GW - 132

PERMITS, RENEWALS, & MODS Application

Lowe, Leonard, EMNRD

From: Lowe, Leonard, EMNRD
Sent: Wednesday, August 25, 2010 4:26 PM
To: 'Barndt, Eric'
Cc: Zentz, Doug; VonGonten, Glenn, EMNRD; Powell, Brandon, EMNRD; Perrin, Charlie, EMNRD
Subject: GW-132 Closure Letter
Attachments: GW-132 Gavilan Closure Letter.pdf

Mr. Eric Barndt,

See attach letter.

Thank you for your help.

llowe

Leonard Lowe
Environmental Engineer
Oil Conservation Division/EMNRD
1220 S. St. Francis Drive
Santa Fe, N.M. 87505
Office: 505-476-3492
Fax: 505-476-3462
E-mail: leonard.lowe@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Jim Noel
Cabinet Secretary
Karen W. Garcia
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

August 25, 2010

Mr. Eric Barndt
Environmental Engineer
Black Hills Corporation
1515 Wynkoop Street, Suite 500
Denver CO, 80202

Re: Discharge Permit GW-132, Gavilan Compressor Station
Section 11 Township 25 North, Range 2 West, NMPM
Rio Arriba County, New Mexico

Dear Mr. Eric Barndt:

The Oil Conservation Division Environmental Bureau performed an onsite closure inspection of the closed Gavilan Compressor Station on Wednesday, August 25, 2010 at 9:30 A.M. Mr. Doug Zentz, Blackhills Productions Superintendent, Brand Powell Environmental Specialist, Aztec OCD and Leonard Lowe, Environmental Engineer, Santa Fe OCD performed a closure walk through. The OCD has verified the closure of the facility. The OCD determines that this site is closed. The OCD database will reflect this discharge permit to be closed as of August 25, 2010. Black Hills Corporation shall notify the land owner of the discharge permit closure status.

Sincerely,

Leonard R. Lowe
Environmental Engineer
Oil Conservation Division

CC: Mr. Brandon Powell, Environmental Engineer, Aztec OCD
Mr. Charlie Perrin, District Supervisor, Aztec OCD
Glenn Von Gonten, Environmental Bureau Chief, Santa Fe OCD
Daniel Sanchez, Enforcement & Compliance Manager, Santa Fe OCD

Eric J. Barndt
Environmental Engineer
E-mail eric.barndt@blackhillscorp.com

1515 Wynkoop Street, Suite 500
Denver, CO 80202
P (303) 566-3446
F (303) 568-3252

July 20, 2010

New Mexico Energy, Minerals and Natural Resource Department
Oil Conservation Division
Attention: Mr. Leonard Lowe
1220 S. St. Francis Drive
Santa Fe, N.M. 87505

RE: Notice of Facility Closure Report and Request for Inactivation of Groundwater Discharge Permit for Gavilan Natural Gas Compressor Station Groundwater Discharge Permit GW-132
Black Hills Gas Resources, Inc.

Dear Mr. Lowe:

This Facility Closure Report and Request for Inactivation of Groundwater Discharge Permit is being submitted for the Black Hills Gas Resources, Inc. (a subsidiary of Black Hills Exploration and Production, Inc.) (Black Hills) Gavilan Natural Gas Compressor Station (Gavilan Station). Gavilan Station facility formerly operated under Groundwater Discharge Permit GW-132 issued by New Mexico Energy, Minerals and Natural Resource Department (NMEMNR) Oil Conservation Division (OCD).

Due to the length of time that this permit has been in existence (since 1992) and changes in facility ownership the following relevant information is presented:

- The original application for this permit was submitted on September 30, 1992 by Mallon Oil Company. The first GW-132 permit was issued by OCD on December 9, 1992.
- A renewal application was submitted and the permit was renewed and issued to Mallon Oil Company on September 24, 1997 by OCD.
- A subsequent renewal application was submitted and the permit was renewed and issued again to Mallon Oil Company on January 13, 2003 by OCD.
- Black Hills took ownership of the facility in 2002. The enclosed April 24, 2006 memorandum from Mr. Randy Fox (former Black Hills Environmental Engineer) to Mr. Jack Ford, with the OCD documented the ownership transfer and requested that the OCD transfer the discharge permit (GW-132) to Black Hills Gas Resources, Inc.
- A renewal application was submitted and the permit was most recently renewed and issued to Black Hills on December 3, 2007 by OCD. This permit is set to expire on September 24, 2012.

The permits issued by OCD require that the facility be closed properly. The following actions have been taken to ensure the facility has been properly closed:

- On April 22, 2008 you (Mr. Leonard Lowe) conducted an inspection at Gavilan Station. Your inspection report, issued May 7, 2008, revealed six concerns that required corrective action.
- On June 27, 2008 Black Hills responded to the May 7, 2008 inspection report. The response indicated that the six concerns identified in your May 7, 2008 inspection report were addressed. The June 27, 2008 response also included: (1) photographs of repairs made to containment liner penetrations (penetrations were sealed); (2) soil sample results proving that contaminated soil remediation was completed within the engine (compressor)

building; (3) confirmation that containers that were not provided with secondary containment were removed from the site; (4) an updated schematic of the facility; (5) soil sample results proving that no contamination resulted from the removal of an 8 foot diameter tank; and (6) results of hydrostatic pressure tests proving acceptable conditions of all underground lines located at the facility.

- Shortly after your inspection on April 22, 2008 Black Hills decided to close the Gavilan Station:
  - Operations at Gavilan Station were permanently discontinued in July 2008.
  - All wells that formerly fed natural gas to the facility were plugged and abandoned in accordance with NMEMNR OCD requirements.
  - Since the facility was permanently shut down in July 2008 clean activities were initiated and as of November 1, 2009:
    - All surface equipment was removed from Gavilan Station.
    - The site has been reclaimed and restored to original conditions.
    - Photos of the site are included with this notice and show that all surface equipment has been removed from the site and the site has been re-contoured, re-vegetated and returned to its original condition.

Because the site never contained any below-grade or underground tanks; operations at the site were permanently discontinued in July 2008; soil samples were most recently taken for analysis and showed no evidence of contamination at the facility on May 31, 2008 (in response to your April 22, 2008 inspection of Gavilan Station); no spills occurred at the site since the May 31, 2008 soil samples were taken; and facility operations were permanently discontinued as of July 2008, the site can be assumed to be free of remaining contamination.

With submission of this Notice of Facility Closure Report Black Hills has met the permit conditions related to site closure and is requesting that the OCD permanently discontinue and inactivate Groundwater Discharge Permit GW-132.

Please call me at (303) 566-3446 if you have any questions related to this Notice of Facility Closure Report and request for Groundwater Discharge Permit GW-132 to be inactivated.

Sincerely,

Eric J. Barndt
Black Hills

Two Enclosures: (1) April 24, 2006 ownership transfer memorandum from Mr. Randy Fox to Mr. Jack Ford; and (2) Photographs of the reclaimed Gavilan Natural Gas Compressor Station

cc: Brandon Powell, OCD; 1000 Rio Brazos Road; Aztec, New Mexico 87410
Fred Carl, Black Hills Energy, Inc.
Tim Mordhorst, Black Hills
Gary Stripling, Black Hills

Randy Fox
Environmental Engineer
E-mail rfox@bhenergy.com

350 Indiana St., Suite 400
Golden, Colorado 80401
P (720) 210-1334
F (720) 210-1361

April 24, 2006

W. Jack Ford, C.P.G.
Environmental Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Change of Ownership for
Discharge Permit GW-132
Gavilan Compressor Station
Black Hills Gas Resources, Inc. (wholly owned subsidiary of Black Hills Exploration and Production, Inc.)

Dear Mr. Ford:

Thank you for taking the time on April 14 to discuss with me the current status of Discharge Permit GW-132 for the Gavilan Compressor Station. This discharge permit was originally issued to the Mallon Oil Company in 1992. Black Hills Gas Resources, Inc. (wholly owned subsidiary of Black Hills Exploration and Production, Inc.) has been the owner of this facility since 2002. It appears that Mallon Oil Company failed to officially notify the Oil Conservation Division of this change in ownership. At your convenience, please transfer the discharge permit to "Black Hills Gas Resources, Inc.".

Also, please send me by either hard copy or electronic file a copy of the updated permit. If you have any questions, please contact me at 720-210-1334 (office) or 303-909-9589 (cell).

Sincerely,

Randy Fox
Black Hills Energy

Attachments

cc: Fred Carl, Black Hills Energy
Lynn Benally, Black Hills Exploration and Production

Photographs Reclaimed Gavilan Natural Gas Compressor Station

PHOTOGRAPHIC LOG	**Site Location:** Black Hills Gas Resources, Inc. Gavilan Natural Gas Compressor Station - Rio Arriba County, NM Facility Closure Notice and Request for Inactivation of Groundwater Discharge Permit GW-132
Photo No. 1 **Description:** Photo of site to northeast.	

PHOTOGRAPHIC LOG	**Site Location:** Black Hills Gas Resources, Inc. Gavilan Natural Gas Compressor Station - Rio Arriba County, NM Facility Closure Notice and Request for Inactivation of Groundwater Discharge Permit GW-132
Photo No. 2 **Description:** Photo of site to southwest.	

PHOTOGRAPHIC LOG	**Site Location:** Black Hills Gas Resources, Inc. Gavilan Natural Gas Compressor Station - Rio Arriba County, NM Facility Closure Notice and Request for Inactivation of Groundwater Discharge Permit GW-132
Photo No. **3** **Description:** Photo of site to northwest.	

PHOTOGRAPHIC LOG	**Site Location:** Black Hills Gas Resources, Inc. Gavilan Natural Gas Compressor Station - Rio Arriba County, NM Facility Closure Notice and Request for Inactivation of Groundwater Discharge Permit GW-132
Photo No. **4** **Description:** Photo of site to southeast.	

Randy Fox
Environmental Engineer
E-mail rfox@bhenergy.com

350 Indiana St., Suite 400
Golden, Colorado 80401
P (720) 210-1334
F (720) 210-1361

January 15, 2008

Wayne Price
New Mexico Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Discharge Permit
Gavilan Compressor Station GW-132
Black Hills Gas Resources, Inc.

Dear Mr. Price

Attached is the signed discharge permit and permit fee payment for the Gavilan Compressor Station operated by Black Hills Gas Resources.

If you have any questions, please contact me at 720-210-1334 (office) or 303-909-9589 (cell).

Sincerely,

Randy Fox
Black Hills Energy

cc: Fred Carl, Black Hills Energy

Attachments

ATTACHMENT TO THE DISCHARGE PERMIT
BLACK HILLS GAS RESOURCES INC, GAVILAN COMPRESSOR STATION (GW-132)
DISCHARGE PERMIT APPROVAL CONDITIONS
DECEMBER 03, 2007

Please remit a check for $400.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
C/o: Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

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 renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee. However, the owner/operator still owes the required $400.00 renewal permit fee for a gas compressor station less than 1001 horsepower.

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 September 24, 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 September 4, 2007 discharge plan renewal 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 OCD-approved 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. ***An unauthorized discharge is a violation of this permit.***

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: N/A

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: Black Hills Gas Resources, Inc. (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.

Conditions accepted by: "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

TIM T. HOPKINS
Company Representative- print name

Company Representative- signature

Title VP & GM

Date: 1/15/08

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. _____ dated 12/6/07

or cash received on _____ in the amount of $ 400 00

from Black Hills Gas Resources

for GW-132

Submitted by: Lawrence Romero Date: 1/17/08

Submitted to ASD by: Lawrence Romero Date: 1/17/08

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. _____ dated 8/16/07

or cash received on _____ in the amount of $ 100.00

from Black Hills Gas Resources

for GW-132

Submitted by: Lawrence Romero Date: 9/14/07

Submitted to ASD by: Lawrence Romero Date: 9/14/07

Received in ASD by: _____ Date: _____

Filing Fee ✓ New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

Randy Fox
Environmental Engineer
E-mail rfox@bhenergy.com

350 Indiana St., Suite 400
Golden, Colorado 80401
P (720) 210-1334
F (303) 568-3261

September 4, 2007

Wayne Price
Environmental Bureau Chief
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

RE: Renewal of Groundwater Discharge Permit
Gavilan Natural Gas Compressor Station
Black Hills Gas Resources, Inc. (a subsidiary of Black Hills Exploration and Production, Inc.)

Dear Mr. Price:

Attached are two copies of the application and all related information to renew the Groundwater Discharge Permit for the Gavilan Natural Gas Compressor Station. This facility is operated by Black Hills Gas Resources, Inc. (Black Hills). Please note that Black Hills Gas Resources, Inc. is a subsidiary of Black Hills Exploration and Production, Inc. Included in this submittal are:

- A $100.00 payment for the filing fee;
- A renewal application form;
- Pertinent information that has been updated for the facility since issuance of the 2002 permit (with the cover letter to the permit dated January 13, 2003);
- The current Groundwater Discharge Permit issued in 2002 (with the cover letter dated January 13, 2003) to Mallon Oil Company, the former operator of the facility. The expiration date for this 2002 permit is September 24, 2007.
- An April 24, 2006 letter notifying the Oil Conservation Division of a change in ownership of the facility from Mallon Oil Company to Black Hills Gas Resources.

Please invoice Black Hills for any remaining permit fees. Send the invoice to:

Randy Fox
Black Hills Exploration and Production
350 Indiana Street, Suite 400
Golden, Colorado 80401

If you have any questions, please contact me at 720-210-1334.

Sincerely,

Randy Fox
Black Hills Exploration and Production

cc: Fred Carl, Black Hills Energy

Original Submittal of the Application and Related Information to
Renew the Groundwater Discharge Permit for the
Gavilan Natural Gas Compressor Station
(includes actual payment for filing fee)

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: Compressor station

2. Operator: Black Hills Gas Resources, Inc. (a subsidiary of Black Hills Exploration and Production, Inc.)

   Address: 350 Indiana Street, Suite 400, Golden, CO 80401

   Contact Person: Randy Fox, Black Hills Gas Resources, Inc. Phone: 720-210-1334

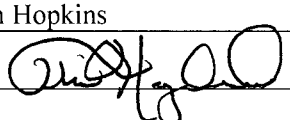
3. Location: SW /4 SE /4 Section 11 Township 25N Range 2W
   Submit large scale topographic map showing exact location.

For the following section, information that has been updated since the last permit was issued or needs clarification is included as attachments to this application form.

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.

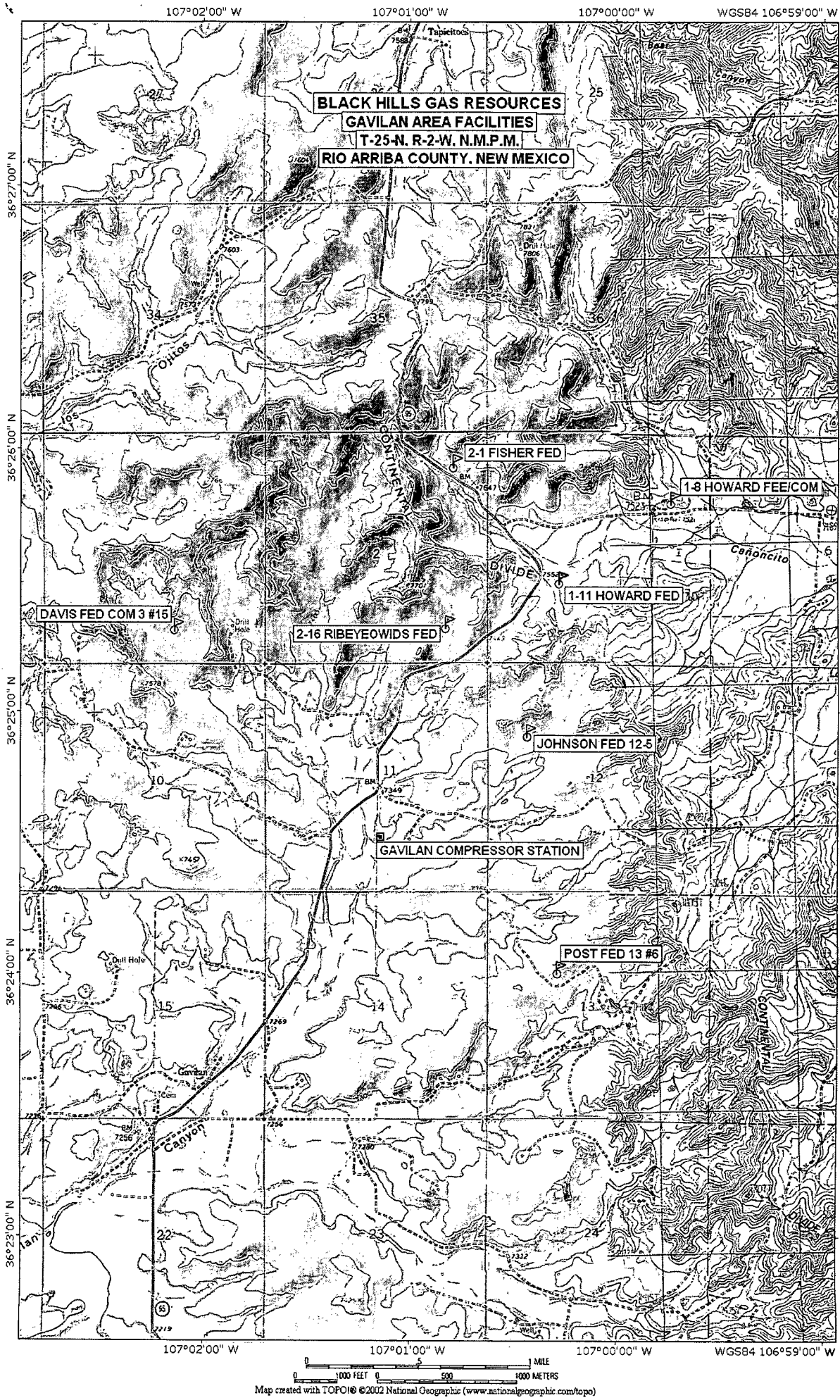
Name: Tim Hopkins Title: Vice President and General Manager, Black Hills Exploration and Production, Inc.

