

GW - 132

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**  
2006 - 1992

**Price, Wayne, EMNRD**

**From:** Price, Wayne, EMNRD  
**Sent:** Wednesday, September 20, 2006 7:49 AM  
**To:** 'rfox@bhgen.com'  
**Subject:** RE: Document retention of Discharge Permits as required by New Mexico Oil Conservation Division

OCD hereby agrees.

**From:** rfox@bhgen.com [mailto:rfox@bhgen.com]  
**Sent:** Tuesday, September 19, 2006 7:36 PM  
**To:** Price, Wayne, EMNRD  
**Cc:** fcarl@bh-corp.com; astulken@bh-corp.com  
**Subject:** Document retention of Discharge Permits as required by New Mexico Oil Conservation Division

Wayne,

Thanks for taking a few minutes with me and discussing the requirements for document retention of Discharge Permits as required by the New Mexico Oil Conservation Division. As I mentioned to you, Black Hills Gas Resources has Discharge Permits at two of its New Mexico Facilities: Espinosa Canyon Amine Plant and Gavilan Compressor Station. Based on our conversation, you stated that Black Hills is not required to maintain hard copies of these permits (along with any relevant correspondence) at these two facilities. At the Espinosa Plant, Black Hills will maintain electronic copies on its computer system which will be readily accessible for field inspections. At our unmanned Gavilan Station, we do not store hard copy records or electronic files. The records for the Gavilan Station are electronically stored in our Golden, Colorado and Rapid City, South Dakota corporate offices. You stated that the document retention situation for both facilities is acceptable to the New Mexico Oil Conservation Division.

Thank you again for your help in this matter.

Randy Fox  
Black Hills Energy  
350 Indiana Street, Suite 400  
Golden, Colorado 80401  
720-210-1334 (direct)  
303-909-9589 (cell)  
303-568-3261 (fax)  
rfox@bhenergy.com

*GW-356*  
*GW-132*



2006 APR 26 PM 1 25

**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

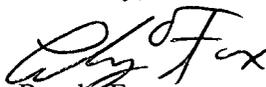
RE: Change of Ownership for  
Discharge Permit GW-132  
Gavilan Compressor Station  
Black Hills Gas Resources, Inc. (wholly owned subsidiary of Black Hills Exploration and  
Production, Inc.)

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

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*Energy, communications...and you.*

[www.blackhillscorp.com](http://www.blackhillscorp.com)

C:\Randy\_Black Hills\_files\E&P\New Mexico\_E&P\Gavilan\Discharge  
Permit\gavilan\_disch\_perm\_rev\_4\_06.doc

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 2/18/03  
or cash received on \_\_\_\_\_ in the amount of \$ 400<sup>00</sup>  
from MALLON OIL COMPANY  
for GAVILAN COMP. ST GW-132  
Submitted by: <sup>(Family Name)</sup> WAYNE PRICE Date: <sup>CP No.</sup> 2/26/03  
Submitted to ASD by: [Signature] Date: "  
Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee \_\_\_\_\_ New Facility \_\_\_\_\_ Renewal   
Modification \_\_\_\_\_ Other \_\_\_\_\_  
(Optional)

Organization Code 521.07 Applicable FY 2002<sup>3</sup>

To be deposited in the Water Quality Management Fund.  
Full Payment  or Annual Increment \_\_\_\_\_

DO NOT ACCEPT THIS CHECK without confirmation of presence of Federal Watermark on back, color security features and listed on

MALLON OIL COMPANY  
999 18TH STREET, SUITE 1700  
DENVER, COLORADO 80202  
703.733.2333

BANK ONE, COLORADO N.A.  
DENVER, COLORADO

CHECK NO. [REDACTED]

CHECK NUMBER	DATE	PAY EXACTLY
[REDACTED]	Feb 18, 2003	\$400.00

PAY TO THE ORDER OF **\$400dols00cts**  
FOUR HUNDRED DOLLARS AND NO CENTS

VOID IF NOT PRESENTED FOR PAYMENT WITHIN 90 DAYS

TO THE ORDER OF  
WATER QUALITY MANAGEMENT FUND  
C/O NAOIL CONSERVATION DIV  
1225 SOUTH SAINT FRANCIS DR  
SANTA FE, NM 87505

GW-132



2006 APR 26 PM 1 26

**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: Additional Information for  
Discharge Permit GW-356  
Espinosa Canyon Amine Plant  
Black Hills Cabresto Pipeline, LLC (wholly owned subsidiary of Black Hills Exploration  
and Production, Inc.)

Dear Mr. Ford:

In an April 12, 2006 letter, Black Hills Cabresto Pipeline, LLC submitted to the Oil Conservation Division (OCD) a minor modification to Discharge Permit GW-356 for the Espinosa Canyon Amine Plant. As we discussed in our meeting on April 14, 2006, OCD requested additional information concerning the horsepower rating of the natural gas compressor engines at the Espinosa Canyon Amine Plant. This plant currently has three Caterpillar G3516 compressor engines with plans to possibly add three more such engines in the future. All six compressor engines (both current and planned) have a site rating of 1,113 horsepower and have been permitted by the Air Quality Bureau of the New Mexico Environment Department.

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

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*Energy, communications...and you.*

[www.blackhillscorp.com](http://www.blackhillscorp.com)

C:\Randy\_Black Hills\_files\E&P\New Mexico\_E&P\amine plant\Discharge  
Permit\_Plan\updates\_to\_dischargeplan\espinosa\_disch\_perm\_rev\_4\_24\_06.doc



# 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.

Mr. Robert Blaylock

January 13, 2003

Page 2

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](mailto: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 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**

\_\_\_\_\_  
Company Representative- print name

\_\_\_\_\_  
Date \_\_\_\_\_  
Company Representative- Sign

Title \_\_\_\_\_

**AFFIDAVIT OF PUBLICATION**

**Ad No. 47000**

**STATE OF NEW MEXICO  
County of San Juan:**

CONNIE PRUITT, being duly sworn says:  
That she is the Advertising Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meeting of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):  
Tuesday, November 5, 2002.

