012-	-01	Prepared &	Analyzed:	05/30/06				
Reactive Cyanide	0.0760	0.0900	mg/kg	0.0833	0.00	91.2	50-150			
Matrix Spike Dup (EE63024-MSD1)	Sou	rce: 6E24012-	-01	Prepared &	Analyzed:	05/30/06				
Reactive Cyanide	0.0780	0.0900	mg/kg	0.0833	0.00	93.6	50-150	2.60	20	
Batch EE63025 - 9030B SW846										
Blank (EE63025-BLK1)	<u></u>			Prepared &	Analyzed:	05/30/06				
Reactive Sulfide	ND	0.0500	mg/kg							
LCS (EE63025-BS1)				Prepared &	Analyzed:	05/30/06	~			
Reactive Sulfide	0.381	0.0500	mg/kg	0.399		95.5	50-150			
Calibration Check (EE63025-CCV1)				Prepared &	: Analyzed:	05/30/06				
Reactive Sulfide	0.0490		mg/kg	0.0500		98.0	80-120			
Matrix Spike (EE63025-MS1)	Sou	-ce: 6E24012-	-01	Prepared &	Analyzed:	05/30/06				
Reactive Sulfide	3.00		mg/kg	2.50	0.900	84.0	50-150			

Environmental Lab of Texas

100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100

1.00

18 M. L.

Sec. Sec.

1. a. . .

言語に通

Southern Union Gas Services- Jal P.O. Box 1226 Jal NM, 88252	Project: South Eunice Compressor Project Number: None Given Project Manager: Tony Savoie									395-2326 rted: 5 14:37
General Cl	nemistry Para	meters by	EPA /	Standard		is - Qua	ality Cont	rol		
		Environm	ental L	ab of Tex	xas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE63025 - 9030B SW846										
Matrix Spike Dup (EE63025-MSD1)	Sour	ce: 6E24012-	01	Prepared &	z Analyzed:	05/30/06				_
Reactive Sulfide	2.94		mg/kg	2.50	0.900	81.6	50-150	2.02	20	
Batch EE63026 - General Preparation (V	WetChem)									
Duplicate (EE63026-DUP1)	Sour	ce: 6E24012-	01	Prepared &	z Analyzed:	05/30/06				
gnitability by Flashpoint	>100		°C		0.00				20	
Reference (EE63026-SRM1)				Prepared &	Analyzed:	05/30/06				
gnitability by Flashpoint	26.5		°C	27.2		97.4	96-102			
Batch EE63109 - Water Extraction										
Calibration Check (EE63109-CCV1)				Prepared &	z Analyzed:	05/30/06				_
ы	7.02		pH Units	7.00		100	97,5-102.5			
Duplicate (EE63109-DUP1)	Sour	ce: 6E25013-	01	Prepared &	z Analyzed:	05/30/06				
bH	6.12	• 0.10	pH Units		6.14			0.326	2.5	

Sec. Back

Sec. 10

\$7.44 A

Services.

200.62

a Walking

17 Salation of the local section of the local secti

A STATE

Southern Union Gas Services- Jal
P.O. Box 1226
Jal NM, 88252

State See

Project: South Eunice Compressor Project Number: None Given Project Manager: Tony Savoie

Fax: 505-395-2326

Reported:

06/05/06 14:37

TCLP Metals 1311 by EPA / Standard Methods - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF60201 - EPA 1311/3005										
Blank (EF60201-BLK1)				Prepared: (05/31/06 A	nalyzed: 06	/02/06			
Chromium	ND	0.000975	mg/L							
Arsenic	ND	0.00170	"							
Selenium	ND	0.00300	"							
Silver	ND	0.000405								
Cadmium	ND	0.000692	н							
Barium	ND	0.000489	н :							
Lead	ND	0.000296	"							
LCS (EF60201-BS1)				Prepared: ()5/31/06 A	nalyzed: 06	/02/06			
Chromium	0.198	0.000975	mg/L	0.200		99.0	85-115			• <u>-</u>
Arsenic	0.731	0.00170	н	0.800		91.4	85-115			
Selenium	0.418	0.00300	н	0.400		104	85-115			
Silver	0.101	0.000405		0.100		101	85-115			
Cadmium	0.204	0.000692	"	0.200		102	85-115			
Barium	0.205	0.000489	"	0.200		102	85-115			
Lead	1.02	0.000296	н	1.10		92.7	85-115			
LCS Dup (EF60201-BSD1)				Prepared: ()5/31/06 A	nalyzed: 06	/02/06			
Chromium	0.202	0.000975	mg/L	0.200		101	85-115	2.00	20	
Arsenic	0.739	0.00170	"	0.800		92.4	85-115	1.09	20	
Selenium	0.424	0.00300	"	0.400		106	85-115	1.43	20	
Silver	0.101	0.000405	n	0.100		101	85-115	0.00	20	
Cadmium	0.204	0.000692	n	0.200		102	85-115	0.00	20	
Barium	0.205	0.000489	н	0.200		102	85-115	0.00	20	
Lead	1.02	0.000296	n	1.10		92.7	85-115	0.00	20	
Calibration Check (EF60201-CCV1)				Prepared: ()5/31/06 A	nalyzed: 06	/02/06			
Chromium	0.0511		mg/L	0.0500		102	90-110	-		
Arsenic	0.0543		"	0.0500		109	90-110	,		
Selenium	0.0523		11	0.0500		105	90-110			
Silver	0.0526		н	0.0500		105	90-110			
Cadmium	0.0514		н	0.0500		103	90-110			
Barium	0.0516		н	0.0500		103	90-110			
Lead	0.0520		"	0.0500		104	90-110			

TCLP Metals 1311 by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF60201 - EPA 1311/3005							· · ·			
Matrix Spike (EF60201-MS1)	Sou	rce: 6E30004-	01	Prepared: (05/31/06 Ai	nalyzed: 06	/02/06			
Chromium	0.193	0.00975	mg/L	0.200	ND	96,5	75-125			
Arsenic	0,836	0.0170	н	0.800	ND	104	75-125			
Selenium	0.408	0.0300	н	0.400	0,00670	100	75-125			
Silver	0.0929	0.00405		0.100	ND	92.9	75-125			
Cadmium	0.220	0.00692	"	0.200	0.0173	101	75-125			
Barium	0.842	0.00489	"	0.200	0.662	90.0	75-125			
Lead	1.09	0.00296	н	1.10	ND	99.1	75-125			
Matrix Spike Dup (EF60201-MSD1)	Sou	rce: 6E30004-	01	Prepared: (05/31/06 Ai	nalyzed: 06	/02/06			
Chromium	0.193	0.00975	mg/L	0.200	ND	96.5	75-125	0.00	20	
Arsenic	0.840	0.0170	**	0.800	ND	105	75-125	0.477	20	
Selenium	0.411	0.0300	"	0.400	0.00670	101	75-125	0.733	20	
Silver	0.0924	0.00405		0.100	ND	92.4	75-125	0.540	20	
Cadmium	0.220	0.00692	н	0.200	0.0173	101	75-125	0.00	20	
Barium	0.840	0.00489	u	0,200	0.662	89.0	75-125	0.238	20	
Lead	1.09	0.00296	"	1.10	ND	99.1	75-125	0.00	. 20	

Blank (EF60206-BLK1)				Prepared: 06/01/0	6 Analyzed: 0	6/02/06					
Мегсигу	ND	0.000250	mg/L								
LCS (EF60206-BS1)				Prepared: 06/01/0)6 Analyzed: 06	6/02/06					
Mercury	0.00115	0.000250	mg/L	0.00100	115	85-115					
LCS Dup (EF60206-BSD1)	Prepared: 06/01/06 Analyzed: 06/02/06										
Mercury	0.00111	0.000250	mg/L	0.00100	111	85-115	3.54	20	<u> </u>		

Environmental Lab of Texas

and the

200.0

State of the second

11 Jan

1000

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Reported:

Southern Union Gas Services- Jal	Project:	South Eunice Compressor
P.O. Box 1226	Project Number:	None Given
Jal NM, 88252	Project Manager:	Tony Savoie

Fax: 505-395-2326 Reported:

06/05/06 14:37

TCLP Metals 1311 by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Anaiyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF60206 - EPA 1311/7470A										
Calibration Check (EF60206-CCV1)				Prepared: 0	6/01/06 A	nalyzed: 06	/02/06			
Mercury	0.00109		mg/L	0.00100		109	90-110			
Matrix Spike (EF60206-MS1)	Sou	Prepared: 0	6/01/06 A	/02/06						
Mercury	0.00110	0.000250	mg/L	0.00100	ND	110	75-125			

Environmental Lab of Texas

1000

が構想

Series .

のない

行いため

The second

and the

「「

States.

Contraction of the

No.