Signature:  Date: 9/4/07

E-mail Address: thopkins@bhep.com

Attachment 3
Large Scale Topographic Map

See attached figure.



Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)

Attachment 4
Name, telephone number and address of the landowner of the facility site

Owner:	Frederick Harold Davis and Sarah Alma Davis Family Trust, c/o Mr. H. F. Davis		
Address:	P.O. Box 868, Cuba, New Mexico 87013		
Local Contact Person:	Jeff Davis (contract pumper)	Phone:	505-330-1617

Please note that Black Hills Gas Resources, Inc. (a subsidiary of Black Hills Exploration and Production, Inc.) operates the facility.

Attachment 5
Facility Description

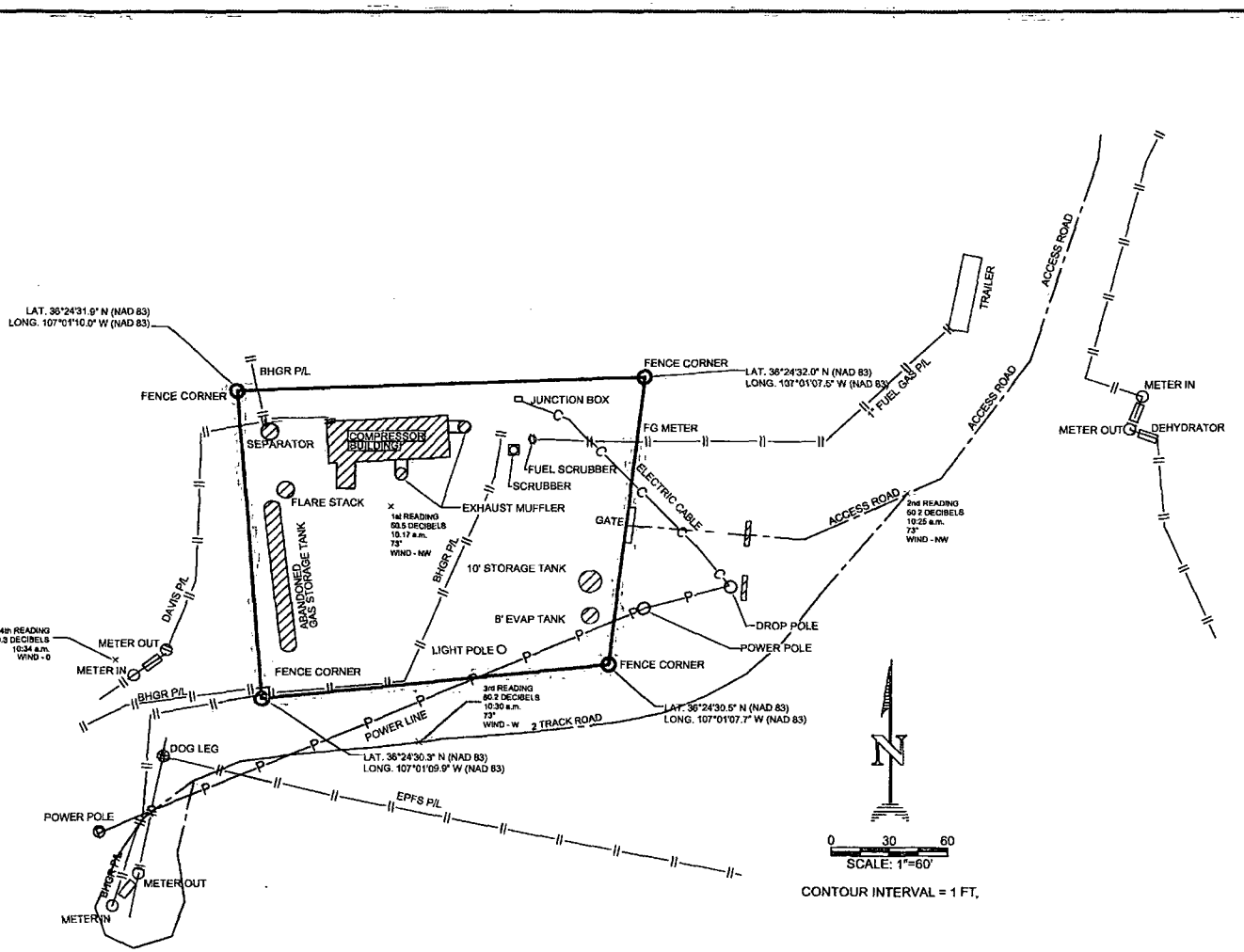
The Gavilan Natural Gas Compressor Station is operated by Black Hills Gas Resources, Inc. (a subsidiary of Black Hills Exploration and Production, Inc.). The function of this facility is to compress natural gas from the nearby gathering system. Currently, the facility compresses well below 0.5 million cubic feet per day (MMscfd) of natural gas. See the attached facility map for more details.

The facility **does not treat** natural gas (such as amine treating or dehydration).

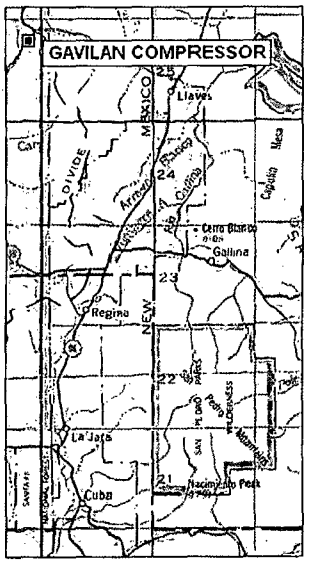
A TOPOGRAPHIC MAP FOR

BLACK HILLS GAS RESOURCES
GAVILAN COMPRESSOR SITE

SEC. 11, TOWNSHIP 25 NORTH, RANGE 2 WEST, N.M.P.M.
LOCATED NORTH OF LINDRITH,
RIO ARRIBA COUNTY, NEW MEXICO



CONTOUR INTERVAL = 1 FT.



NOT TO SCALE

REVISION	REV. BY	DATE

Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O. Box 15088 Farmington, NM 87401
Phone (505) 326-1772 Fax (505) 326-6019
REGISTERED LAND SURVEYOR

SHEET 1 OF 1	CADFILE: MN374T01
DRAWN BY: B.L.	ROW#: MN374 / DATE: 01/24/05

Attachment 6
Materials Stored or Used at the Facility

The following potential sources of effluent or waste solids have changed since the last permit was issued:

- Waste lubrication and motor oils – There is little if any waste oil generated and stored on site. Stored waste oil is picked up by a waste hauler.
- Used filters – Used filters are rarely generated at the facility. When they are generated, they are picked up by a waste hauler.

Most Current Groundwater Discharge Permit for the Gavilan Natural Gas Compressor Station

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

January 13, 2003

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFIED MAIL
RETURN RECEIPT NO. 3929 9703

Mr. Robert Blaylock
Mallon Oil Company
P.O. Box 2797
Durango, Colorado 81302

Re: Renewal of Discharge Permit GW-132
Gavilan Natural Gas Compressor Station

Dear Mr. Blaylock:

The groundwater discharge permit GW-132 for the Mallon Oil Company, Gavilan Natural Gas Compressor Station, located in the SW/4 SE/4 of Section 11, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. 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.**

The original discharge plan was approved on December 9, 1992. The discharge permit renewal application dated October 21, 2002, including attachments, submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals.

The discharge permit is renewed pursuant to Section 3109.C. Please note Section 3109.G., which provides for possible future amendment of the permit. Please be advised that approval of this permit does not relieve Mallon Oil Company of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does it relieve Mallon Oil Company of its responsibility to comply with any other governmental authority's rules and regulations.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that Section 3104. of the regulations requires that "when a permit has been approved, discharges must be consistent with the terms and conditions of the permit." Pursuant to Section 3107.C., Mallon Oil Company is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. **This approval will expire September 24, 2007** and an application for renewal should be submitted in ample time before that date. Pursuant to Section 3106.F. of the regulations, 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.

The discharge permit application for the Mallon Oil Company, Gavilan Natural Gas Compressor Station, is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge permit will be assessed a fee equal to the filing fee of $100.00 plus a flat fee of $400 for gas compressor stations (0-1000 hp). The OCD has not received the $400.00 flat fee. The flat fee may be paid in a single payment due on the date of the discharge permit approval or in five equal installments over the expected duration of the discharge permit. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge permit approval and subsequent installments due on this date of each calendar year.

Please make all checks payable to: Water Quality Management Fund
C/o: Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail WPRICE@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,

Roger C. Anderson
Environmental Bureau Chief

RCA/lwp
Attachment-1
Xc: OCD Aztec Office

ATTACHMENT TO THE DISCHARGE PLAN GW-132 RENEWAL
MALLON OIL COMPANY
GAVILAN COMPRESSOR STATION
DISCHARGE PLAN APPROVAL CONDITIONS
(September 24, 1997)

1. Payment of Discharge Plan Fees: The $50.00 filing fee shall be submitted upon receipt of the approval. The $1,667.50 required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.

2. Mallon Commitments: Mallon will abide by all commitments submitted in the discharge plan application dated August 5, 1997.

3. Waste Disposal: All wastes shall be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous by characteristics may be disposed of at an OCD approved facility upon proper waste characterization per 40 CFR Part 261.

4. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

5. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

6. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.

7. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

8. Labeling: All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill, or ignite.

9. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

10. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter, or prior to discharge plan renewal. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

11. Class V Wells: Leach fields and other wastewater disposal systems at OCD regulated facilities which inject fluid other than domestic waste sewage below the surface are considered Class V injection wells under the EPA UIC program. All class V wells will be closed unless, it can be demonstrated that protectable groundwater will not be impacted in the reasonably foreseeable future. Class V wells must be closed through the Santa Fe Office. The OCD allows industry to submit closure plans which are protective of human health, environment and groundwater as defined by the WQCC, and are cost effective.

12. Housekeeping: All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

13. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Aztec District Office.

14. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

15. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

16. Certification: Mallon, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Mallon further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

MALLON OIL COMPANY

by _____
Title

Duane C. Winkler
Operations Manager

Randy Fox
Environmental Engineer
E-mail rfox@bhenergy.com

350 Indiana St., Suite 400
Golden, Colorado 80401
P (720) 210-1334
F (720) 210-1361

April 24, 2006

W. Jack Ford, C.P.G.
Environmental Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Change of Ownership for
Discharge Permit GW-132
Gavilan Compressor Station
Black Hills Gas Resources, Inc. (wholly owned subsidiary of Black Hills Exploration and Production, Inc.)

Dear Mr. Ford:

Thank you for taking the time on April 14 to discuss with me the current status of Discharge Permit GW-132 for the Gavilan Compressor Station. This discharge permit was originally issued to the Mallon Oil Company in 1992. Black Hills Gas Resources, Inc. (wholly owned subsidiary of Black Hills Exploration and Production, Inc.) has been the owner of this facility since 2002. It appears that Mallon Oil Company failed to officially notify the Oil Conservation Division of this change in ownership. At your convenience, please transfer the discharge permit to "Black Hills Gas Resources, Inc.".

Also, please send me by either hard copy or electronic file a copy of the updated permit. If you have any questions, please contact me at 720-210-1334 (office) or 303-909-9589 (cell).

Sincerely,

Randy Fox
Black Hills Energy

Attachments

cc: Fred Carl, Black Hills Energy
Lynn Benally, Black Hills Exploration and Production

ATTACHMENT TO THE DISCHARGE PERMIT GW-132 APPROVAL
Mallon Oil Company, Gavilan Natural Gas Compressor Station
DISCHARGE PERMIT APPROVAL CONDITIONS
January 13, 2003

1. Payment of Discharge Permit Fees: The $100.00 filing fee has been received by the OCD. There is a required flat fee of $ 400.00 for gas Compressor stations (0-1000 hp). The flat fee required for this facility may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge permit, with the first payment due upon receipt of this approval. The filing fee is payable at the time of application and is due upon receipt of this approval.

2. Commitments: Mallon Oil Company will abide by all commitments submitted in the discharge permit renewal application dated October 21, 2002 including attachments and these conditions for approval.

3. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

4. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

5. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.

6. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

7. Labeling: All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

8. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved
by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All below grade tanks, sumps and pits must be tested annually, except systems that have secondary containment with leak detection. These systems with leak detection shall have a monthly inspection of the leak detection to determine if the primary containment is leaking. Results of tests and inspections shall be maintained at the facility covered by this discharge plan and available for NMOCD inspection. Any system found to be leaking shall be reported pursuant to Item # 12. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

9. Underground Process/Wastewater Lines: All underground process/wastewater pipelines
must be approved by the OCD prior to installation and must be tested to demonstrate their mechanical integrity every five (5) years. Results of such tests shall be maintained at the facility covered by this discharge plan and available for NMOCD inspection. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

10. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which 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.

11. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices will be emptied of fluids within 48 hours of discovery. A record of inspections will be retained on site for a period of five years.

12. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD District Office.

13. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge permit will be approved by OCD on a case-by-case basis.

    Rule 712 Waste: Pursuant to Rule 712 disposal of certain non-domestic waste is allowed at solid waste facilities permitted by the New Mexico Environment Department as long as the waste stream is identified in the discharge permit, and existing process knowledge of the waste stream does not change without notification to the Oil Conservation Division.

14. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections. As a result of OCD's inspection conducted on October 15, 2002 Mallon shall address the following action items and submit a report to OCD by March 30, 2003 confirming corrective actions taken:

    A. Drums were being stored without proper containment.
    B. Compressor oil spray was being discharged to the ground around the compressor inlet.
    C. Fiberglass open top tank (no net) containing waste oil/water was cracked and waste was noted to be leaking onto the ground.

15. Storm Water Permit: Stormwater runoff controls shall be maintained. As a result of operations, if any water contaminant that exceeds the WQCC standards listed in 20 NMAC 6.2.3101 is discharged in any stormwater run-off, then immediate actions shall be taken to mitigate the effects of the run-off, notify the OCD within 24 hours, and modify the discharge permit to include a formal stormwater run-off containment permit and submit for OCD approval within 15 days.

16. Transfer of Discharge Permit: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge permit. A written commitment to comply with the terms and conditions of the previously approved discharge permit must be submitted by the purchaser and approved by the OCD prior to transfer.

17. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure permit will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

18. Certification: **Mallon Oil Company** by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. **Mallon Oil Company** further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Conditions accepted by: **Mallon Oil Company**

Robert Blaylock
Company Representative- print name

Date 2/10/03
Company Representative- Sign

Title District Manager

ATTACHMENT TO THE DISCHARGE PLAN GW-132 RENEWAL
MALLON OIL COMPANY
GAVILAN COMPRESSOR STATION
DISCHARGE PLAN APPROVAL CONDITIONS
(September 24, 1997)

1. Payment of Discharge Plan Fees: The $50.00 filing fee shall be submitted upon receipt of the approval. The $1,667.50 required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.