And the cost of the publication is \$72.80.

Connie Pruitt

ON 11-11-02 CONNIE PRUITT appeared before me, whom I know personally to be the person who signed the above document.

Dennis Beck  
My Commission Expires April 2, 2004.

**COPY OF PUBLICATION**

918 Legals

**NOTICE OF PUBLICATION**

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

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

(GW-132) - Mallon Oil Company, Robert Blaylock, District Mgr., P.O. Box 2797, Durango Colorado, 81302, has submitted a discharge plan renewal application for their 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. Natural gas products, waste oil and water is stored in above ground tanks prior to being transported off-site to OCD approved facilities. Ground water most likely to be affected in the event of an accidental discharge is at a depth of approximately 300 feet with an estimated total dissolved solids concentration of approximately 1500 mg/l to 2000 mg/l. The discharge plan addresses how oilfield products and waste will be properly handled, stored, and disposed of, including how spills, leaks, and other accidental discharges to the surface will be managed in order to protect fresh water.

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

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 31 day of October, 2002.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

SEAL  
LORI WROTENBERY, Director

Legal No. 47000, published in The Daily Times, Farmington, New Mexico, Tuesday, November 5, 2002.

THE SANTA FE  
**NEW MEXICAN** RECEIVED  
 Founded 1849

NOV 1 2 2002

**OIL CONSERVATION  
 DIVISION**

NM OIL CONSERVATION  
 1220 ST. FRANCIS DR.  
 SANTA FE, NM 87505  
 ATTN WAYNE PRICE

AD NUMBER: 289270      ACCOUNT: 56660  
 LEGAL NO: 72433      P.O.#: 02199000249  
 195 LINES      1 time(s) at \$ 85.96  
 AFFIDAVITS:      5.25  
 TAX:      5.70  
 TOTAL:      96.91

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

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 31 day of October, 2002.

STATE OF NEW MEXICO  
 OIL CONSERVATION DIVISION

SEAL

LORI WROTENBERY, Director  
 Legal #72433  
 Pub. Nov. 6, 2002

**AFFIDAVIT OF PUBLICATION**

STATE OF NEW MEXICO  
 COUNTY OF SANTA FE

I, K. G. Gorman being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTE FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication #72433 a copy of which is hereto attached was published in said newspaper 1 day(s) between 11/06/2002 and 11/06/2002 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 6 day of November, 2002 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/s/ K. G. Gorman  
 LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this  
 6 day of November A.D., 2002

Notary Laura S. Herdige

Commission Expires 11/23/03

**NOTICE OF PUBLICATION**

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

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 31 day of October, 2002.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



LORI WROTENBERY, Director

SEAL





MALLON OIL COMPANY  
 999 18TH STREET, SUITE 1700  
 DENVER, COLORADO 80202  
 (303) 293-2333

BANK ONE, COLORADO N.A.  
 DENVER, COLORADO  
 Acct 119079

Vendor No.	Vendor Name	Date	Check No.	Check Total
11231	NMED - WATER QUALITY MGT	Oct 22, 2002	[REDACTED]	\$100.00

VOUCHER	VENDOR INV #	INV DATE	TOTAL AMOUNT	PRIOR PAYMENTS	NET AMOUNT
10-10-41	102202	10/22/02	100.00	0.00	100.00
TOTAL INVOICES PAID					100.00