States and

Fax: 505-395-2326

Reported: 06/05/06 14:37

TCLP Volatile Organic Compounds by EPA Method 1311/8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF60211 - EPA 1311/ZHE										
Blank (EF60211-BLK1)				Prepared &	Analyzed:	06/02/06				
Benzene	ND	1.00	ug/l		· · ·					
Toluene	ND	1.00	**							
Ethylbenzene	ND	1.00	"							
Xylene (p/m)	ND	1.00	*							
Xylene (0)	ND	1.00	"							
Surrogate: Dibromofluoromethane	54.2		ug/kg	50.0		108	68-129			
Surrogate: 1,2-Dichloroethane-d4	45.0		"	50.0		90.0	72-132			
Surrogate: Toluene-d8	46.3		"	50.0		92.6	74-118			
Surrogate: 4-Bromofluorobenzene	40.0		"	50.0		80.0	65-140			
LCS (EF60211-BS1)				Prepared &	Analyzed:	06/02/06				
Benzene	22.4	1.00	ug/l	25.0		89.6	70-130			
Toluene	23.7	1.00	**	25.0		94.8	70-130			
Ethylbenzene	26.7	1.00	11	25.0		107	70-130			
Xylene (p/m)	48.7	1.00	"	50.0		97.4	70-130			
Xylene (o)	25.6	1.00	"	25.0		102	70-130			
Surrogate: Dibromofluoromethane	48.4	<i>n</i>	ug/kg	50.0		96.8	68-129			
Surrogate: 1,2-Dichloroethane-d4	42.4		"	50.0		84.8	72-132			
Surrogate: Toluene-d8	42.7		"	50.0		85.4	74-118			
Surrogate: 4-Bromofluorobenzene	39.6		"	50.0		79.2	65-140			
LCS Dup (EF60211-BSD1)				Prepared: ()6/02/06 Ai	nalyzed: 06	/03/06			
Benzene	22.2	1.00	ug/l	25.0		88.8	70-130	0.897	20	
Toluene	23.5	1.00		25.0		94.0	70-130	0.847	20	
Ethylbenzene	26.3	1.00		25.0		105	70-130	1.89	20	
Xylene (p/m)	48.1	1.00		50.0		96.2	70-130	1.24	20	
Xylene (0)	25.2	1.00	"	25.0		101	70-130	0.985	20	
Surrogate: Dibromofluoromethane	47.1		ug/kg	50.0		94.2	68-129			
Surrogate: 1,2-Dichloroethane-d4	41.0		n	50.0		82.0	72-132			
Surrogate: Toluene-d8	43.8		"	50.0		87.6	74-118			
Surrogate: 4-Bromofluorobenzene	39.0		n	50.0		78.0	65-140			

Southern Union	Gas Services- Jal	Project:	South Eunice Compressor	Fax: 505-395-2326
P.O. Box 1226		Project Number:	None Given	Reported:
Jal NM, 88252		Project Manager:	Tony Savoie	06/05/06 14:37

TCLP Volatile Organic Compounds by EPA Method 1311/8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF60211 - EPA 1311/ZHE										
Calibration Check (EF60211-CCV1)				Prepared &	Analyzed:	06/02/06				
Toluene	47.9		ug/kg	50.0		95.8	70-130			
Ethylbenzene	40.7			50.0		81.4	70-130			
Surrogate: Dibromofluoromethane	49.2		n	50.0		98.4	68-129			
Surrogate: 1,2-Dichloroethane-d4	43.0		п	50.0		86.0	72-132			
Surrogate: Toluene-d8	45.7		"	50.0		91.4	74-118			
Surrogate: 4-Bromofluorobenzene	38.8		"	50.0		77.6	65-140			
Matrix Spike (EF60211-MS1)	Sour	ce: 6E24012-	01	Prepared: ()6/02/06 A:	nalyzed: 06	/03/06			
Benzene	25.8	1.00	ug/l	25.0	ND	103	70-130			
Toluene	26.9	1.00	н	25.0	ND	108	70-130			
Ethylbenzene	27.0	1.00	"	25.0	0.510	106	70-130			
Xylene (p/m)	49.2	1.00	**	50.0	ND	98.4	70-130			
Xylene (o)	26.3	1.00	*	25.0	ND	105	70-130			
Surrogate: Dibromofluoromethane	51.4		ug/kg	50.0	-	103	68-129			
Surrogate: 1,2-Dichloroethane-d4	48.9		0	50.0		97.8	72-132			
Surrogate: Toluene-d8	46.0		"	50.0		92.0	74-118			
Surrogate: 4-Bromofluorobenzene	40.2		"	50.0		80.4	65-140			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