2. Mallon Commitments: Mallon will abide by all commitments submitted in the discharge plan application dated August 5, 1997.

3. Waste Disposal: All wastes shall be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous by characteristics may be disposed of at an OCD approved facility upon proper waste characterization per 40 CFR Part 261.

4. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

5. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

6. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.

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12. Housekeeping: All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

13. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Aztec District Office.

14. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

15. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

16. Certification: Mallon, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Mallon further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

MALLON OIL COMPANY

by _____
Title

Duane C. Winkler
Operations Manager

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

State of New Mexico
Energy Minerals and Natural Resources

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

Revised January 24, 2001

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)

RECEIVED
OCT 25 2002
Environmental Bureau
Oil Conservation Division

☐ New ☒ Renewal ☐ Modification

1. Type: Compressor Station
2. Operator: Mallon Oil Company

   Address: P.O. Box 2797 Durango, CO 81302

   Contact Person: Robert Blaylock Phone: 970-382-9100
3. Location: SW /4 SE /4 Section 11 Township 25N Range 02W
   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. CERTIFICATIONI hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Robert Blaylock Title: District Manager

Signature: Robert Blaylock Date: October 21, 2002

New Mexico Oil Conservation Division
Ground Water Discharge Plan
Mallon Oil Company, Gavilan Compressor Station

1. Type of Operation

The Gavilan Compressor Station is a small compressor with a G342C engine and total combined site rated horsepower is 200-290 HP.

2. Operator/Legally Responsible Party and Local Representative

Operator: Mallon Oil Company
P.O. Box 2797
Durango, CO 81302
970-382-9100

Local Representative:
Charlotte Davis
Two Cross
505-326-4902

3. Location of the Discharge Plan Facility

The Gavilan Compressor Station is located in the SW SE, Sec. 11, T25N-R2W, Rio Arriba County, New Mexico (Exhibits 1 and 2).

4. Landowners

Richard Loos
(505) 774-9108

5. Facility Description

The Facility is located in a 30,767 foot square compound at the above described location. The compressor is located in a steel building approximately 30' x 120' along the north side of the compound, the separator is just east of the building, and the 200 Bbl tank which holds the liquid output from the station's inlet separator is in the southeast corner. (Exhibit 3).

Discharges are from gas sales off of the compressor and condensate sales from the storage tank. There are no other discharges.

Storage facilities consist of lean oil, anti-freeze, and methanol in drums. These items are located inside the building. Condensate and water is stored in 210 bbl storage tank with berm.

There are no disposal facilities on this site.

Processing facilities consist of a two phase production unit located on the east end of the building.

No other relevant facilities are located at the compressor facility.

6. Materials Stored or Used at the Facility

A. Process specific chemicals: Anti-freeze, Lean Oil, Methanol

B. Acids/Caustics: Not Applicable

C. Detergents/Soaps: Not Applicable

D. Solvents, inhibitors and degreasers: Not Applicable

E. Paraffin Treatment/Emulsion breakers: Not Applicable

F. Biocides: Not Applicable

G. Others: Not Applicable

See MSDS sheets (Exhibit 4, 5 and 6).

7. Sources and Quantities of Effluent and Waste Solids Generated at the Facility

Part A

1. Separator(s), Scrubber(s), and Slug Catcher(s)

The liquid output from the 3' x 10' inlet separator is composed of formation water and high gravity (approximately 45° API) petroleum liquids. The liquids readily segregate in the tank and no problems with tank bottoms or sludge have been noted. No chemical additives have been required in the system. Approximately 5 BWPM and 6 BOPM are extracted by the separator with the present production stream of about 125 MCFD.

2. Boilers, Waste Heat Recovery Units, Cogeneration Facilities and Cooling Towers/Fans

   Not Applicable

3. Wash Down/Stream out effluent from process and storage equipment internals and externals

   Not Applicable

4. Solvent/Degreaser use

   Not Applicable

5. Spent acids or caustics

   Not Applicable

6. Used engine coolants (i.e. antifreeze)

   Not Applicable

7. Used lubrication and motor oils

   Waste from the compressor and engine is pumped to drums and transported to a waste oil recycling facility.

8. Used lube oil and process filters

   Oil filters from the compressor engine are dried and transported to proper waste facilities.

9. Solids and sludges from tanks (provide description of materials)

   Not applicable

10. Painting wastes

    Not applicable

11. Sewage

    Not applicable

12. Laboratory Wastes

Not applicable

13. Other waste liquids

Drip pans under the compressor and engine will catch any leaking oil and/or coolant. The wastes will be disposed to proper facilities.

14. Other waste solids

Used drums are returned to venders.

Part B - Quality Characteristics

1. Concentration analysis for Total Dissolved Solids and Major Cations/Anions, pH, and Conductivity in umhos/cm.

Exhibit 7

2. Hydrocarbon analysis for benzene, ethyl benzene, toluene, and meta-, ortho-, and Para-xylene.

Exhibit 7

3. Analyses for WQCC section 3103 standards not included within the above analyses.

Exhibit 7

4. Presence or absence of toxic pollutants (WQCC 1101.TT) in each process where a discharge/possible discharge effluent may be generated.

All of the water is kept in a closed system at the facility site and transported to a disposal facility approved for the disposal of oilfield brines. (Exhibit 7).

5. Sampling locations, methods and procedures used to obtain values for #1, 2 and 3 above.

The water sample was taken from the 210 bbl storage tank on location. (Exhibit 7).

6. Variations that could produce higher or lower values than those shown by the sampling procedures outlines above in #5.

   The variation of flow rates should not significantly affect the water sample values.

Part C - Commingled Waste Streams

1. Production fluids commmingle at the facility. Individual rates, volumes and concentrations do not vary beyond a set range and are self-contained to prevent discharge or spills.

2. Not Applicable

8. Description of Current Liquid and Solid Waste Collection/Storage/Disposal Procedures

Part A - Summary Information: On site collection is a 210 bbl tank. There are no disposal systems, floor drains, sumps, pits, onsite injection wells, leach fields or off site disposal.

1. The collection and storage system are a closed system. No contaminants can be discharged to the surface. (Exhibit 8)

2. Boilers, Waste Heat Recovery Units, Cogeneration Facilities and Cooling Towers/Fans

   Not Applicable

3. Wash Down/Stream out effluent from process and storage equipment internals and externals

   Not Applicable

4. Solvent/Degreaser use

   Not Applicable

5. Spent acids or caustics

   Not Applicable

6. Used engine coolants (i.e. antifreeze)

   Not Applicable

7. Used lubrication and motor oils

   Waste from the compressor and engine is pumped to drums and transported to a waste oil recycling facility.

8. Used lube oil and process filters

   Oil filters from the compressor engine are dried and transported to proper waste facilities.

9. Solids and sludges from tanks (provide description of materials)

   Not applicable

10. Painting wastes

    Not applicable

11. Sewage

    Not applicable

12. Laboratory Wastes

    Not applicable

13. Other waste liquids

    Drip pans under the compressor and engine will catch any leaking oil and/or coolant. The wastes will be disposed of at the proper facilities.

14. Other waste solids

    Used drums are returned to venders.

Part B - Collection and Storage Systems

1. The collection and storage system are a closed system. No contaminants can be discharged to the surface. (Exhibit 8)

2. Tanks and Chemical Storage Areas

Storage tanks are bermed to contain a volume one-third more than the largest tank. Chemical and drum storage areas are such that spills or leaks from drums are contained on the pads.

3. All of the wastewater handling is in an enclosed system at the facility. The line from the separator to the tank is buried 2" line pipe installed in 1986 with a pressure rating of 3,000 psi. Normally, pressure on the line would be limited to tank height hydrostatic, approximately 5 psi. The tank is above ground and vented and the separator has a 250 psi working pressure, above the general wellhead and sales line pressures.

Part C - Existing Effluent and Solids Disposal

1. On-Site Facilities used for effluent or solids disposal of water, sludges, waste oils, solvents, etc..

There are no on-site disposal operations.

2. Off-Site Disposal

Produced water will be trucked to commercial saltwater disposal facilities.
Schmitz Enterprizes
HCR 74 Box 113
Lindrith, New Mexico 87029

Engine lubricants will be pumped into drums and hauled to waste oil recyclers.

9. Proposed Modifications

Part A - No modifications are planned.

Part B - Not Applicable

10. Inspection, Maintenance and Reporting

Part A Proposed routine inspection procedures for surface impoundments and other disposal units having leak detection systems.

Although it is very unlikely that any spill will occur at the proposed facility, the tank area is probably the most likely, as fluids are transferred to trucks, etc.. At present, and in the foreseeable future, Mallon's local representative is living at a site adjacent to the compressor facility and is in an excellent position to oversee all fluid transfers and detect any spills early. The berm around the tank would contain any volume of liquid that could be lost from the tank and, if that occurred, the liquid would be picked up by a vacuum truck as soon as possible. The OCD would be notified of any spill greater than 5 bbls, any spill of any hazardous material, or of any spill entering or threatening a watercourse as stipulated in OCD rule 116.

Part B Not Applicable

Part C General procedures for containment of precipitation and runoff.

Drainage disposition is such that precipitation runoff can not come into contact with any contaminants.

11. Spill, Leak Prevention and Reporting Procedures (Contingency Plans)

Any spills would most likely occur at the tank area where fluids are transferred to trucks, etc.). The berm around the tank would contain any volume of liquid that could be lost from the tank and, if a spill did occur, the liquid would be picked up by a vacuum truck as soon as possible. The NMOCD would be notified of any spill greater than 5 Bbls, any spill of hazardous material, or of any spill entering or threatening a watercourse as stipulated in NMOCD rule 116.

Part A Proposed procedures addressing containment, cleanup and reporting in case of major and minor spills at the facility.

Although it is very unlikely that any spill will occur at the proposed facility, the tank area is probably the most likely, as fluids are transferred to trucks, etc.. At present, and in the foreseeable future, Mallon's local representative is living at a site adjacent to the compressor facility and is in an excellent position to oversee all fluid transfers and detect any spills early. The berm around the tank would contain any volume of liquid that could be lost from the tank and, if that occurred, the liquid would be picked up by a vacuum truck as soon as possible. The OCD would be notified of any spill greater than 5 bbls, any spill of any hazardous material, or of any spill entering or threatening a watercourse as stipulated in OCD rule 116.

Part B Methods used to detect leaks and ensure integrity of above and below round tanks, and piping.

There is a daily visual inspection of above and below equipment and piping for leaks.

Part C Not applicable

12. Site Characteristics

Part A Hydrologic Features

1. The compressor station is located about 200 feet north of an upper, unnamed branch of the Gavilan Canyon tributary to Canada Largo. A manmade "Stock Pond", built on the intermittent drainage is directly south of the facility and is on land owned by the owner of the facility site.

Water wells in the area are about 200 feet deep. Water analysis from the April, 1979 USGS Blanket Environmental Impact Analysis of the Lindrith Area are attached. (Exhibit 9 and 10).

2. A water sample was obtained from Mallon's office adjacent to the Compressor site. An analysis was performed by BJ Services. (Exhibit 11).

3. a. Soil Type(s)

The soil type at the plant site is sandy loam and is mostly fill, 1-6 feet deep resting on sandstone of the San Jose Formation. A generalized soils map and soil description from the Blanket Environmental Impact Analysis is attached (Exhibit 12 and 13).

b. Name of aquifer(s)

The compressor station is located about 200 feet north of an upper, unnamed branch of the Gavilan Canyon tributary to Canada Largo. A manmade "Stock Pond", built on the intermittent drainage is directly south of the facility and is on land owned by the owner of the faciltiy site.

Water wells in the area are about 200 feet deep. Water analysis from the April, 1979 USGS Blanket Environmental Impact Analysis of the Lindrith Area are attached. (Exhibit 9 and 10).

c. Composition of aquifer material (Exhibit 9 and 10)

d. Depth to rock at base of alluvium

Water wells in the area are about 200 feet deep. Water analysis from the April, 1979 USGS Blanket Environmental Impact Analysis of the Lindrith Area are attached. (Exhibit 9 and 10).

4. a. Information on flood protection

The facility site sits on relatively high ground above the drainages and should not be affected by flooding.

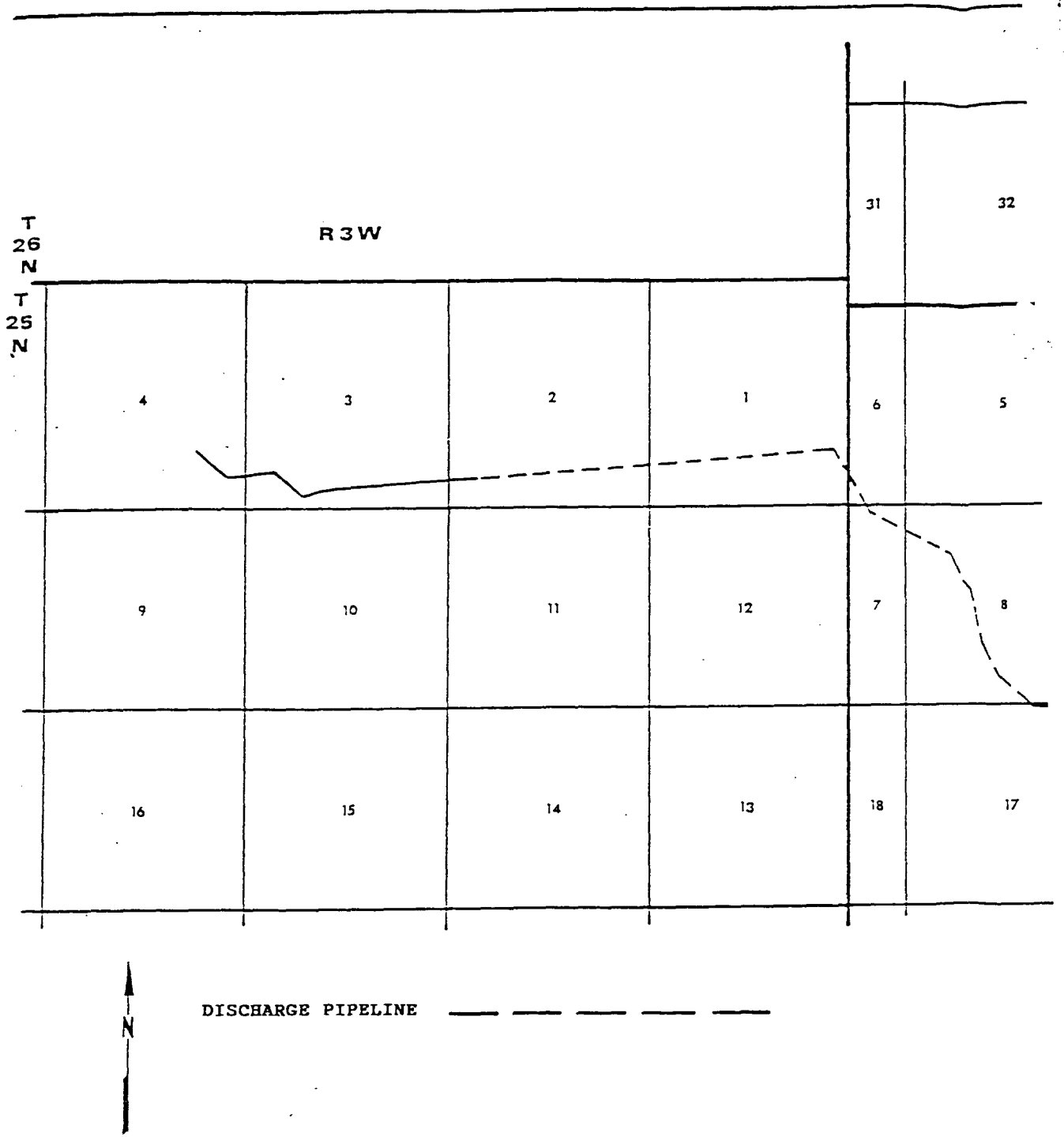
b. Not Applicable

Part B Additional Information

There are no unlined surface impoundments, pits, or leach fields.