GW-132

PAYEE: DETACH THIS STATEMENT BEFORE DEPOSITING

**MALLON OIL COMPANY**  
 999 18TH STREET, SUITE 1700  
 DENVER, COLORADO 80202  
 (303) 293-2333

**BANK ONE, COLORADO N.A.**  
 DENVER, COLORADO  
 Acct 119079

CHECK NO. **25208** 1030

PAY TO THE ORDER OF **NMED - WATER QUALITY MGT**  
 2049 S PACHECO  
 SANTA FE, NM 87505

**100dols00cts**  
 ONE HUNDRED DOLLARS AND NO CENTS

CHECK NUMBER	DATE	PAY EXACTLY
25208	Oct 22, 2002	\$100.00

VOID IF NOT PRESENTED FOR PAYMENT WITHIN 90 DAYS

*[Signature]*

⑈025208⑈ ⑆102001017⑆ 1190795722⑈

**NEW MEXICO ENVIRONMENT DEPARTMENT  
REVENUE TRANSMITTAL FORM**

Description	FUND	CES	DFA ORG	DFA ACCT	ED ORG	ED ACCT	AMOUNT	
1 CY Reimbursement Project Tax	064	01						1
5 Gross Receipt Tax	064	01		2329	900000	2329134		2
3 Air Quality Title V	092	13	1300	1896	900000	4169134		3
4 PRP Prepayments	248	14	1400	9696	900000	4969014		4
2 Climax Chemical Co.	248	14	1400	9696	900000	4969015		5
6 Circle K Reimbursements	248	14	1400	9696	900000	4969248		6
7 Hazardous Waste Permits	339	27	2700	1696	900000	4169027		7
8 Hazardous Waste Annual Generator Fees	339	27	2700	1696	900000	4166339		8
0 Water Quality - Oil Conservation Division	341	29		2329	900000	2329029	\$ 100.00	10
1 Water Quality - GW Discharge Permit	341	29	2900	1696	900000	4189029		11
2 Air Quality Permits	631	31	2500	1696	900000	4169031		12
3 Payments under Protest	651	33		2919	900000	2919033		13
4 Xerox Copies	662	34		2349	900000	2349001		*14
5 Ground Water Penalties	662	34		2349	900000	2349002		15
6 Witness Fees	662	34		2349	900000	2439003		16
7 Air Quality Penalties	662	34		2349	900000	2349004		17
8 OSHA Penalties	662	34		2349	900000	2349005		18
9 Prior Year Reimbursement	652	34		2349	900000	2349006		19
10 Surface Water Quality Certification	652	34		2349	900000	2349009		20
11 Jury Duty	652	34		2349	900000	2349012		21
2 CY Reimbursements ( i.e. telephone)	652	34		2349	900000	2349014		22
3 UST Owner's List	783	24	2500	9696	900000	4969201		*23
4 Hazardous Waste Notifiers List	783	24	2500	9696	900000	4969202		*24
5 UST Maps	783	24	2500	9696	900000	4969203		*25
6 UST Owner's Update	783	24	2500	9696	900000	4969205		*26
8 Hazardous Waste Regulations	783	24	2500	9696	900000	4969207		*28
9 Radiologic Tech. Regulations	783	24	2500	9696	900000	4969208		*29
10 Superfund CERLIS List	783	24	2500	9696	900000	4969211		*30
11 Solid Waste Permit Fees	783	24	2500	9696	900000	4969213		31
12 Smoking School	783	24	2500	9696	900000	4969214		32
13 SWQB - NPS Publications	783	24	2500	9696	900000	4969222		*33
14 Radiation Licensing Regulation	783	24	2500	9696	900000	4969228		*34
15 Sale of Equipment	783	24	2500	9696	900000	4969301		*35
16 Sale of Automobile	783	24	2500	9696	900000	4969302		*36
7 Lost Recoveries	783	24	2500	9696	900000	4969814		**37
8 Lost Repayments	783	24	2500	9696	900000	4969815		**38
9 Surface Water Publication	783	24	2500	9696	900000	4969801		39
0 Exxon Reese Drive Ruidoso - CAF	783	24	2500	9696	900000	4969242		40
1 Emerg. Hazardous Waste Penalties NOV	957	32	9600	1696	900000	4164032		41
2 Radiologic Tech. Certification	987	05	0500	1696	900000	4169005		42
4 Ust Permit Fees	989	20	3100	1696	900000	4169020		44
5 UST Tank Installers Fees	989	20	3100	1696	900000	4169021		45
6 Food Permit Fees	991	26	2800	1696	900000	4169026		46
3 Other								43

Gross Receipt Tax Required

\*\* Site Name & Project Code Required

TOTAL

\$ 100.00

Contact Person: ED MARTIN

Phone: 476-3492

Date: 10/25/02

Received in ASD By: \_\_\_\_\_

Date: \_\_\_\_\_ RT #: \_\_\_\_\_

ST #: \_\_\_\_\_

**Price, Wayne**

**From:** Price, Wayne  
**Sent:** Wednesday, May 08, 2002 10:34  
**To:** 'rblaylock@frontier.net'  
**Subject:** MEMODPNO.DOC

**Memorandum of Meeting or Conversation**

Telephone   X    
Personal         
E-Mail   X    
FAX:       

**Date:** May 05, 2002

**Originating Party:** Wayne Price-OCD

**Other Parties:** Bob Blaylock-Mallon Oil Co. 970-382-9100 E-mail rblaylock@frontier.net

**Subject:** Discharge Plan Renewal Notice for the following Facilities:

**GW-280** Gavilan Comp St expires Sept 24, 2002  
**GW-\_\_\_** Name expires  
**GW-\_\_\_** Name expires  
**GW-\_\_\_** Name expires

**WQCC 3106.F.** If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge plan continued under this provision remains fully effective and enforceable. An application for discharge plan renewal must include and adequately address all of the information necessary for evaluation of a new discharge plan. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved. [12-1-95]

**Discussion/Notification:** Notification of WQCC 3106F ; notice to submit Discharge Plan renewal application with \$100.00 filing fee for the above listed facilities.

**Conclusions or Agreements:**

**Please send DP application and \$ 100.00 filing Fee before May 24, 2002 to retain WQCC 3106.F provision.**

x

**Signed:** \_\_\_\_\_ electronic signature

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [REDACTED] dated 10/13/97

or cash received on \_\_\_\_\_ in the amount of \$ 50.00

from Mallon Oil

for Gravelon C.S. GW 132

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Submitted to ASD by: R. Anderson Date: 10/20/97

Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee Xr New Facility \_\_\_\_\_ Renewal \_\_\_\_\_  
Modification \_\_\_\_\_ Other \_\_\_\_\_

Organization Code 521.07 Applicable FY 98

To be deposited in the Water Quality Management Fund.

Full Payment \_\_\_\_\_ or Annual Increment \_\_\_\_\_

**MALLON OIL COMPANY**

999 18TH STREET  
SUITE 1700  
DENVER, COLORADO 80202  
(303) 293-2333

BANK ONE, COLORADO N.A.  
DENVER, COLORADO  
23-101 / 1020

PAY

\*\*\*FIFTY DOLLARS AND NO%\*\*\*\*\*

TO  
THE  
ORDER  
OF

NMED WATER QUALITY MANAGEMENT

CHECK NUMBER	DATE	PAY EXACTLY
[REDACTED]	10/13/97	***\$50.00***

VOID IF NOT PRESENTED FOR PAYMENT WITHIN 90 DAYS

Raymond R. Long  
Anthony J. Chapman

**MALLON OIL COMPANY**

999 18TH STREET / SUITE 1700  
DENVER COLORADO 80202 / (303) 293-2333



PAYEE	CHECK NUMBER	DATE
NMED-WATER QUALITY MANAGEMENT		10/13/98

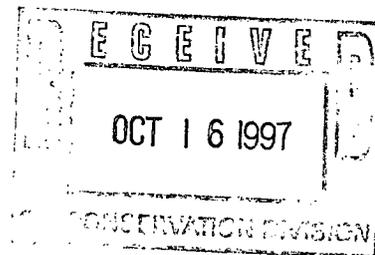
GAVILAN COMPRESSOR STATION-GROUND WATER DISCHARGE

GW-132

# Mallon Oil Company

Denver/Colorado ♦ Carlsbad/New Mexico

a Mallon Resources subsidiary



October 14, 1997

Mr. William J. LeMay  
State of New Mexico  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

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

Dear Mr. LeMay:

Please find enclosed Mallon Oil Company's check number 1843 in the amount of \$50.00 to cover the filing fee for the above referenced discharge plan.