1200

P.C.M.R.

and the second

調査を

and the second

	n Union Gas Services- Jal	Project:	Fax: 505-395-2320	
P.O. Boy		Project Number:	Reported: 06/05/06 14:37	
Jal NM,	88252	Project Manager:		
		Notes and De	finitions	
J	Detected but below the Reporting Lin	it; therefore, result is an estimated	d concentration (CLP J-Flag).	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above the	reporting limit		
NR	Not Reported			
dry	Sample results reported on a dry weight ba	sis		
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			
			•	

Report Approved By:

Sec. Pa

S. Marting

Constant of

1.000

Carried Barrier

Raland K Just Date:

6/5/2006

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

	yl - ar ar an ar				·						·	er is Roya					-								
間影響		50 L					ŗ			14	AT (Pre-Schedule	TAT HRUR T brebnei2	\geq					_							
	EST	ampreso	-	ő									_			+					z z				
	CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST	\sim		Eunice										_						<u> </u>	Sample Containers Intact?				
	IL YSIS	Eunice	1	1								איסיצישי אכו	2												
	D ANA			ΔF				Analyze For		09	6030 or BTEX 82	Semivolatiles BTEX 60218	>	_							Sample Containers Intact? Labels on container? Custody Seals: Container Temperature Upon Receip	Laboratory Comments:			
a	RD AN	Project Name: SUUT h		Project Loc: South								Volatiles									Sample Containers Ir Labels on container? Custody Seals: Cont Temperature Upon R	ry Con			
	RECOL	3		J.					_	98	Ba Ca Cr Pb Hg EC	O \ 923 \ AAS DA 24 281599M	>								nple C bels on stody 5 nperat	orato			
:	ί λαο.	ame:	Project #:	Loc:	# Od				10)4" (CO3" HCO3) 10" (A9" M)	Cations (Ca. M Anions (Cl. SC								-	Sar Cus Ter	Tel			_
ļ	cust	oject N	Proj	roject	_						01 5001 WS10	8 1.815 HQT					1					anii	Time	2774	いい
_	NN OF	Рл									25, La Ringe	Soil Soil	>							+.			-+		
1	СНА	I	I	I	I	ţ		1		Matrix		Sludge	$\overline{}$									Dale	Date		- V V r
										$\left \right $	(٨)	Other (Specif Water	`` 												ξ
										ive		Naue H ^s SO*								-					
										Preservalive		HOEN								-					
										Pre	5910-	нсі (2) 10н нио ²	7		_			┝─┤			4				
										Ц		(1) EDI	7			_	1								
	• .		Å.			<u>ق</u>			ĺ		, , , , , , , , , , , , , , , , , , ,	No. of Conta	3								-		ł		
_			1-1 8		·	Fax No:					pə	qms2 smiT	35						ļ						-
			ŝ										07								_	1	ic		
3.			SORVICES								na	iqme2 steO	100									id by:		11 A a a	1
			Sor	600	2						pol	amp2 atc0	5/24				Ì					Received		Heceived by E	
,	10			Rie	25												+								-
ļ	X3: 1-1800	d	ق	South Commerce	88252	و	0															Time	12.48	ault	
	b of Texas Phone: 432-563-1800 Fax: 432-563-1713	ony Javaie	Nion	ر بر	۔ کر		C mar															0)	8		
	ax: 4	2	5	tuo	N. M.	ۍ ۱	K	ł				CODE	0									Date	2175 000	Date	
	D ^t and D	۲ ۵	16 5 1	11	4	63	4	h				FIELD CODE	50%				1						-		
THE REAL PROPERTY OF		Ĺ	(fnc	019	1	-50	1					_	1												
	nta	ן יי	ة أ	3:	1	ا بر			 #				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				1						2		
	n B B B B B B B B B B B B B B B B B B B	Project Manager:	Company Name SOUTNOCH UNION (Jas	Company Address:	City/State/Zip:	Telephone No: 505- 631- 931	Sampler Skopature:	b	Email:	-			5	5									Cune		
	OD1 -20 Ea	oject h	edwo;	hany /	City/S	Telepf	oler Sí				X	(Vlna -									uctions		Ñ	42	
Ĩ	Vir(Vest , Texa	đ	U	Com		-	Sam				J D	ab USe	D	+						ĺ	Instru	hed by	<u>u</u> .	er Care	
No.	Environmental Lab of Texas 12600 West 1-20 East Odessa, Texas 79765 Fax: 432-563-1713											LAB # (lab use puly)	1								Special Instructions.	Relinquished by:	-	Relinquisher	
													· · · · ·	I			_1	łe,	·ł	Ł	<u>~</u>		↓	<u></u>	