1. Stratigraphic information including formation and member names, thickness, lithologies, lateral extent, etc.

Not Applicable


T 26 N
T 25 N
R 3 W
31
32
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1
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5
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15
14
13
18
17
N
DISCHARGE PIPELINE

2. Generalized maps and cross-sections.

   Not Applicable

3. Potentiometric maps for aquifiers potentially affected.

   Not Applicable

4. Porosity, hydraulic conductivity, storativity and other hydrologic parameters of the aquifier.

   Not Applicable

5. Specific information on the water quality of the receiving aquifier.

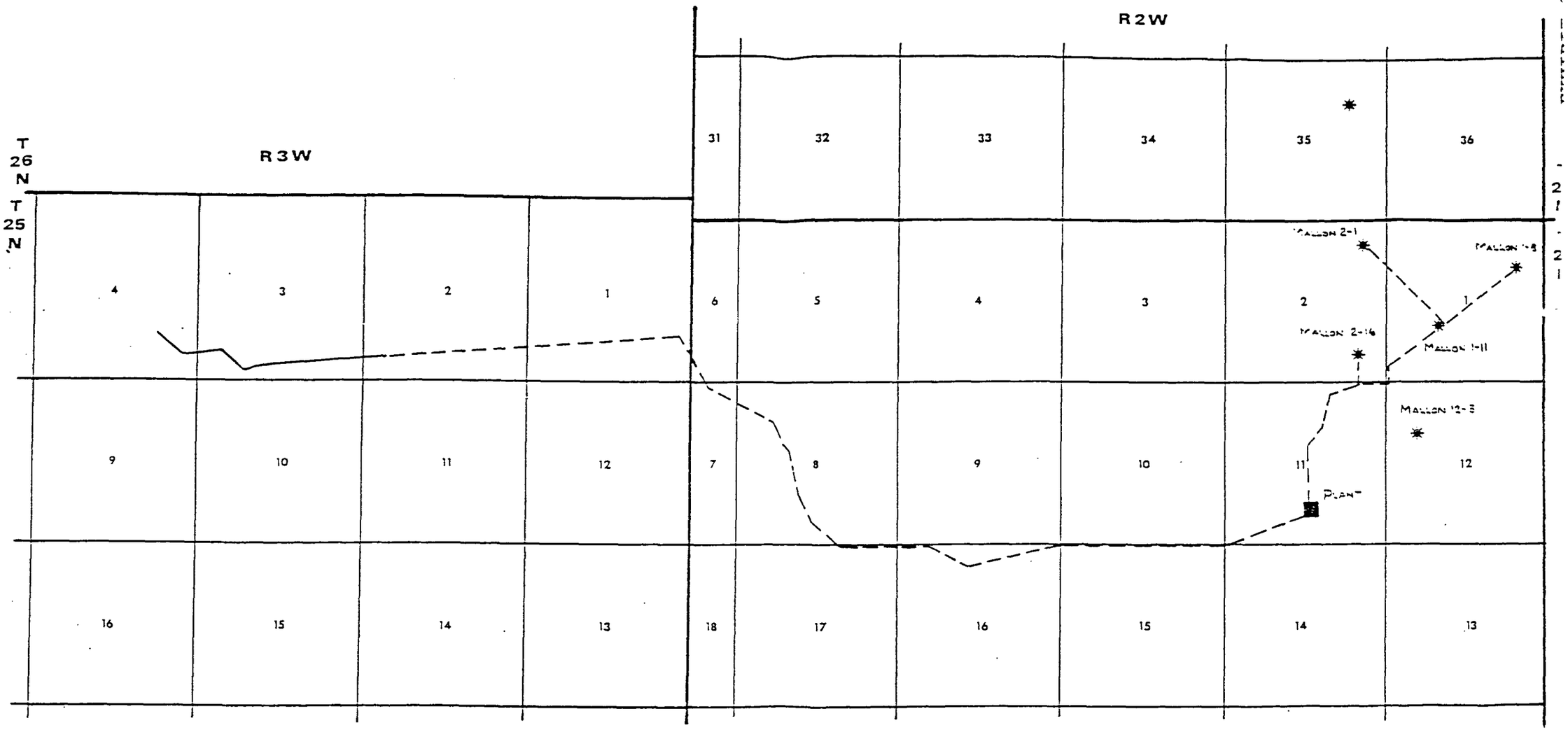
   Not Applicable

6. Expected alteration of contaminants due to sorption, precipitation or chemical reaction in the unsaturated zone, and expected reactions and/or dilution in the aquifier.

   Not Applicable

13. Other Compliance Information

Mallon Oil Company has complied with all OCD regulations in all operating phases.



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DISCHARGE PIPELINE ——— ——— ——— ——— ———

CUSTOM ENERGY CONST., IN(

DESIGN, FABRICATION, & INSTALLATION OF OIL & GAS EQU

BOX 9486
CASPER, WYOMING 82609

PHONE
(307) 265-8563

GAVILAN FIELD AREA

PIPELINE MAP

RIO ARRIBA COUNTY NEW MEXI

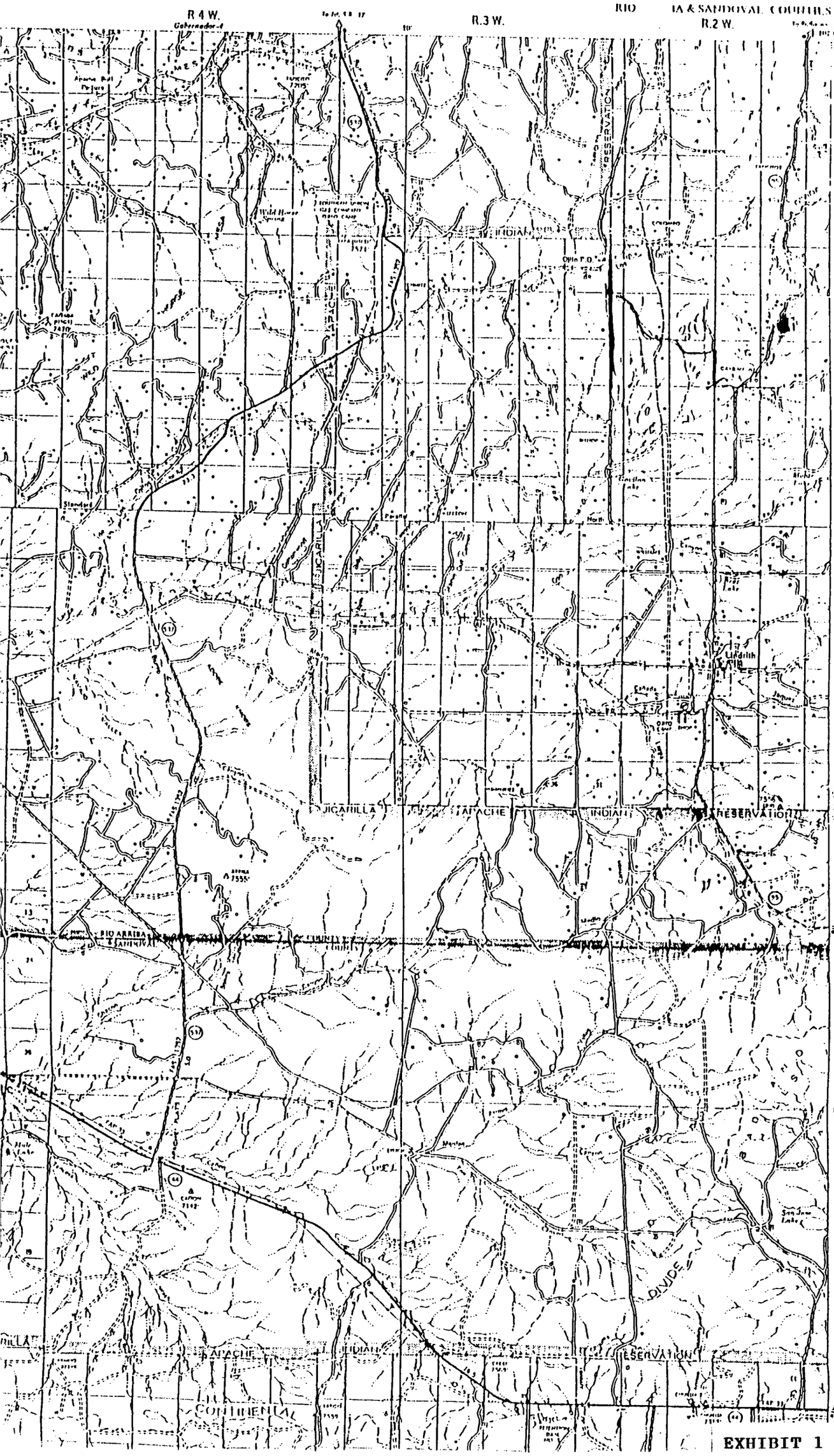

LINDRITH QUADRANGLE 46
RIO ARRIBA & SANDOVAL COUNTIES
R.4 W.
R.3 W.
R.2 W.
JICARILLA APACHE INDIAN RESERVATION
RIO ARRIBA
DIVIDE
CONTINENTAL

EXHIBIT 1

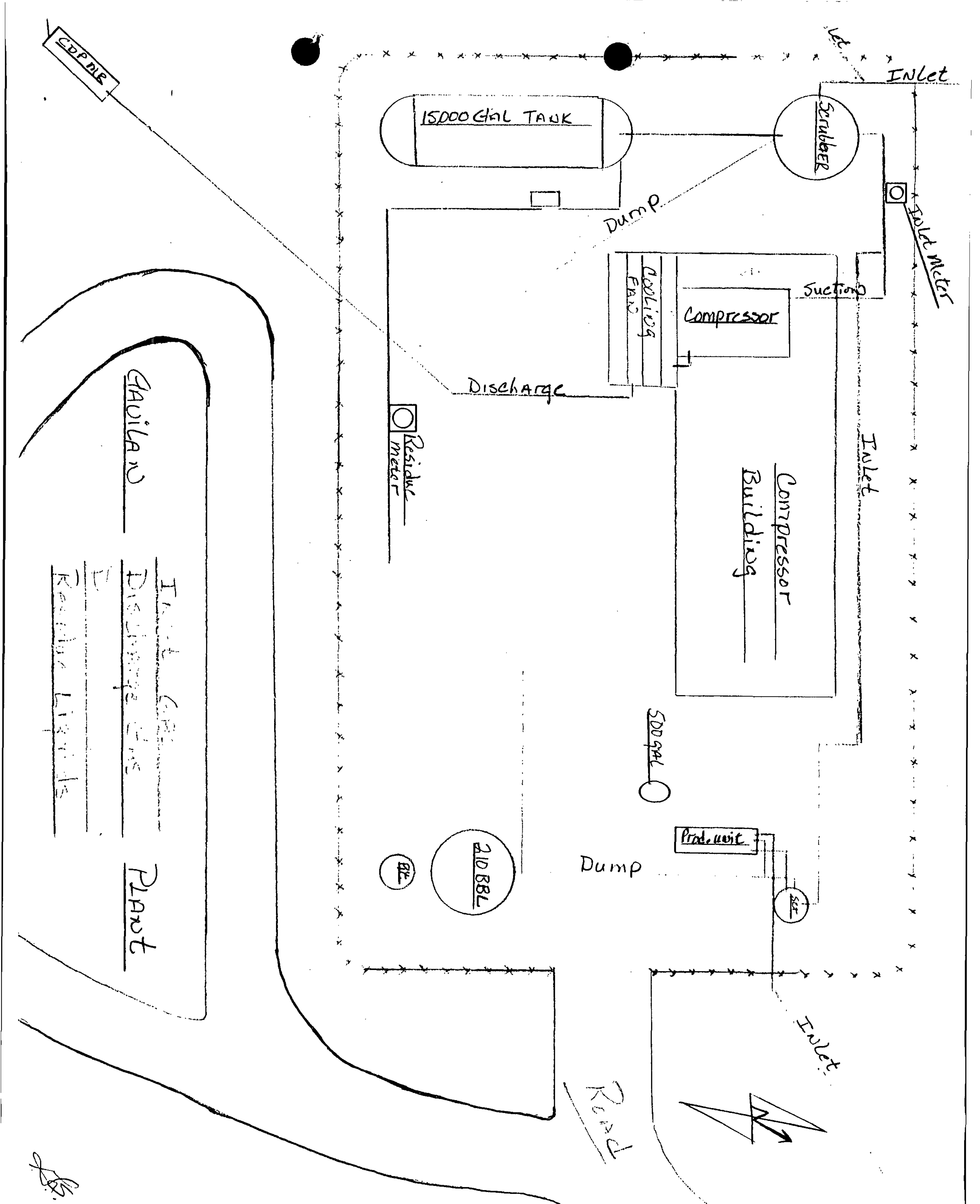

15000 GAL TANK
Scrubber
Inlet
Inlet Meter
Dump
Suction
Cooling Fan
Compressor
Discharge
Residue meter
Inlet
Compressor Building
500 GAL
Prod. unit
210 BBL
Dump
Inlet
Road
Gavilan Plant

EXHIBIT 3

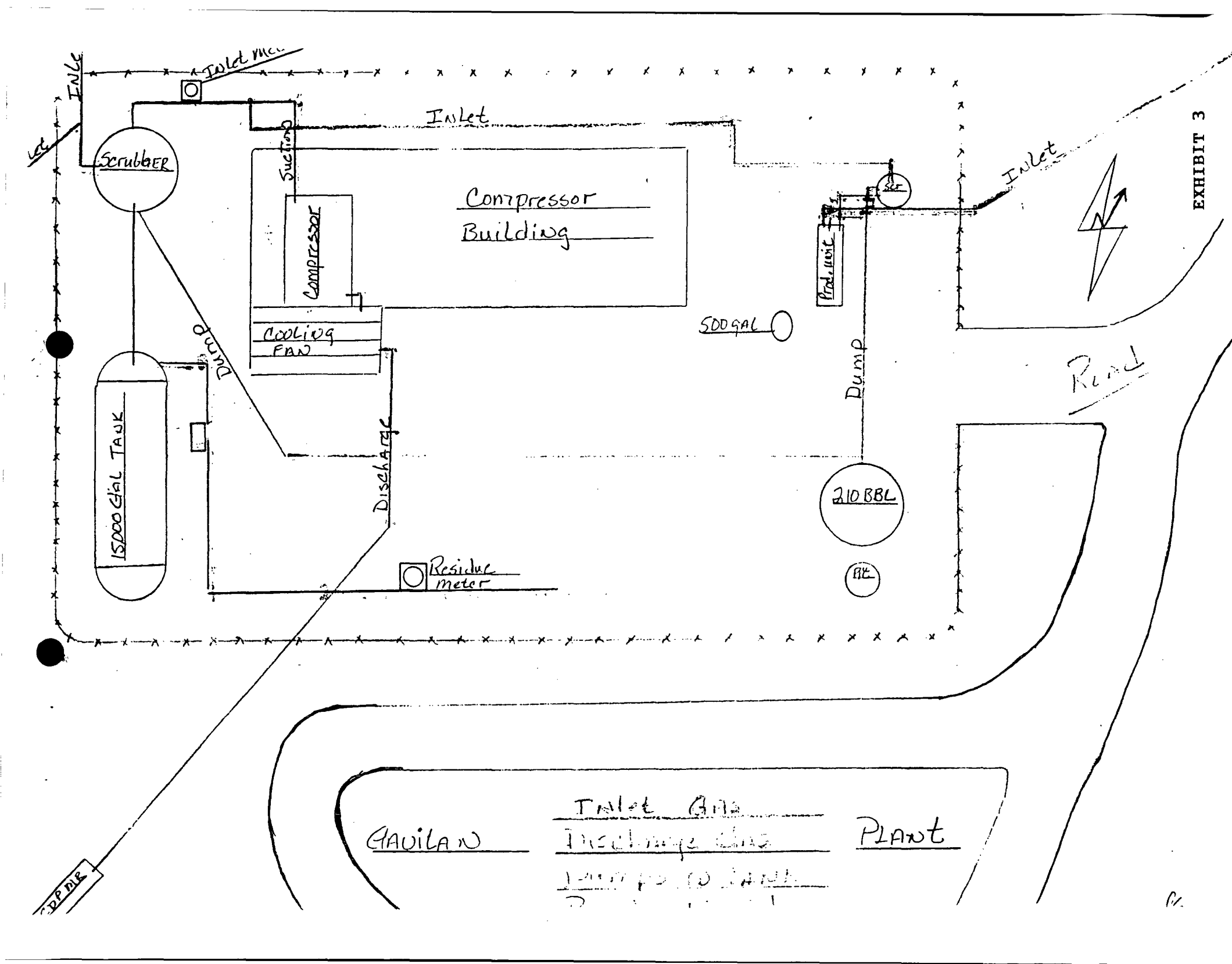


EXHIBIT 3
Inlet
Scrubber
Suction
Compressor
Compressor Building
Cooling Fan
Dump
Discharge
15000 Gal Tank
Residue meter
500 GAL
Prod. unit
Inlet
Dump
210 BBL
Road
Inlet Gas
Discharge Gas
GAVILAN
PLANT

MOTC0070 Revised 25-OCT-1996 Printed 8-JAN-1997

EL MAR 3000 ENGINE OIL

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification
"EL MAR" is a registered trademark of Conoco.