Should you need anything further or have any questions please contact the undersigned at 505-885-4596. Thank you for your assistance in this matter.

Sincerely,

**MALLON OIL COMPANY**

A handwritten signature in cursive script that reads "Theresa A. McAndrews".

Theresa A. McAndrews  
Office Manager

Enclosures



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

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

P 288 258 984

October 3, 1997

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-288-258-984**

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**

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

Sent to	
Street & Number	
Post Office, State, & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Dear Mr. Winkler:

The New Mexico Oil Conservation Division approval letter date September 24, 1997 incorrectly stated that Mallon Oil Company owed a flat fee renewal of \$1,667.50 for Gavilan Compressor Station (GW-132). There are no flat fees for compressor stations with a combined horsepower of 1,000 or less. Since Gavilan Compressor Station is less than 1,000 combined horsepower, no flat fee is required. The \$50.00 filing fee is still required. Enclosed is check number 1830 for \$1,717.50.

On behalf of the OCD I would like to apologize for any inconveniences. Should you need further assistance, please contact me at (505) 827-7155.

Sincerely,



Mark Ashley  
Geologist

xc: OCD Artesia Office



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office  
2105 Osuna NE

Albuquerque, New Mexico 87113  
Phone: (505) 761-4525 Fax: (505) 761-4542

August 29, 1997

William J. Lemay, Director  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Dear Mr. Lemay:

This responds to your agency's public notices dated August 1 and August 7, 1997, regarding the discharge plan applications and renewals for the two applicants described below:

**(GW-114) - Dowell, A Division of Schlumberger Technology Corporation.** Mr. Lynn Northcutt has submitted an application for renewal of the company's approved discharge plan for the Artesia Service facility located in Section 4, Township 17 South, Range 26 East, Eddy County, New Mexico. The application also includes a plan for cleaning up vadose zone and groundwater contamination beneath the facility. Potential discharges will be stored in a closed top receptacle, or captured on pad and curb type containment.

**(GW-132) - Mallon Oil Company.** Mr. Duane Winkler has submitted an application for renewal of the company's approved discharge plan for the Gavilan Compressor Station located in Section 11, Township 25 North, Range 2 West, Rio Arriba County, New Mexico. Potential discharges will be stored in closed top receptacles prior to offsite disposal or recycling at a site approved by the Oil Conservation Division.

The U.S. Fish and Wildlife Service (Service) heartily endorses the Oil Conservation Division (Division) approving closed top receptacles to contain discharges at these two facilities as the closed tops prevent migratory bird and other wildlife direct access to potentially toxic chemicals. We also recommend the use of berms or some other spill containment methodology around the storage receptacles for the operations above to help prevent migration of contaminated waters into the surface waters of New Mexico during any accidental rupture or spill.

For discharge plan GW-114 the Service also recommends the use of excluding technology (e.g., nets, fences, etc.) over the pad and curb containment structure to prevent access by migratory birds and other wildlife to wastewater and contaminated groundwater which may contain toxic chemicals, or which may harbor a surface oil sheen. During flight, migratory birds may not distinguish between this structure and a

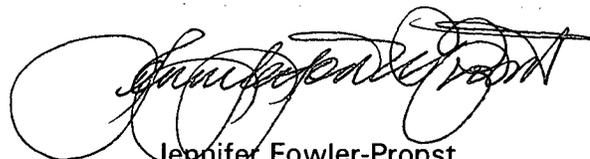
natural waterbody: the artificial waterbody may serve as an "attractive nuisance" if measures are not taken to exclude migratory birds from access. Alternatively, the applicants or the Division may elect to demonstrate that the retained waters are "bird-safe" (e.g., can meet New Mexico general water quality standards 1102.B, 1102.F, and 3101.K or 3101.L).

Our intent is to inform and intercede before any migratory bird deaths occur, since these birds constitute a legally protected resource. Under the Migratory Bird Treaty Act (MBTA), the courts have held that an operator of wastewater or contaminated water storage facilities may be held liable for an "illegal take" of migratory birds. An "illegal take" has been interpreted to include accidental poisoning or accumulation of harmful concentrations of contaminants by migratory birds, which might occur as a result of access to the stored fluids. Hydrocarbon pollutants, for instance, can be carried to the nest on breast feathers, on feet, or in nesting materials, where the eggs can subsequently become contaminated, leading to embryo death and reduced hatchability. If the construction or operation of the open pad and curb containment structure results in migratory bird deaths and the problem is not addressed, the operator may be held liable under the enforcement provisions of the MBTA.

Although the comments we have provided in this letter are primarily designed to safeguard migratory birds and threatened and endangered species, incorporation of our recommendations in this discharge plan would also tend to be protective of other wildlife which may reside at or visit the disposal site. We encourage your agency to solicit additional comments from the New Mexico Department of Game and Fish to assist in the protection of wildlife.

Thank you for the opportunity to review and comment on these discharge plan applications. If you have any question about these comments, please call Dennis W. Byrnes at (505) 761-4525.