蒙

and the second

Environmental Lab of Texas	
Variance / Corrective Action Report - Sample L	og-In

Dlient:	SULS
Date/Time: _	5/25/00 12:48
Order #:	UE25017
nitials:	CH

Sample Receipt Checklist

/Temperature of container/cooler?	Yes	No	2,5 C
Shipping container/cooler in good condition?	Xes	No	
Dustody Seals intact on shipping container/cooler?	Yes	No	Mot present
Sustedy Seals intact on sample bottles?	Yes	No	Cot preserit,
Chain of custody present?	XES	No	· · · · · · · · · · · · · · · · · · ·
Sample Instructions complete on Chain of Custody?	Xe	No	
Chain of Custody signed when relinquished and received?	B	No	
Chain of custody agrees with sample label(s)	C C C C C C C C C C C C C C C C C C C	No	
Container labels legible and intact?	8	No	
Sample Matrix and properties same as on chain of custody?	7.23	No	
Samples in proper container/bottle?	1 (2)	No	
Samples properly preserved?	1 Cas	l No	
Sample bottles intact?	X=ş	No	
Preservations documented on Chain of Custody?	(Es	No	
Containers documented on Chain of Custody?	0	No	······································
Sufficient sample amount for indicated test?	tes	No	······································
All samples received within sufficient hold time?	(G)	l No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

 Variance Documentation:

 Contact Person: -_____Date/Time:
 Contacted by:

 Regarding:
 Contacted by:

 Corrective Action Taken:
 Contacted by:

 Contact Person:
 Contacted by:

 Contacted by:
 Contacted by:

 Corrective Action Taken:
 Contacted by:

 Contacted by:
 Contacted by:

 Corrective Action Taken:
 Contacted by:

 Contacted by:
 Contacted by:

APPENDIX D:

調修

and the

B.B. Barris

あるが

12.2.4.4.4.

Sec. 1

が花

Ser. Sec

湯見な

Lany.

6¹(12)

ないの

DRAFT NOTICE OF APPLICATION, LOCATIONS AND NEWSPAPER FOR PUBLICATION

APPENDIX D

Notice of Application by Southern Union Gas Services for Approval of a Discharge Plan for Natural Gas Compressor Station: Southern Union Gas Services, whose offices are located at 301 N. Commerce St., Suite 700, Fort Worth, Texas (76102) seeks approval from the New Mexico Oil Conservation for a Discharge Plan for the South Eunice Compressor Station, located in the Northeast Quarter of the Northeast Quarter of Section 10, Township 22 South, Range 37 East in Lea County, New Mexico (32^o 24.799' North, 103^o 8.634'West). This location is at an elevation of 3400 feet; approximately 2 miles south of Eunice, New Mexico. This compressor station is designed to have no intentional liquid discharges. The shallowest groundwater potentially impacted by this facility is at a depth of approximately 70 to 100 feet and has a total dissolved solids content of approximately 700 to 800 milligrams per liter. Additional information, comments or statements should be addressed Mr. James C. Hunter, R.G. of Geolex, Inc., 500 Marquette NW, Suite 1350, Albuquerque, NM 87102, Tel. (505-842-8000).

PROPOSED POSTINGS, NOTIFICATIONS, AND PUBLICATION

Following NMOCD review and acceptance, we propose to post this notice using a 2'x3' sign, in English and Spanish, at the gate of the above-named facility and to post the 2^{nd} sign outside the SUGS office in Jal.

Identified owners of all properties within a 1/3-mile distance from the boundary of the property where the discharge site is located will be provided with copies of this notice by mail. If there are no properties other than properties owned by SUGS within a 1/3-mile distance from the boundary of property where the discharge site is located, notice will be provided to owners of record of the next nearest adjacent properties not owned by the discharger.

Any owners of the lands upon which the proposed discharge site is located not owned by SUGS will be notified by certified, receipt-requested mailing.

The notice will also be advertised, in English and Spanish, in a 3" by 4" display advertisement in the local newspaper, the Hobbs Sun.

1000