Grade	30, 40, 15W-40

Product Use
Natural Gas Engine Oil

Tradenames and Synonyms
7513, 7514, 7515 - Conoco Base Codes

Company Identification
MANUFACTURER/DISTRIBUTOR

Conoco, Inc.
P.O. Box 2197
Houston, TX 77252

PHONE NUMBERS

Product Information	1-281-293-5550
Transport Emergency	CHEMTREC 1-800-424-9300
Medical Emergency	1-800-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
Highly refined base oils		>80
Proprietary additives		<20

If oil mist is generated, exposure limits apply.

(Continued)

EXHIBIT 4

HAZARDS IDENTIFICATION

Potential Health Effects

Primary Route of Entry: Skin

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

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

"USED" Motor Oil -
There are no epidemiology studies showing "used" motor oil to be carcinogenic. Health hazards to "used" motor oil can be minimized by avoiding prolonged skin contact.

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

FIRST AID MEASURES

First Aid
INHALATION

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

SKIN CONTACT

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

EYE CONTACT

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

INGESTION

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

If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration.

(Continued)

FIRST AID MEASURES(Continued)

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

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point	202 C (396 F) (SAE 30) 204 C (399 F) (SAE 40) 193 C (379 F) (SAE 15W-40)
Method	Pensky-Martens Closed Cup - PMCC.
Flash Point	250 C (482 F) (SAE 30) 257 C (495 F) (SAE 40) 229 C (444 F) (SAE 15W-40)
Method	Cleveland Open Cup - COC.

Flash point(s) given above are typical values

Autoignition	Not Available
NFPA Classification	Class IIIB Combustible Liquid.

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

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

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

ACCIDENTAL RELEASE MEASURES

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

Remove source of heat, sparks, and flame.

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

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

(Continued)

HANDLING AND STORAGE

Handling (Personnel)

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

Handling (Physical Aspects)

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

Storage

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

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Ventilation: Normal shop ventilation.

Personal Protective Equipment

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

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

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

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

Other Precautions: Avoid any prolonged or repeated skin contact with "used" motor oil. Wash thoroughly with soap and water after contact.

 # Exposure Guidelines

Applicable Exposure Limits

If oil mist is generated, exposure limits apply.

PEL	(OSHA)	5 mg/m3, 8 Hr. TWA
TLV	(ACGIH)	5 mg/m3, 8 Hr. TWA, STEL 10 mg/m3

(Continued)

EXPOSURE CONTROLS/PERSONAL PROTECTION(Continued)

	Notice of Intended Changes (1996) 5 mg/m3, 8 Hr. TWA, (As sampled by method that does not collect vapors)
AEL * (DuPont)	5 mg/m3, 8 Hr. TWA

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

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point	700-1100 F (371-593 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air = 1)
% Volatiles	Nil
Evaporation Rate	Nil
Solubility in Water	Insoluble
Odor	Petroleum hydrocarbon (mild)
Form	Liquid
Color	Amber to Brown
Specific Gravity	0.88 @ 60 F (16 C)
Density	7.34-7.36 lb/gal @ 60 F (16 C)

STABILITY AND REACTIVITY

Chemical Stability
Stable at normal temperatures and storage conditions.

Conditions to Avoid
Heat, sparks, and flames.

Incompatibility with Other Materials
Incompatible or can react with oxidizers.

Decomposition
Normal combustion forms carbon dioxide; incomplete combustion may produce carbon monoxide.

Polymerization
Polymerization will not occur.

TOXICOLOGICAL INFORMATION

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

"USED" Motor Oil -
Laboratory studies with mice have shown that "Used" motor oil applied repeatedly to the skin caused skin cancer. In these studies, the "Used" motor oil was not removed between applications.

(Continued)

ECOLOGICAL INFORMATION

Ecotoxicological Information
No specific aquatic data available for this product.

DISPOSAL CONSIDERATIONS

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

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

TRANSPORTATION INFORMATION

Shipping Information
DOT
Not regulated.

ICAO/IMO
Not restricted.

REGULATORY INFORMATION

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

CERCLA/SUPERFUND
Not applicable; this material is covered by the CERCLA petroleum exclusion.

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

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

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

SARA, TITLE III, 313

(Continued)

REGULATORY INFORMATION(Continued)

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

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

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

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

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

State Regulations (U.S.)
CALIFORNIA "PROP 65"
The material contains ingredient(s) known to the State of California to cause cancer, birth defects, or other reproductive harm. Read and follow all label directions.

Ingredient	Acetaldehyde (CAS# 75-07-0) @ <0.01%
Ingredient	Arsenic (CAS# 7440-38-2) @ <0.01%
Ingredient	Benzene (CAS# 71-43-2) @ <0.01%
Ingredient	1,3-butadiene (CAS# 106-99-0) @ <0.01%
Ingredient	Cadmium (CAS# 7440-43-9) @ <0.01%
Ingredient	Lead (CAS# 7439-92-1) @ <0.01%

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	0
Flammability	1
Reactivity	0
NPCA-HMIS Rating	
Health	1
Flammability	1
Reactivity	0

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

(Continued)

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

Responsibility for MSDS	: MSDS Coordinator
Address	: Conoco Inc.
>	: PO Box 2197
>	: Houston, TX 77252
Telephone	: 1-281-293-5550

# Indicates updated section.

End of MSDS

MATERIAL SAFETY DATA SHEET

METHANOL

MSDS No. HCROC1423

Rev. Date 02/02/95

LYONDELL PETROCHEMICAL COMPANY
1221 MCKINNEY STREET, SUITE 1600
P.O. BOX 3646
HOUSTON, TEXAS 77253-3646

IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers, and users of this product.
This product is considered a hazardous chemical under the OSHA Hazard Communication Rule.

I. General

Trade Name	METHANOL
Other Names	METHYL ALCOHOL; (MEETS ASTM D-1152 SPECIFICATIONS); WOOD ALCOHOL; WOOD NAPHTHA; WOOD SPIRITS; CARBINOL; COLUMBIAN SPIRITS, PYROXYLIC SPIRITS, MANHATTAN SPIRITS
Telephone Numbers	EMERGENCY 800/424-9300 CHEMTREC 800/245-4532 HOT LINE CUSTOMER SERVICE 713/652-7200 INFO ONLY
Chemical Family	ALIPHATIC ALCOHOL
DOT Hazardous Materials Proper Shipping Name	METHANOL OR METHYL ALCOHOL
Generic Name	METHANOL
DOT Hazard Class	3 (6.1) (FLAMMABLE LIQUID POISON), PG II
CAS No.	67-56-1
Company ID No.	[illegible]
UN/NA ID No.	UN 1230

II. DANGER — Summary of Hazards

EXTREMELY FLAMMABLE! USHA/NFPA CLASS-IB FLAMMABLE LIQUID
KEEP AWAY FROM HEAT, SPARKS, AND FLAME. KEEP CONTAINERS CLOSED
POISON-CLASS B. HARMFUL OR FATAL IF SWALLOWED OR ABSORBED THROUGH THE SKIN! INGESTION OF ONE TO FOUR OUNCES CAN CAUSE IRREVERSIBLE INJURY TO THE NERVOUS SYSTEM, BLINDNESS, OR DEATH. IT CANNOT BE MADE NON-POISONOUS
CAUSES EYE AND RESPIRATORY SYSTEM IRRITATION AND MAY CAUSE SKIN IRRITATION! AVOID LIQUID, MIST, OR VAPOR CONTACT. WEAR PROPER PROTECTIVE CLOTHING. WASH THOROUGHLY AFTER HANDLING. (SEE SECTIONS V AND XI.)
MAY BE HARMFUL IF INHALED! MAY CAUSE INTERNAL ORGAN DAMAGE! AVOID BREATHING VAPORS. USE ONLY WITH ADEQUATE VENTILATION. INHALATION OR LIQUID PENETRATION OF THE SKIN CAN CAUSE CENTRAL NERVOUS SYSTEM (CNS) DEPRESSION. PROLONGED OR REPEATED HIGH INHALATION EXPOSURE MAY CAUSE OPTIC NERVE DAMAGE, PULMONARY AND/OR CEREBRAL EDEMA, LIVER AND/OR KIDNEY DAMAGE, BIRTH DEFECTS, COMA, RESPIRATORY FAILURE, AND DEATH.

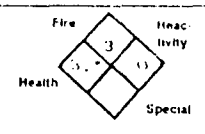
III. Fire and Explosion

Flash Point (Method) AP 53°F (11.5°C) SEE "FIRE & EXPLOSION HAZARDS"	**Autoignition Temperature (Method)** AP [illegible] (464°C) BASED UPON DATA "METHANOL"	**Flammable Limits in Air at Normal Atmospheric Temperature and Pressure** Lower AP 6.0 % Upper AP 36.5 % BASED UPON DATA "METHANOL"

Fire and Explosion Hazards: EXTREMELY FLAMMABLE! THIS MATERIAL RELEASES VAPORS AT OR BELOW AMBIENT TEMPERATURES. WHEN MIXED WITH AIR IN CERTAIN PROPORTIONS AND EXPOSED TO AN IGNITION SOURCE, THESE VAPORS CAN BURN IN THE OPEN OR EXPLODE IN CONFINED SPACES. BEING HEAVIER THAN AIR, FLAMMABLE VAPORS MAY TRAVEL LONG DISTANCES ALONG THE GROUND BEFORE REACHING A POINT OF IGNITION AND FLASHING BACK.

Extinguishing Media: ALCOHOL TYPE FOAM, DRY CHEMICAL, CO2, WATER FOG, WATERSPRAY, AND FOAM CAN COOL THE FIRE, BUT PROBABLY WILL NOT ACHIEVE EXTINGUISHMENT. [illegible] FOAM

HAZARD RATING:
4 - Extreme
3 - High
2 - Moderate
1 - Slight
0 - Insignificant



* Chronic Health Hazard - See Section IV

Special Firefighting Procedures: MIXTURES WITH WATER CONTAINING MORE THAN 31 VOL % METHANOL ARE FLAMMABLE. DIKE UP FIRE CONTROL WATER FOR LATER DISPOSAL; DO NOT SCATTER THE MATERIAL. METHANOL FIRES MAY NOT BE VISIBLE TO THE NAKED EYE. DO NOT ENTER ANY CONFINED/ENCLOSED FIRE SPACE WITHOUT PROPER PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS. WATER COOL FLAME-EXPOSED CONTAINERS FROM THE SIDE UNTIL WELL AFTER THE FIRE IS OUT. EVACUATE IMMEDIATELY IF [illegible]

EXHIBIT 5

V. Health Hazards

mmary of ute Hazards	LIQUID, MIST OR VAPORS CAN CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION AND CNS DEPRESSION. ASPIRATION INTO THE LUNGS WILL CAUSE CHEMICAL PNEUMONIA

ROUTE OF EXPOSURE	SIGNS AND SYMPTOMS	Primary Route(s)
halation	SHORT-TERM EXPOSURE TO HIGH LEVELS OF VAPOR MAY CAUSE CNS DEPRESSION. SYMPTOMS INCLUDE NAUSEA, DROWSINESS, VERTIGO, FATIGUE, CONVULSIONS, UNCONSCIOUSNESS AND DEATH, DEPENDING ON EXPOSURE DURATION. (SEE "SUMMARY" BELOW.)	X
e ntact	*EYE IRRITATION MAY OCCUR UPON SHORT-TERM EXPOSURE, INCLUDING A BURNING* SENSATION, TEARING, REDNESS, OR SWELLING. UPON DIRECT CONTACT WITH LIQUID, CONJUNCTIVITIS AND CORNEAL BURNS MAY OCCUR.	X
in sorption	UPON PROLONGED OR REPEATED CONTACT, ABSORPTION THROUGH THE SKIN MAY OCCUR AND PRODUCE TOXIC EFFECTS SIMILAR TO THOSE RESULTING FROM INHALATION EXPOSURE. (SEE "INHALATION" BOX ABOVE.)	X
in tation	SKIN IRRITATION OR MORE SERIOUS DISORDERS MAY OCCUR UPON PROLONGED AND REPEATED CONTACT DUE TO SKIN DEFATTING.	X
gestion	SWALLOWING ONLY 1 TO 4 OUNCES HAS BEEN REPORTED TO CAUSE DEATH OR SERIOUS IRREVERSIBLE INJURY SUCH AS BLINDNESS. METHANOL METABOLISM CAUSES SYSTEMIC ACIDOSIS RESULTING IN DAMAGE TO THE OPTIC NERVE. SYMPTOMS MAY BE DELAYED.	X

mmary of ronic Hazards d ecial Health fects	METHANOL IS SLOWLY ELIMINATED FROM THE BODY, HENCE REPEATED EXPOSURES MAY RESULT IN TOXIC LEVELS IN THE BLOOD AND TISSUES. IN LIMITED ANIMAL STUDIES, WHERE METHANOL WAS GIVEN ORALLY OR APPLIED TO THE SKIN, THERE HAS BEEN NOT EVIDENCE OF CARCINOGENIC POTENTIAL. RODENT STUDIES HAVE SHOWN THAT HIGH-LEVEL EXPOSURE IMPAIRS NEURAL TUBE CLOSURE AND INDUCES OTHER BIRTH DEFECTS. PERSONNEL WITH PRE EXISTING CNS DISEASE, SKIN DISORDERS, IMPAIRED LIVER OR KIDNEY FUNCTION, OR CHRONIC RESPIRATORY DISEASES SHOULD AVOID EXPOSURE.

Protective Equipment and Other Control Measures

piratory	DO NOT USE AIR PURIFYING RESPIRATOR. ONLY NIOSH/MSHA APPROVED SUPPLIED AIR OR SELF-CONTAINED BREATHING APPARATUS OPERATED IN POSITIVE PRESSURE MODE ARE SATISFACTORY, IF EXPOSURE CAN EXCEED THE PEL/TLV.
e	EYE PROTECTION SUCH AS CHEMICAL SPLASH GOGGLES AND/OR FACE SHIELD MUST BE WORN WHEN POSSIBILITY EXISTS FOR EYE CONTACT DUE TO SPLASHING OR SPRAYING LIQUID, AIRBORNE PARTICLES, OR VAPOR. CONTACT LENSES SHOULD NOT BE WORN.
in	WHEN SKIN CONTACT IS POSSIBLE, PROTECTIVE CLOTHING INCLUDING GLOVES, APRON, SLEEVES, BOOTS, HEAD AND FACE PROTECTION SHOULD BE WORN. THIS EQUIPMENT MUST BE CLEANED THOROUGHLY AFTER EACH USE.
jineering ntrols	GENERAL ROOM OR LOCAL EXHAUST VENTILATION IS USUALLY REQUIRED TO MEET EXPOSURE STANDARD(S).
ier Hygienic l rk Practices	EMERGENCY EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE IN THE IMMEDIATE VICINITY OF ANY POTENTIAL EXPOSURE. USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. PROMPTLY REMOVE SOILED CLOTHING/WASH THOROUGHLY BEFORE REUSE. SHOWER AFTER WORK USING PLENTY OF SOAP AND WATER.

f. Occupational Exposure Limits

ostance		Source	Date	Type	Value/Units	Time
METHYL ALCOHOL (METHANOL)	SKIN	OSHA	1989	PEL	200 PPM	8 HRS
				STEL	250 PPM	15 MIN
METHANOL (METHYL ALCOHOL)	SKIN	ACGIH	1994	TLV	200 PPM	8 HRS
				STEL	250 PPM	15 MIN

VII. Emergency and First Aid

Inhalation	IMMEDIATELY REMOVE FROM CONTAMINATED AREA TO FRESH AIR. KEEP INDIVIDUAL QUIET. FOR RESPIRATORY DISTRESS, GIVE AIR OR OXYGEN, AND/OR ADMINISTER CPR (CARDIOPULMONARY RESUSCITATION). OBTAIN EMERGENCY MEDICAL ATTENTION.
Eye Contact	IMMEDIATELY FLUSH EYES WITH PLENTY OF CLEAN LOW PRESSURE WATER FOR AT LEAST 15 MINUTES. RETRACT EYELIDS OFTEN. OBTAIN EMERGENCY MEDICAL ATTENTION.
Skin Contact	IMMEDIATELY REMOVE CONTAMINATED CLOTHING. WASH AFFECTED SKIN THOROUGHLY WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE; WASH OR DISCARD CONTAMINATED LEATHER SHOES/GLOVES.
Ingestion	SEE EMERGENCY MEDICAL TREATMENT PROCEDURES AND SECTION XI, "GENERAL COMMENTS".
Emergency Medical Treatment Procedures	METHANOL INGESTION IS LIFE-THREATENING. IF SWALLOWED AND CONSCIOUS, DRINK TWO GLASSES OF WATER AND INDUCE VOMITING BY FINGER DOWN THE THROAT OR WITH SYRUP OF IPECAC. FOLLOW EMESIS WITH TWO TEASPOONS OF BAKING SODA IN WATER. SYMPTOM ONSET MAY BE DELAYED. ETHANOL THERAPY MAY BE INDICATED. SEE SECTION XI, "GENERAL COMMENTS" FOR ADDITIONAL INFORMATION.