Sincerely,



Jennifer Fowler-Propst  
Field Supervisor

cc:

Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico  
Geographic Manager, New Mexico Ecosystems, U.S. Fish and Wildlife Service,  
Albuquerque, New Mexico  
Migratory Bird Office, U.S. Fish and Wildlife Service, Albuquerque, New Mexico

# Affidavit of Publication

STATE OF NEW MEXICO } ss.  
County of Rio Arriba

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

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

(GW-132) - Mallon Oil Company, Duane Winkler, (505) 885-4596; P.O. Box 3256, Carlsbad, New Mexico 88220, has submitted a discharge application for renewal of its previously approved discharge plan for the 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. All wastes generated will be stored in closed top receptacles prior to offsite disposal or recycling at an OCD approved site. Ground water most likely to be affected in the event of an accidental discharge is at a depth of approximately 200 feet with a total dissolved solids concentration of approximately 1,200 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

109

10.80  
5.00  
5.80  
2.83  
8.63

I, Robert Trapp, being first duly sworn, declare and say that I am the Publisher of the Rio Grande Sun, a weekly newspaper, published in the English language, and having a general circulation in the City of Espanola and County of Rio Arriba, State of New Mexico, and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 of the Session Laws of 1937; that the publication, a copy of which is hereto attached, was published in said paper once each week for ..... consecutive weeks, and on the same day of each week in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement, the first publication being on the 21<sup>th</sup> day of Aug 1997 and the last publication on the 21<sup>th</sup> day of Aug 1997; that payment for said advertisement has been (duly made), or (assessed as court costs); that the undersigned has personal knowledge of the matters and things set forth in this affidavit.

**RECEIVED**  
AUG 25 1997  
Environmental Bureau  
Oil Conservation Division

Robert Trapp  
Publisher

Subscribed and sworn to before me this 21 day of Aug A.D., 1997

Ruth J. Trapp  
Notary Public

My Commission expires 5-17-01

OKM  
8-25-97


**STATEMENT**

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan renewal application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan applications, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing

shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

# The Santa Fe New Mexican

Since 1849 We Read You

AUG 19 1997

NM OIL DIVISION  
ATTN: SALLY MARTINEZ  
2040 S. PACHECO ST.  
SANTA FE, NM 87505

AD NUMBER: 680671

ACCOUNT: 56689

LEGAL NO: 62207

P.O. #: 96-199-002997

171 LINES ONCE at \$ 68.40

Affidavits: 5.25

Tax: 4.60

Total: \$ 78.25

## NOTICE OF PUBLICATION

### STATE OF NEW MEXICO

#### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

#### OIL CONSERVATION DIVISION

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Any interested person may

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

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of August 1997.

STATE OF NEW MEXICO  
OIL CONSERVATION  
DIVISION  
WILLIAM J. LEMAY,  
Director  
Legal #62207  
Pub. August 14, 1997

## AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO  
COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a News paper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 62207 a copy of which is hereto attached was published in said newspaper once each WEEK for ONE consecutive week(s) and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 14 day of AUGUST 1997 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/

*Betsy Perner*  
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 14 day of AUGUST A.D., 1997

Notary Laura L. Harding  
Commission Expires 11/23/99

OK MM

8-20-97



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

August 11, 1997

RIO GRANDE SUN  
P. O. Box 790  
Española, New Mexico 87532

RE: NOTICE OF PUBLICATION

ATTN: ADVERTISING MANAGER

Dear Sir/Madam:

Please publish the attached notice one time immediately on receipt of this request. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.

Immediately upon completion of publication, please send the following to this office:

1. Publisher's affidavit in duplicate.
2. Statement of cost (also in duplicate.)
3. CERTIFIED invoices for prompt payment.

We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.

Please publish the notice no later than August 18, 1997.

Sincerely,

*Sally E. Martinez*  
Sally E. Martinez  
Administrative Secretary

Attachment

7 765 962 233

Receipt for  
Certified Mail

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)



Sent to	
Street No.	
City	Rio Grande Sun
P.O. Box No.	Box 790
Post Office	Espanola, NM 87532
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

August 11 \_\_\_\_\_, 1997

*THE NEW MEXICAN*  
202 E. Marcy  
Santa Fe, New Mexico 87501

*RE: NOTICE OF PUBLICATION*

*PO #96-199-002997*

*ATTN: Betsy Perner*

*Dear Sir/Madam:*

*Please publish the attached notice one time immediately on receipt of this request. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.*

*Immediately upon completion of publication, please send the following to this office:*

- 1. Publisher's affidavit.*
- 2. Invoices for prompt payment.*

*We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.*

*Please publish the notice on Thursday, August 14, 1997.*

*Sincerely,*

*Sally Martinez*  
Sally E. Martinez  
Administrative Secretary

*Attachment*

**NOTICE OF PUBLICATION**

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

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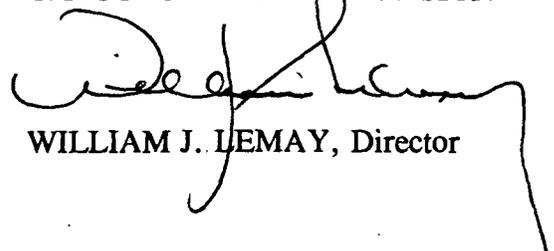
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Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan renewal application may be viewed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

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of August 1997.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY, Director

SEAL

**NOTICE OF PUBLICATION**

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

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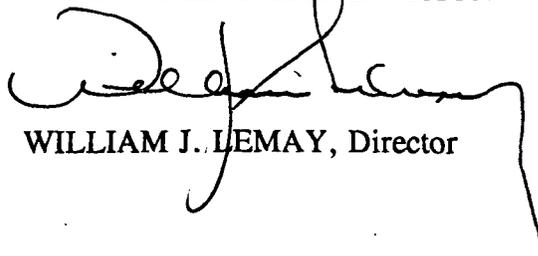
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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 7th day of August 1997.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY, Director

S E A L

P. O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 S. First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Road  
Aztec, NM 87410  
District IV - (505) 827-7131

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

Revised 12/

Submit Orig  
Plus 1 Cr  
to San  
Copy to appropr  
District C



**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES,  
GAS PLANTS, REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS**  
(Refer to the OCD Guidelines for assistance in completing the application)

New                       Renewal                       Modification

GW-132

1. Type: Compressor Station
2. Operator: Mallon Oil Company  
Address: P.O. Box 3256, Carlsbad, NM 88220  
Contact Person: Duane C. Winkler Phone: (505) 885-4596
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 OCI 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: Duane C. Winkler Title: Operations Manager

Signature: *Duane C. Winkler* Date: August 5, 1997

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 a total combined site rated horsepower is 200-290 HP.