VIII. Spill and Disposal

Precautions if Material is Spilled or Released	EXTREMELY FLAMMABLE LIQUID. RELEASE CAUSES AN IMMEDIATE FIRE HAZARD. REMOVE ALL IGNITION SOURCES AND APPLY WATER FOG TO DISPERSE VAPORS. REMOVE ALL NON-ESSENTIAL PERSONNEL. USE PROPER PROTECTIVE EQUIPMENT. CONTAIN OR PREVENT FLOW TO SEWERS OR PUBLIC WATERS. BLANKET WITH AN APPROPRIATE FOAM. RESTRICT WATER USE FOR CLEANUP. IN URBAN AREA, CLEANUP ASAP. IN NATURAL ENVIRONMENTS, SEEK ADVICE FROM ECOLOGISTS. THIS MATERIAL IS WATER-SOLUBLE AND MAY BIODEGRADE. COMPLY WITH ALL APPLICABLE LAWS. SPILLS MAY NEED TO BE REPORTED TO THE NATIONAL RESPONSE CENTER (800-424-8802). SPILLED MATERIAL AND ANY CONTAMINATED WATER OR SOIL MAY BE HAZARDOUS TO HUMAN OR OTHER LIFE.
Waste Disposal Methods	FOR LARGE SPILLS, MAXIMIZE PRODUCT RECOVERY FOR REUSE OR RECYCLING. FREE LIQUID MAY BE PUMPED FOR USING EXPLOSION PROOF DIESEL OR VACUUM PUMPS. FOR SMALL SPILLS, TAKE UP WITH SAND OR OTHER NON-COMBUSTIBLE ABSORBENT. USE REGISTERED TRANSPORTERS TO MOVE CONTAMINATED PRODUCT/SOIL/WATER IN D.O.T. APPROVED CONTAINERS. DISPOSE OF MATERIALS AT A LICENSED FACILITY PERMITTED TO HANDLE RCRA/OSHA "HAZARDOUS WASTES". INCINERATION IS THE RECOMMENDED DISPOSAL METHOD. BURN CONCENTRATED LIQUID IN SYSTEMS COMPATIBLE WITH WATER SOLUBLE WASTE. AVOID FLAMEOUT. BIODEGRADATION MAY BE USED ON DILUTE AQUEOUS WASTE. ASSURE EMISSIONS AND EFFLUENT COMPLY WITH APPLICABLE LAWS.

IX. Components

(This may not be a complete list of components)

Component Name	CAS No.	Carcinogen##	Composition amount (Wt) (See Qualification on Page 4)
METHANOL (METHYL ALCOHOL)	[illegible]	[illegible]	99.9 PERCENT

##Listed By: 1 = NTP 2 = IARC 3 = OSHA 4 = Other

Compositions given are typical values, not specifications.

Physical and Chemical Data

iling Point (At 760.0 mm Hg) 148° F	Viscosity Units, Temp. (Method) AP 1 CPS AT [illegible] (D-445)		Dry Point N/AP
ezing Point -144° F	Vapor Pressure (MM HG AT [illegible] F) AP [illegible]		Volatile Characteristics APPRECIABLE
ecific Gravity (H,O = 1 at 39.2° F) 0.79	Vapor Sp. Gr. (Air = 1.0 at 60° 90 F) AP 1.1	Solubility in Water COMPLETE	pH N/AP
zardous Polymerization T EXPECTED TO OCCUR	Other Chemical Reactivity METHANOL FORMS AN AZEOTROPE WITH WATER.		Stability STABLE

her Physical d Chemical Properties	MOLECULAR WEIGHT = 32.04; WATER CONTENT = LT 0.05 WT % (ASTM D-1364); EVAPORATION RATE = 5.9 (IF N-BUTYL ACETATE = 1.0).
pearance d Odor	CLEAR, COLORLESS LIQUID; FAINT, CHARACTERISTIC ALCOHOL ODOR; ODOR THRESHOLD = 55 PPM IN AIR; ODOR IS NOT A GOOD INDICATOR OF EXPOSURE LEVEL.
nditions Avoid	HEAT, SPARKS, OPEN FLAME, AND OXIDIZING CONDITIONS.
terials Avoid	STRONG OXIDIZING AGENTS; ALUMINUM, ZINC (GALVANIZED), OR ANY OTHER REACTIVE METAL WHICH WILL DISPLACE HYDROGEN; CERTAIN FORMS OF PLASTICS; AND RUBBER OR RUBBER BASED COATINGS. ALUMINUM MAY FORM AN OXIDE SCALE ON PROLONGED CONTACT.
ardous composition ducts	EXCESSIVE HEATING AND/OR INCOMPLETE COMBUSTION WILL GENERATE HIGHLY POISONOUS CARBON MONOXIDE AND PERHAPS OTHER TOXIC VAPORS SUCH AS FORMALDEHYDE.

I. Additional Precautions

ndling, orage, d conta- ination ocedures	STORE AND TRANSPORT IN ACCORDANCE WITH ALL APPLICABLE LAWS. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. KEEP CONTAINERS CLOSED AND PROPERLY LABELED. GROUND ALL DRUMS AND TRANSFER VESSELS WHEN HANDLING. USE ONLY WITH ADEQUATE VENTILATION. AVOID BREATHING VAPOR. USE CARE IN A COOL (LT 80° F), WELL VENTILATED PLACE. FOR STORAGE AREA AND VENTILATION, EQUIPMENT SHOULD COMPLY WITH NFPA STANDARDS OR FOR CLASS IA/B FLAMMABLE LIQUIDS AND NEC REQUIREMENTS. "PETROLEUM DISTILLATES" PER 1500.14(E)(5). USE SPECIAL FEDERAL LABELING IF INTENDED, OR PACKAGED FOR USE IN THE HOUSEHOLD OR BY CHILDREN. DO NOT USE THIS MATERIAL AS A CLEANING SOLVENT. ISOLATE, VENT, DRAIN, WASH AND PURGE SYSTEMS OR EQUIPMENT BEFORE ANY REPAIR OR MAINTENANCE. REMOVE ALL IGNITION SOURCES. CHECK ATMOSPHERE FOR OXYGEN DEFICIENCIES AND EXPLOSIVITY. USE ADEQUATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION V.) AND OBSERVE PRECAUTIONS PERTAINING TO CONFINED SPACE ENTRY.
neral nments	INGESTION OF THIS PRODUCT, EVEN IN SMALL AMOUNTS, CAN CAUSE BLINDNESS AND DEATH. ONSET OF SYMPTOMS MAY BE DELAYED FOR 16-24 HOURS. TREATMENT PRIOR TO ONSET OF SYMPTOMS MAY BE LIFE-SAVING. METHANOL IS RAPIDLY ABSORBED, SO INDUCE VOMITING ASAP (WITHIN 30 MINUTES OF INGESTION) TO BE MOST EFFECTIVE. ETHANOL INHIBITS FORMATION OF TOXIC METABOLITES. IF INDICATED, START WITH A LOADING DOSE OF 7.6-10 ML/KG OF BODY WEIGHT OF 10% ETOH IN D5W OVER 30-60 MINUTES; MAINTENANCE DOSE OF 1.4 ML/KG TO ACHIEVE 100-150 MG/DL BLOOD ETOH LEVEL DURING ETHANOL THERAPY. (IF CHARCOAL IS ADMINISTERED, ETHANOL SHOULD BE ADMINISTERED INTRAVENOUSLY AND NOT ORALLY.) MAINTAIN CONTACT WITH THE POISON CONTROL CENTER DURING ALL ASPECTS OF THE DIAGNOSIS AND TREATMENT. REFER TO A.P.I.'S PUBLICATION 4524 ENTITLED "CLINICAL TOXICOLOGY OF THE ACUTE INGESTION OF METHANOL/HYDROCARBON BLENDS" FOR ADDITIONAL INFORMATION REGARDING MEDICAL MONITORING AND TREATMENT. SOME OF THE INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE MIXTURE ITSELF.

- - Note - - - Qualifications:

EQ = Equal	AP = Approximately	N/P = No Applicable Information Found
LT = Less Than	UK = Unknown	N/AP = Not Applicable
GT = Greater Than	TR = Trace	N/DA = No Data Available

XII. Regulatory Information

SEE SUPPLEMENT
BEGINNING ON PAGE 6

SUPERFUND AMENDMENTS AND REAUTHORIAZATION ACT OF 1986 (SARA), TITLE III

SECTION 311/312 HAZARD CATEGORIES

IMMEDIATE (ACUTE) HEALTH HAZARD — DELAYED (CHRONIC) HEALTH HAZARD

FIRE HAZARD

SECTION 313

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 313 AND 40 CFR 372:

METHANOL (METHYL ALCOHOL)

TOXIC SUBSTANCES CONTROL ACT (TSCA)

ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. BECAUSE THIS PRODUCT CONTAINS A SMALL, BUT DETECTABLE, CONCENTRATION OF ACETONE (2-PROPANONE), IT IS SUBJECT TO SECTION 12(B) EXPORT NOTIFICATION REQUIREMENTS.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA)

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF CERCLA:

	REPORTABLE QUANTITY (RQ), LBS
METHANOL (METHYL ALCOHOL)	5,000/2,270kG

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 - PROPOSITION 65

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED BY THE STATE OF CALIFORNIA A "KNOWN TO THE STATE TO CAUSE REPRODUCTIVE TOXICITY"

ETHANOL (ETHYL ALCOHOL)

XIII. Label Information

Manufacturer:
LYONDELL PETROCHEMICAL COMPANY
1221 MCKINNEY STREET, SUITE 1600
P.O. BOX 3646
HOUSTON, TEXAS 77253-3646

Telephone Numbers
EMERGENCY
800/424-9300 CHEMTREC
800/245-4532 HOT LINE
CUSTOMER SERVICE
713/652-7200 INFO ONLY

Use Statement:
FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN

Signal Word:
DANGER

Physical Hazards:

EXTREMELY FLAMMABLE
AQUEOUS SOLUTIONS MAY PRODUCE FLAMMABLE VAPORS
CORROSIVE TO SOME METALS

Health Hazards:

HIGH INGESTION, SKIN, AND INHALATION HAZARD
MAY PERMANENTLY DAMAGE THE OPTIC NERVE
MAY DAMAGE THE BRAIN OR NERVE TISSUES
MAY CAUSE METABOLIC ACIDOSIS OF BLOOD
MAY CAUSE LIVER AND/OR KIDNEY DAMAGE
EYE AND MUCOUS MEMBRANE IRRITANT
SKIN IRRITANT - DEFATTING ACTION
PROLONGED EXPOSURE MAY DAMAGE THE LUNGS
MAY CAUSE LONG-TERM ADVERSE HEALTH EFFECTS
MAY CAUSE BIRTH DEFECTS

Precautionary Measures:
DO NOT HANDLE NEAR HEAT, SPARKS, OR OPEN FLAME
SPILL-LEAK CAN CAUSE FIRE/EXPLOSION
KEEP CONTAINER CLOSED WHEN NOT IN USE
DO NOT CONTACT WITH OXIDIZABLE MATERIALS
USE ONLY WITH ADEQUATE VENTILATION/PERSONAL PROTECTION
AVOID PROLONGED OR REPEATED BREATHING OF VAPOR
AVOID CONTACT WITH EYES, SKIN, AND CLOTHING
WASH THOROUGHLY AFTER HANDLING
PREVENT CONTACT WITH FOOD, CHEWING OR SMOKING MATERIALS
DO NOT TASTE/SWALLOW.

DOT Information:
Hazard Class- 3 (6.1) (FLAMMABLE LIQUID/POISON), PG-II
Proper Shipping- METHANOL OR METHYL ALCOHOL
UN/NA ID Number- UN 1230

Instructions:
In case of fire, use- ALCOHOL TYPE FOAM, DRY CHEMICAL, CO2, INERT GAS - HALON/N2, FOAM

First Aid
-Inhalation: IMMEDIATELY REMOVE FROM CONTAMINATED AREA TO FRESH AIR. KEEP INDIVIDUAL QUIET. FOR RESPIRATORY DISTRESS, GIVE AIR OR OXYGEN, AND/OR ADMINISTER CPR (CARDIOPULMONARY RESUSCITATION). OBTAIN EMERGENCY MEDICAL ATTENTION.
-Eye Contact: IMMEDIATELY FLUSH EYES WITH PLENTY OF CLEAN LOW-PRESSURE WATER FOR AT LEAST 15 MINUTES. RETRACT EYELIDS OFTEN. OBTAIN EMERGENCY MEDICAL ATTENTION.
-Skin Contact: IMMEDIATELY REMOVE CONTAMINATED CLOTHING. WASH AFFECTED SKIN THOROUGHLY WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE; WASH OR DISCARD CONTAMINATED LEATHER SHOES/GLOVES.
-Ingestion: SEE EMERGENCY MEDICAL TREATMENT PROCEDURES AND SECTION XI, "GENERAL COMMENTS"

In case of spill,
EXTREMELY FLAMMABLE LIQUID! RELEASE CAUSES AN IMMEDIATE FIRE/EXPLOSION HAZARD. REMOVE ALL IGNITION SOURCES AND SAFELY STOP FLOW OF SPILL. REMOVE ALL NON-ESSENTIAL PERSONNEL. USE PROPER PROTECTIVE EQUIPMENT. CONTAIN OR PREVENT FLOW TO SEWERS OR PUBLIC WATERS. BLANKET WITH AN APPROPRIATE FOAM. RESTRICT WATER USE FOR CLEANUP. IN URBAN AREAS, CLEANUP ASAP. IN NATURAL ENVIRONMENTS, SEEK ADVICE FROM ECOLOGISTS. THIS MATERIAL IS WATER-SOLUBLE AND MAY BIODEGRADE. COMPLY WITH ALL APPLICABLE LAWS. SPILLS MAY NEED TO BE REPORTED TO THE NATIONAL RESPONSE CENTER (800/424-8802). SPILLED MATERIAL AND ANY CONTAMINATED WATER OR SOIL MAY BE HAZARDOUS TO HUMAN OR OTHER LIFE.

Protective Equipment:
-Respiratory: DO NOT USE AIR PURIFYING RESPIRATOR. ONLY NIOSH/MSHA APPROVED SUPPLIED AIR OR SELF-CONTAINED BREATHING APPARATUS OPERATED IN POSITIVE PRESSURE MODE.
-Eye: EYE PROTECTION SUCH AS CHEMICAL SPLASH GOGGLES AND/OR FACE SHIELD MUST BE WORN WHEN POSSIBILITY EXISTS FOR EYE CONTACT DUE TO SPLASHING OR SPRAYING.
-Skin: WHEN SKIN CONTACT IS POSSIBLE, PROTECTIVE CLOTHING INCLUDING GLOVES, APRON, SLEEVES, BOOTS, HEAD AND FACE PROTECTION SHOULD BE WORN.

Date October, 1985

MATERIAL SAFETY DATA SHEET

Product Name:

ANTIFREEZE

PHILLIPS 66 COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY
Bartlesville, Oklahoma 74004
Emergency Phone Nos.
918-661-3865 (during business)
918-661-8118 (after hours)

PHILLIPS 66 — USA AND CANADA — WORLDWIDE — PHILLIPS PETROLEUM 66 — OTHER COUNTRIES

PRODUCT IDENTIFICATION

Synonyms: NE

Chemical Name: Ethylene Glycol

Chemical Family: Glycol

Chemical Formula: $C_2 H_6 O_2$

CAS Reg. No: 107-21-1

Product No: NE

Post-it® Fax Note 7671	Date	# of pages ▶ 6
To Theresia	From Graves Oil	
Co./Dept. Malbon B.I	Co.	
Phone #	Phone #	
Fax # 505-885-0022	Fax #	

Product and/or Components Entered on EPA's TSCA Inventory: Yes [X] No [ ]

HAZARDOUS COMPONENTS

Ingredients	CAS Number	% By Wt.	OSHA PEL	ACGIH TLV
Ethylene Glycol and other Glycols	107-21-1	88-90	NE	50*
Inhibitors and Dye	Various	10-12	NE	NE

* Ceiling Limit

MATERIAL SAFETY DATA SHEET

PERSONAL PROTECTION INFORMATION

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

Respiratory Protection: For concentrations exceeding the recommended exposure level, use NIOSH/MSHA approved air purifying respirator. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator. If conditions immediately dangerous to life or health (IDLH) exist, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA) equipment.

Eye Protection: Use chemical goggles. For splash protection, use face shield with chemical goggles.

Skin Protection: Use gloves impervious to the material being used. Use full-body, long sleeved garments impervious to the material.

Note: Personal protection information shown above 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.

HANDLING AND STORAGE PRECAUTIONS

Avoid inhalation and skin and eye contact. Wash hands after handling. Wear protective equipment and/or garments described above if exposure conditions warrant. Launder contaminated clothing before reuse. Store in a cool, well-ventilated area. Protect from sources of ignition.

REACTIVITY DATA

Stability: Stable [X] Unstable [ ]

Incompatibility (Materials to Avoid): Oxygen and strong oxidizing agents.

Hazardous Polymerization: Will not Occur [X] May Occur [ ]

Hazardous Decomposition Products: Carbon oxides and various hydrocarbons formed when burned.

MATERIAL SAFETY DATA SHEET

HEALTH HAZARD DATA

RECOMMENDED EXPOSURE LIMITS: ACGIH TLV 50 ppm (ceiling)

ACUTE EFFECTS OF OVEREXPOSURE:

EYE: May cause moderate irritation. Repeated vapor exposure causes severe eye irritation.

SKIN: May cause moderate irritation. Can be absorbed through skin in dangerous amounts.

INHALATION: Causes nausea, vomiting, increased heart rate, drop in blood pressure, depressed reflexes, seizures, convulsions, changes in the eyes, coma. May be aspirated into lungs if swallowed.

INGESTION: Causes eye changes such as optic atrophy and nystagmus. May cause cyanosis.

SUBCHRONIC AND CHRONIC EFFECTS OF OVEREXPOSURE:
Causes central nervous system depression.

OTHER HEALTH EFFECTS: No known applicable information.

HEALTH HAZARD CATEGORIES:

	Animal	Human		Animal	Human
Known Carcinogen	☐	☐	Toxic	☐	☐
Suspect Carcinogen	☐	☐	Corrosive	☐	☐
Mutagen	☐	☐	Irritant	☐	☐
Teratogen	☐	☐	Target Organ Toxin	☒	☒
Allergic Sensitizer	☐	☐	Specify_	Causes kidney damage and	
Highly Toxic	☐	☐	_____	eye damage.	

FIRST AID AND EMERGENCY PROCEDURES:

EYE: Flush eyes with running water for at least 15 minutes. If irritation develops, seek medical attention.

SKIN: Wash with soap and water. If irritation develops, seek medical attention.

INHALATION: Remove from exposure. If illness or adverse symptoms develop, seek medical attention.

INGESTION: Do not induce vomiting. Seek immediate medical assistance. A physician may, at his discretion, perform gastric lavage using a cuffed endotracheal tube.

MATERIAL SAFETY DATA SHEET

PHYSICAL DATA

Appearance: Liquid

Odor: Mild

Boiling Point: 330 (166°C)

Vapor Pressure: NE

Vapor Density (Air = 1): > 1

Solubility in Water: Complete

Specific Gravity (H_2O = 1): 1.11 - 1.14 at 60/60°F

Percent Volatile by Volume: 100

Evaporation Rate (Butyl Acetate = 1): < 1

Viscosity: NE

FIRE and EXPLOSION DATA

Flash Point (Method Used): 250°F (121°C) (COC, ASTM D92)

Flammable Limits (% By Volume in Air): LEL 3.2 UEL NE (For Ethylene Glycol)

Fire Extinguishing Media: Dry chemical, foam or carbon dioxide (CO_2).

Special Fire Fighting Procedures: Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments described on Page 2 if conditions warrant. Water fog or spray may be used to cool exposed equipment and containers.

Fire and Explosion Hazards: Carbon oxides and various hydrocarbons formed when burned.

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 on Page 2 if exposure conditions warrant. Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in dry, inert material (sand, clay, sawdust, etc.). Transfer to disposal containers.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations):

Incinerate or otherwise manage in a permitted waste management facility.

M MATERIAL SAFETY DATA SHEET

h DOT TRANSPORTATION

Shipping Name: NA
Hazard Class: NA
ID Number: NA
Marking: NA
Label: NA
Placard: NA
Hazardous Substance/RQ: NA
Shipping Description: NA
Packaging References: NA

RCRA CLASSIFICATION *(FOR UNADULTERATED PRODUCT AS A WASTE)*

NA

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT

Wear protective equipment and/or garments described on Page 2 if exposure conditions warrant. Use NIOSH/MSHA approved respiratory protection, such as air-supplied mask, in confined spaces or other poorly ventilated areas. See Page 2 for protective clothing requirements. Contact immediate supervisor for specific instructions before work is initiated.

HAZARD CLASSIFICATION

THIS PRODUCT MEETS THE FOLLOWING HAZARD DEFINITION(S) AS DEFINED BY OCCUPATIONAL SAFETY AND HEALTH REGULATIONS (29 CFR PART 1910. 1200):

☐ Not Hazardous	☐ Flammable Solid	☐ Oxidizer
☐ Combustible Liquid	☐ Flammable Aerosol	☐ Pyrophoric
☐ Compressed Gas	☐ Explosive	☐ Unstable
☐ Flammable Gas	☒ Health Hazard (See Page 3)	☐ Water Reactive
☐ Flammable Liquid	☐ Organic Peroxide	

MATERIAL SAFETY DATA SHEET

ADDITIONAL COMMENTS

LABORATORY REPORT NO. 83611
LOG NO. 4606
JULY 28, 1997

ALLON OIL COMPANY

AMPLE TAKEN JULY 1997
AMPLE RECEIVED AT OILAB, INC., JULY 25, 1997

STM DISTILLATION WITH DETERMINATION OF MOLECULAR WEIGHT, SPECIFIC GRAVITY,
EID VAPOR PRESSURE, TOTAL SULFUR CONTENT, AND SUMMARY OF RESULTS

AVILAN COMPRESSOR STATION CONDENSATE

- MALLON OIL COMPANY - CARLSBAD, N.M.

Petroleum Laboratory
Gas Engineering
and Environmental Services
401 N.E. 46th, Oklahoma City, OK 73105-3338
(405) 528-8255

LABORATORY REPORT NO. 83611
LOG NO. 4606

ASTM DISTILLATION OF CONDENSATE

CENT OFF	TEMP. DEG. F
.P.	117
	154
	176
	186
	196
	202
	208
	211
	216
	222
	226
	230
	235
	242
	250
	260
	272
	295
	346
	398
@	445

MALLON OIL COMPANY

LEASE GAVILAN COMPRESSOR STATION

RIT ARRIBA/NM

SAMPLED BY: MALLON OIL CO
DATE SAMPLED 07-00-97
DATE RUN 07-25-97
NOTES: (1) REID VAPOR PRESSURE/100°F (SUS): 5.5
(2) TOTAL SULFUR (WT%): 0.065

PERCENT RECOVERY	98
PERCENT RESIDUE	1
PERCENT LOSS	1
TOTAL	100
COLOR	REDDISH BROWN
SP. GR. @ 60 DEG. F. (WATER = 1.0)	0.7406
CORRESPONDING API GRAVITY	59.6
MOLECULAR WEIGHT	107

SUMMARY OF DISTILLATION RESULTS

PERCENT GASOLINE; E.P. @ 375 DEG. F.	92
PERCENT NAPTHA; E.P. @ 425 DEG. F.	5
PERCENT KEROSENE; E.P. @ 550 DEG. F.	1
PERCENT FUEL OIL (BOTTOMS)	1
PERCENT LOSS (LIGHT FRACTIONS)	1
TOTAL	100

FW01W292

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W292

FARMINGTON LAB

GENERAL INFORMATION

OPERATOR:	MALLON	DEPTH:	
WELL:	CONDENSATE GAVILAN PLANT	DATE SAMPLED:	07/23/97
FIELD:		DATE RECEIVED:	07/23/97
SUBMITTED BY:		COUNTY:	STATE:
WORKED BY	:D. SHEPHERD	FORMATION:	
PHONE NUMBER:			

SAMPLE DESCRIPTION

SAMPLED FROM CONDENSATE TANK DISCHARGE

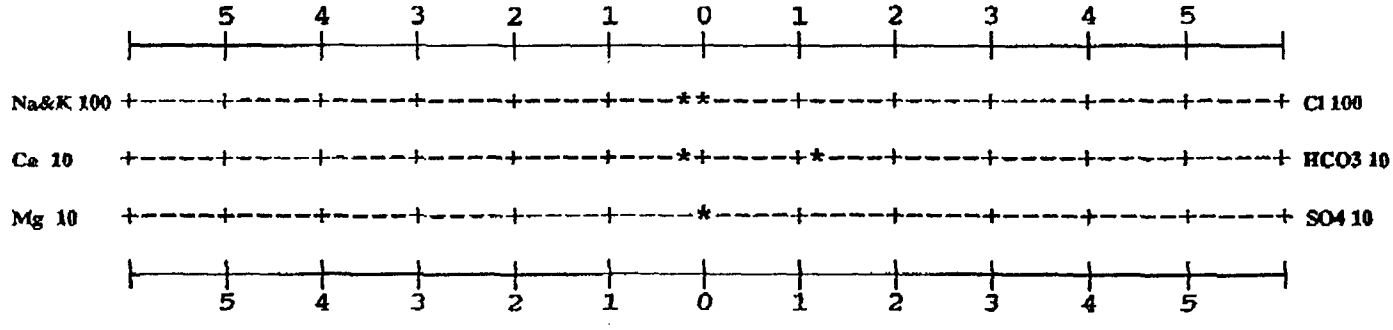
PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY: 1.000 @ 78°F PH: 5.66
RESISTIVITY (CALCULATED): 7.975 ohms @ 75°F

IRON (FE++) :	100 ppm	SULFATE:	0 ppm
CALCIUM:	32 ppm	TOTAL HARDNESS	90 ppm
MAGNESIUM:	2 ppm	BICARBONATE:	744 ppm
CHLORIDE:	355 ppm	SODIUM CHLORIDE(Calc)	583 ppm
SODIUM+POTASS:	469 ppm	TOT. DISSOLVED SOLIDS:	1,658 ppm
H2S: NO TRACE		POTASSIUM CHLORIDE: 10 PPM	

REMARKS

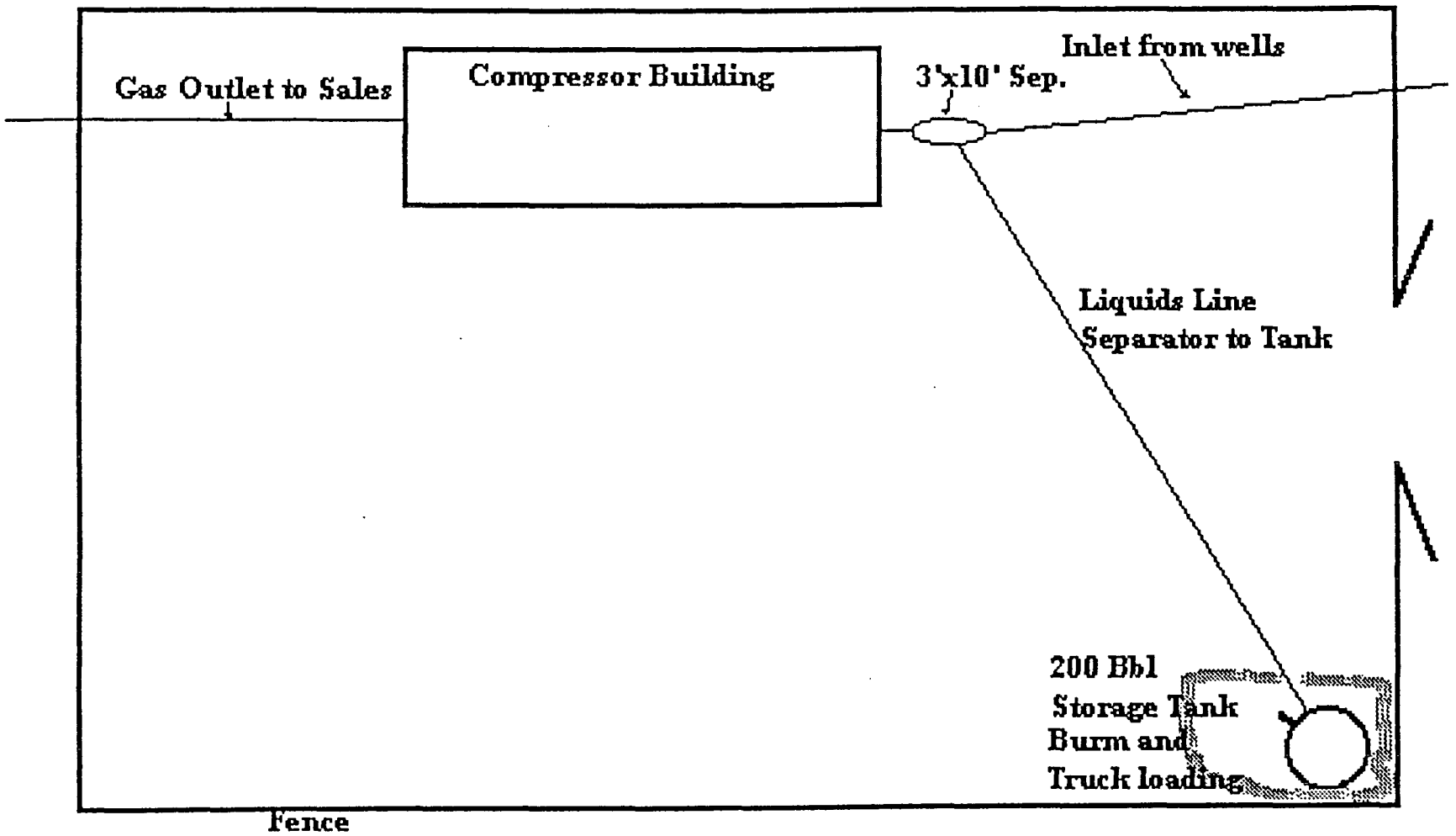
STIFF TYPE PLOT (IN MEQ/L)



ANALYST _____
D. SHEPHERD

** TOTAL PAGE.02 **

EXHIBIT 7



Mallon Oil Company

Gavilan Compressor Station

Wastewater Flow Schematic

9/29/92 JHC

EXHIBIT 8

Water Bearing Formation	Number of Samples	Total Dissolved Solids, mg/l	Total Hardness as $CaCO_3$, mg/l
Quarternary Alluvium	14	404-9,766	14-2,470
San Jose Formation	54	493-4,298	6-2,100
Nacimiento	5	465-3,400	108-1,400
Ojo Alamo	7	694-7,370	4-682
Pictured Cliffs	3	7,567-31,529	No Data
Lewis Shale	4	1,300-5,290	No Data
Mesaverde	4	6,957-13,481	No Data
Morrison	2	7,945-14,586	No Data

Table 2. Concentration range of total dissolved solids and hardness encountered in several water bearing zones within and adjacent to the Lindrith Area. Data source, Water Resources Division, Albuquerque, New Mexico, 1978.

Table 3. Summary of five groundwater chemicalsamples collected from the San Jose and Pictured Cliffs Formation within and adjacent to the Canyon Largo study area (west of the Lindrith Area).