2. Operator/Legally Responsible Party and Local Representative

Operator: Mallon Oil Company  
P.O. Box 3256  
Carlsbad, New Mexico 88220  
(505) 885-4596  
Attention: Mr. Duane C. Winkler

Local Representative: Mr. Jeff Davis (Contract Pumper)  
P.O. Box 509  
La Plata, New Mexico 87029  
(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 2 BWPM and 25 BOPM are extracted by the separator with the present production stream of about 500 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 vendors.

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 commingle 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 vendors.

#### 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 Enterprises  
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 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).

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

2. Generalized maps and cross-sections.  
Not Applicable
3. Potentiometric maps for aquifers potentially affected.  
Not Applicable
4. Porosity, hydraulic conductivity, storativity and other hydrologic parameters of the aquifer.  
Not Applicable
5. Specific information on the water quality of the receiving aquifer.  
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 aquifer.  
Not Applicable

13. Other Compliance Information

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

LINDRITH QUADRANGLE 16

RIO JICARILLA & SAN JUAN COUNTIES  
R.2 W

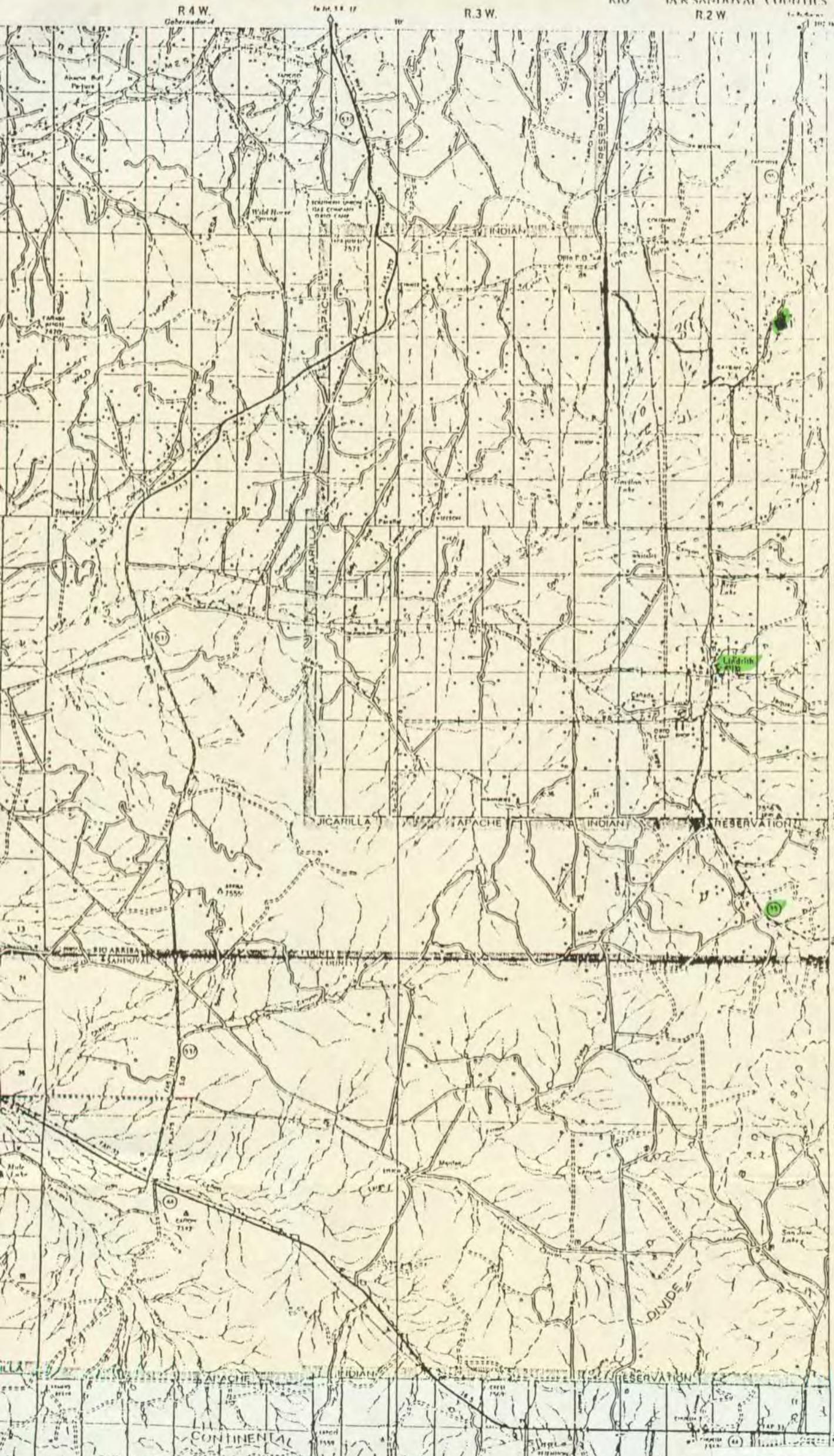


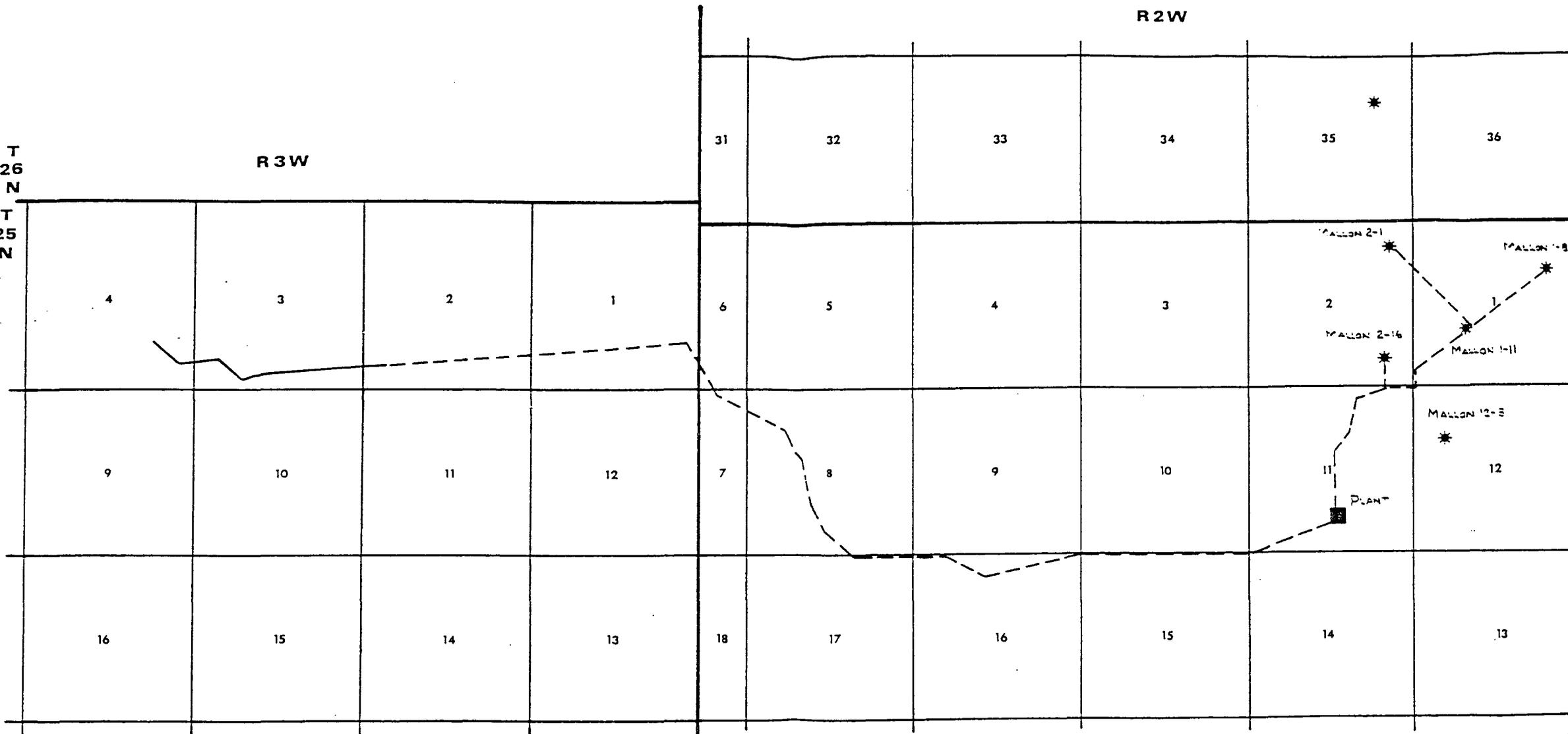
EXHIBIT 1

R 2W

R 3W

T 26 N  
T 25 N

EXHIBIT 2  
T 26 N  
T 25 N



DISCHARGE PIPELINE



**CUSTOM ENERGY CONST., INC.**

DESIGN, FABRICATION, & INSTALLATION OF OIL & GAS EQUIP.  
BOX 9486 PHONE  
CASPER, WYOMING 82609 (307) 265-8563

GAVILAN FIELD AREA

PIPELINE MAP

RIO ARRIBA COUNTY NEW MEXICO

PROPERTY OF MALLON OIL COMPANY

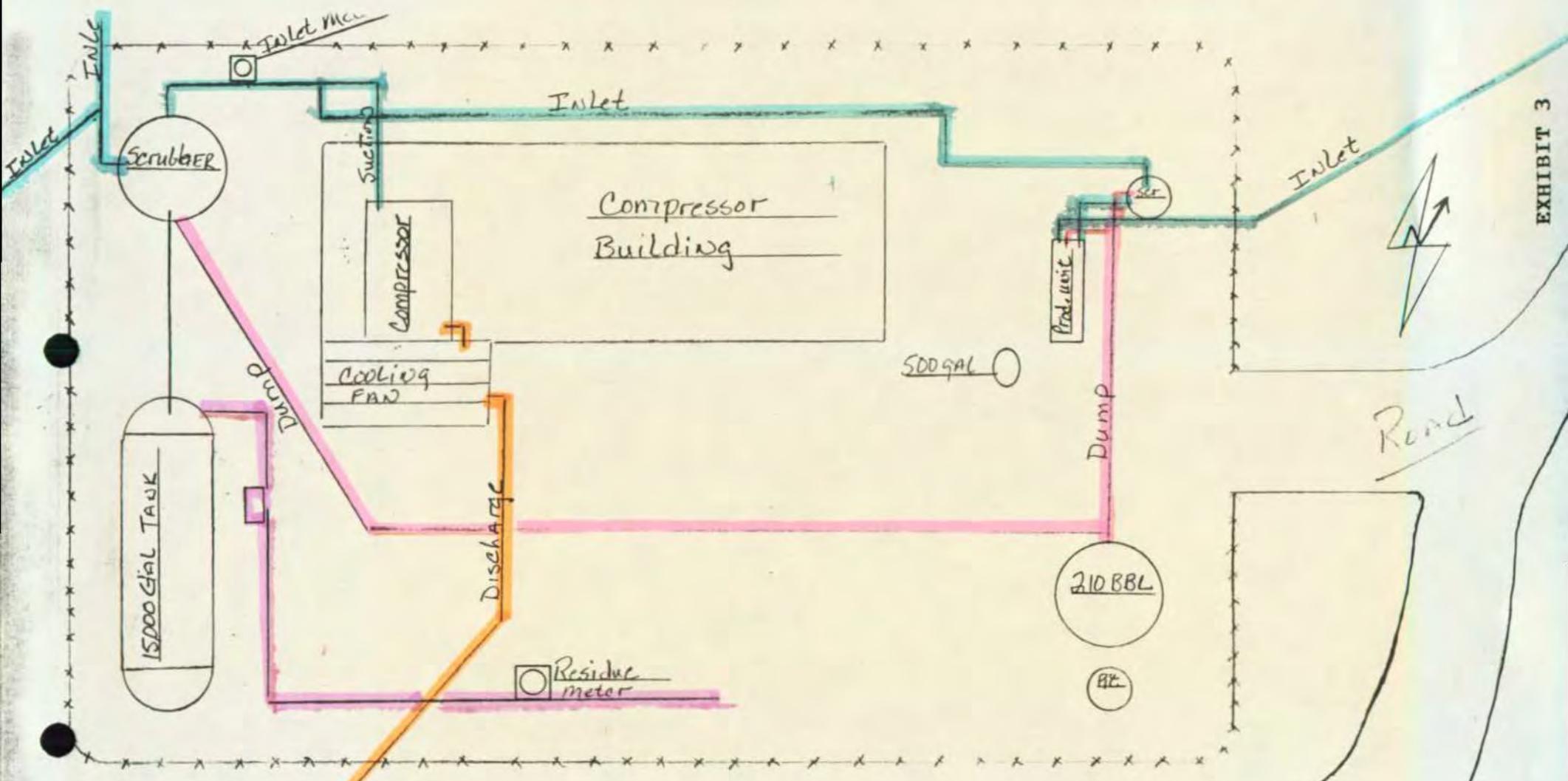


EXHIBIT 3

PAVILAN

Inlet Gas

Discharge Gas

Pumps to TANK

Residue Liquids

PLANT

Handwritten signature or initials.



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)

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## 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.

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## 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.

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(Continued)

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**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.

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**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.

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**Extinguishing Media**

Water Spray, Foam, Dry Chemical, CO2.

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**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.

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**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.