Concentrations expressed in Mg/l or as shown (Data from Water Resources Divison Files, Albuquerque, New Mexico, 1978).

	Ground Water Sample Number and Aquifer					
Parameter	1-Tsj	2-Tsj	3-Kpc	4-Tsj	5-Tsj	New Mexico Gr Water Standar
Silica, Sio_2	8.3	13	--	20	12	
Iron, Fe	.01	.02	--	--	.03	
Calcium, Ca	140	1.7	51	92	10	
Magnesium, Mg	1.5	.0	17	19	4.4	
Sodium, Na	300	250	340	252	301	
Potassium, K	2.5	.9	1.6	--	--	
Bicarbonate, HCO_3	100	318	413	406	386	
Carbonate, CO_3	0	31	0	0	0	
Sulfate, SO_4	920	230	580	488	362	600
Chloride, Cl	5.1	7.5	11	7.6	6.8	250
Flouride, F	.5	1.3	.7	--	--	
Nitrate as NO_3	.2	.2	1.0	1.4	.1	
Total Dissolved Solids	1430	694	1060	1080	886	1000
Total Hardness ($CaCO_3$)	360	4	200	308	43	
pH (Units)	7.6	9.1	8.0	7.4	7.7	6-9

EXHIBIT 10

W01W291

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W291

FARMINGTON LAB

GENERAL INFORMATION			
OPERATOR:	MALLON	DEPTH:	
WELL:	GAVILAN PLANT OFFICE	DATE SAMPLED:	07/23/97
FIELD:		DATE RECEIVED:	07/23/97
SUBMITTED BY:		COUNTY:	STATE:
WORKED BY	:D. SHEPHERD	FORMATION:	
PHONE NUMBER:			

SAMPLE DESCRIPTION

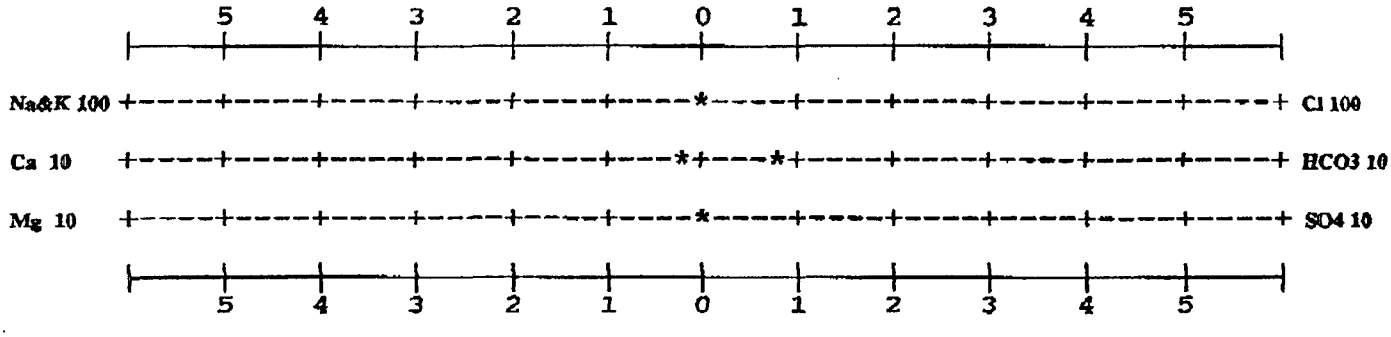
sample for analysis

PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:	1.000 @ 78°F	PH:	7.91
RESISTIVITY (CALCULATED):	10.000 ohms @ 75°F		
IRON (FE++) :	0 ppm	SULFATE:	0 ppm
CALCIUM:	24 ppm	TOTAL HARDNESS	80 ppm
MAGNESIUM:	5 ppm	BICARBONATE:	488 ppm
CHLORIDE:	89 ppm	SODIUM CHLORIDE(Calc)	146 ppm
SODIUM+POTASS:	205 ppm	TOT. DISSOLVED SOLIDS:	861 ppm
H2S: NO TRACE		POTASSIUM CHLORIDE: 3 PPM	

REMARKS

STIFF TYPE PLOT (IN MEQ/L)



ANALYST _____

D. SHEPHERD

EXHIBIT 11

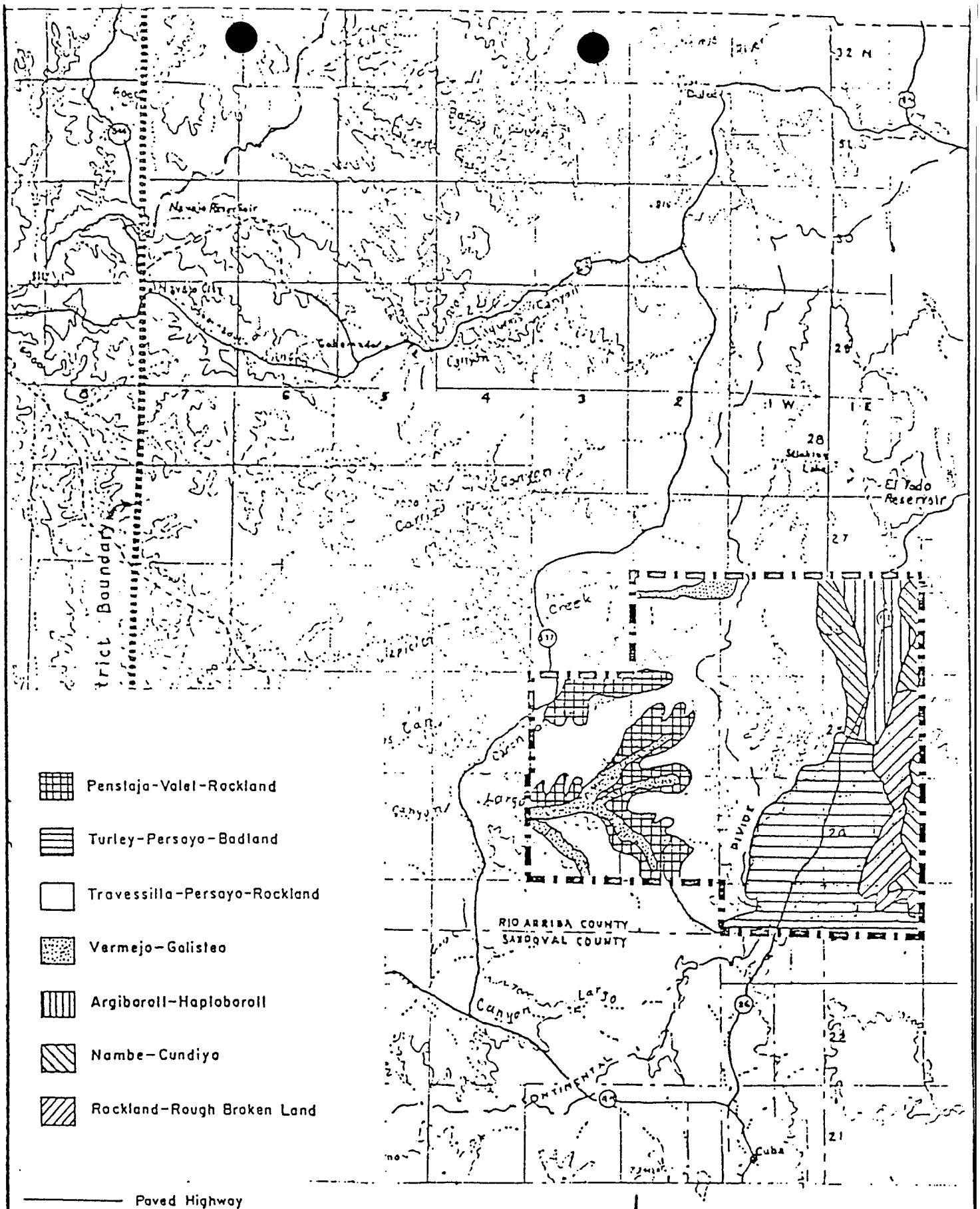


EXHIBIT 12

U.S. GEOLOGICAL SURVEY

GENERALIZED SOILS MAP of the LINDRITH AREA

The associations will be first listed, then followed by a brief summary of the main soil characteristics and related environment. They are: Penistaja-Valent Rockland, Turley-Persayo-Badland, Travessilla-Persayo-Rockland, Vermejo-Galisteo, Argiboroll-Haploboroll, Nambe-Cundiyo and Rockland-Rough Broken Land.

Penistaja-Valent-Rockland association occur on gently sloping and undulating uplands. They have a thin surface layer of light brown fine sandy loam which is noncalcareous. The subsoil consists of a reddish-brown sandy clay loam, moderately thick with the upper zone leached free of lime. Some pockets and thin threads of lime are commonly found in the lower zones of the subsoil. This association is generally well drained even though shale or sandstone occasionally underly these soils within a depth of about 60 inches. This association is characteristic of the main drainage systems west of the Continental Divide.

Turley-Persayo-Badland association is found in the eastern and southern portion of the area along the lower elevations. The Turley soils occur mainly on the undulating valley-filling slopes and somewhat into the valley bottoms. They are strongly calcareous throughout, deep and moderately fine textured. They generally have a thin surface layer of a light brownish-gray silty clay loam or silty loam. This group is slowly permeable so therefore runoff is much higher resulting in extensive erosion and gullying as is evidenced by the many gullies throughout the area.

Persayo soils are characteristic of the steeper slopes found on uplands and ridges. They are composed of a thin layer of calcareous material weathered from the underlying shale parent. They are generally yellowish-brown to light yellow color, containing shale fragments and commonly contain concretions of gypsum and calcium carbonate. Depth to the shale ranges from about 6-18 inches. These soils are also rather impermeable and poorly drained.

For the most part, the Badland component is the result of weathering and erosion of the previous two groups. Soluable salts are leached out and are deposited in low areas where seepage emerges. Vegetative cover is very sparce in this association.

Travessilla-Persayo-Rockland associations are composed of shallow, light-colored, soils dominating gently sloping to moderately steep slopes on mesas and along breaks. They are made up of a thin surface layer of light brownish-gray calcareous fine sandy loam/loamy sand. The subsoil of similar characteristics commonly contain small angular sandstone fragments.

The Persayo soils generally occur on the steeper slopes and are composed of a thin surface layer of a light yellowish brown to light gray calcareous silt clay or silt clay loam. The subsoil contains weathered shale fragments and often contains threads or streaks and pockets of lime and gypsum crystals. This association is generally poorly drained because of the shallow depth to bedrock, mostly less than 20 inches.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

September 24, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-976

Mr. Duane Winkler
Mallon Oil Company
P.O. Box 3256
Carlsbad, New Mexico 88220

RE: Discharge Plan GW-132 Renewal
Gavilan Compressor Station
Rio Arriba County, New Mexico

Dear Mr. Winkler:

The ground water discharge plan GW-132, for the Mallon Oil Company (Mallon) Gavilan Compressor Station located in the SW/4 SE/4 of Section 11, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. The discharge plan consists of the original discharge plan as approved December 9, 1992, and the discharge plan renewal application dated August 5, 1997. 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 10 working days of receipt of this letter.**

The discharge plan was submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission (WQCC) Regulations. It is approved pursuant to Section 3109.A. Please note Sections 3109.E and 3109.F., which provide for possible future amendments or modifications of the plan. Please be advised that approval of this plan does not relieve Mallon of liability should operations result in pollution of surface water, ground water, or the environment.

Please be advised that all exposed pits, including lined pits and open tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that Section 3104 of the regulations require "When a facility has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C. Mallon is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.G.4., this plan is for a period of five years. This approval will expire on September 24, 2002, and Mallon should submit an application in ample time before this date. Note that under Section 3106.F. of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved. It should be noted that all discharge plan facilities will be required to submit the results of an underground drainage testing program as a requirement for discharge plan renewal.

The discharge plan renewal application for the Mallon Oil Company Gavilan Compressor Station is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of $50 plus a flat fee of $1,667.50 for compressor stations. The OCD has not received the filing fee or the flat fee. The filing fee is due upon receipt of this approval. The flat fee may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

William J. LeMay
Director

WJL/mwa
Attachment

xc: OCD Aztec Office

ATTACHMENT TO THE DISCHARGE PLAN GW-132 RENEWAL
MALLON OIL COMPANY
GAVILAN COMPRESSOR STATION
DISCHARGE PLAN APPROVAL CONDITIONS
(September 24, 1997)

1. Payment of Discharge Plan Fees: The $50.00 filing fee shall be submitted upon receipt of the approval. The $1,667.50 required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.

2. Mallon Commitments: Mallon will abide by all commitments submitted in the discharge plan application dated August 5, 1997.

3. Waste Disposal: All wastes shall be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous by characteristics may be disposed of at an OCD approved facility upon proper waste characterization per 40 CFR Part 261.

4. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.

5. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

6. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.

7. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

8. Labeling: All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill, or ignite.

9. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

10. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years thereafter, or prior to discharge plan renewal. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

11. Class V Wells: Leach fields and other wastewater disposal systems at OCD regulated facilities which inject fluid other than domestic waste sewage below the surface are considered Class V injection wells under the EPA UIC program. All class V wells will be closed unless, it can be demonstrated that protectable groundwater will not be impacted in the reasonably foreseeable future. Class V wells must be closed through the Santa Fe Office. The OCD allows industry to submit closure plans which are protective of human health, environment and groundwater as defined by the WQCC, and are cost effective.

12. Housekeeping: All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

13. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the OCD Aztec District Office.

14. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

15. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

16. Certification: Mallon, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Mallon further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

MALLON OIL COMPANY

by_____
Title

P 288 [illegible] 3 976

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PS Form 3800, April 1995

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

December 9, 1992

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-241-886

Mr. Joe H. Cox Jr.
Production Manager
Mallon Oil Company
999 18th St., Suite 1700
Denver, Colorado 80202

Re: Discharge Plan GW-132
Gavilan Compressor Station
Rio Arriba County, New Mexico

Dear Mr. Cox:

The groundwater discharge plan GW-132 for the Mallon Oil Company Gavilan Compressor Station located in the SW/4 SE/4, Section 11, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico is hereby approved under the conditions contained in the enclosed attachment. The discharge plan consists of the application dated September 30, 1992.

The discharge plan was submitted pursuant to Section 3-106 of the New Mexico Water Quality Control Commission Regulations and is approved pursuant to Section 3-109.A.. Please note Section 3- 109.F. provides for possible future amendments or modifications of the plan. Please note that Section 3-104 of the regulations require that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3-107.C. you are required to notify the Director of any facility expansion, production increase, or process modifications that would result in any change in the discharge of water quality or volume. Pursuant to Section 3-109.G.4., this plan approval is for a period of five (5) years. This approval will expire December 9, 1997 and you should submit an application for renewal in ample time before that date.

Please be advised that all exposed pits, including lined pits and open top tanks (tanks exceeding 16 feet in diameter), shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that approval of this plan does not relieve you of liability should your operation result in pollution of surface water, ground water, or the environment which may be actionable under other laws and/or regulations.

The discharge plan application for the Mallon Oil Company Gavilan Compressor Station is subject to the WQCC Regulation 3-114 discharge plan fee. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of fifty (50) dollars plus a flat rate based on the type of facility.

The OCD has not received your $50 filing fee which will now be due upon receipt of this letter. Please make your check payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe office. The flat fee for a discharge plan for a compressor station of less than 1000 hp is $0.00.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

William J. LeMay
by

William J. LeMay
Director

WJL/cee

xc: Denny Foust, OCD Aztec District Office

ATTACHMENT TO THE DISCHARGE PLAN GW-132 APPROVAL
MALLON OIL COMPANY GAVIILAN COMPRESSOR STATION
DISCHARGE PLAN REQUIREMENTS
(December 9, 1992)

1. Drom Storage: All drums will be stored on a pad and curb type containment.

2. Sump Inspection: All pre-existing sumps at this facility will be cleaned and visually inspected on an annual basis. Any new sumps or below-grade tanks will be approved by the OCD prior to installation and will incorporate leak detection in their designs.

3. Berms: All tanks that contain materials other than freshwater will be bermed to contain one and one-third (1-1/3) the capacity of the largest tank within the berm or one and one-third (1-1/3) the total capacity of all interconnected tanks.

4. Pressure testing: All discharge plan facilities are required to pressure test all underground piping at the time of discharge plan renewal. All new underground piping shall be designed and installed to allow for isolation and pressure testing at 3 psi above normal operating pressure.