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**Initial Containment**

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

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**Spill Clean Up**

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

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(Continued)

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## 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.

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### 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.

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### 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.

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

Ventilation: Normal shop ventilation.

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### 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.

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### # Exposure Guidelines

#### Applicable Exposure Limits

If oil mist is generated, exposure limits apply.

PEL (OSHA)	5 mg/m <sup>3</sup> , 8 Hr. TWA
TLV (ACGIH)	5 mg/m <sup>3</sup> , 8 Hr. TWA, STEL 10 mg/m <sup>3</sup>

(Continued)

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**EXPOSURE CONTROLS/PERSONAL PROTECTION**(Continued)

AEL \* (DuPont)

Notice of Intended Changes (1996)  
5 mg/m<sup>3</sup>, 8 Hr. TWA, (As sampled by  
method that does not collect vapors)  
5 mg/m<sup>3</sup>, 8 Hr. TWA

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\* 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.

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**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)

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**STABILITY AND REACTIVITY****Chemical Stability**

Stable at normal temperatures and storage conditions.

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**Conditions to Avoid**

Heat, sparks, and flames.

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**Incompatibility with Other Materials**

Incompatible or can react with oxidizers.

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**Decomposition**

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

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**Polymerization**

Polymerization will not occur.

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**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.

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(Continued)

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## ECOLOGICAL INFORMATION

### Ecotoxicological Information

No specific aquatic data available for this product.

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## 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.

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### 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.

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## TRANSPORTATION INFORMATION

### Shipping Information

DOT  
Not regulated.

ICAO/IMO  
Not restricted.

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## 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)

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**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.

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**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%

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**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.

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(Continued)

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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

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# Indicates updated section.

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End of MSDS

# MATERIAL SAFETY DATA SHEET

METHANOL

MSDS No.  
HCROO1423

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	Telephone Numbers EMERGENCY 800/424-9300 CHEMTREC 800/245-4532 HOT LINE CUSTOMER SERVICE 713/652-7200 INFO ONLY		
Other Names METHYL ALCOHOL; (MEETS ASTM D-1152 SPECIFICATIONS); WOOD ALCOHOL; WOOD NAPHTHA; WOOD SPIRITS; CARBINOL; COLUMBIAN SPIRITS; PYROXYLIC SPIRITS; MANHATTAN SPIRITS.			
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. E000142300	UN/NA ID No. UN 1230	
II. DANGER Summary of Hazards			
<p><b>EXTREMELY FLAMMABLE!</b> OSHA/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.</p>			
III. Fire and Explosion			
Flash Point (Method) AP 53°F (D-56) SEE "FIRE & EXPLOSION HAZARDS"	Autoignition Temperature (Method) AP 725°F (E-659) BASED UPON NFPA "METHANOL"	Flammable Limits (% Vol. in Air) At Normal Atmospheric Temperature and Pressure Lower AP 6.0 Upper AP 36.5 BASED UPON NFPA "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 CD2 WATER FOG, WATERSPRAY, AND FOAM CAN COOL THE FIRE, BUT PROBABLY WILL NOT ACHIEVE EXTINGUISHMENT.	INERT GAS - HALON/N2 FOAM	HAZARD RATING: 4 - Extreme 3 - High 2 - Moderate 1 - Slight 0 - Insignificant
Special Firefighting Procedures	<p>* Chronic Health Hazard - See Section IV.</p> <p>MIXTURES WITH WATER CONTAINING MORE THAN 21 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 THERE IS A RISING SOUND OF WHISTLING SAFETY DEVICES OR BARK DISCOLORIZATION.</p>		

SEQ:

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\*\*\*FOR DISCLAIMER OF LIABILITY SEE THE STATEMENT ON PAGE 4\*\*\*

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**EXHIBIT 5**

#### IV. Health Hazards

**Summary of Acute 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)
Inhalation	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.)	<input checked="" type="checkbox"/>
Eye Contact	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.	<input checked="" type="checkbox"/>
Skin Absorption	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.)	<input checked="" type="checkbox"/>
Skin Irritation	SKIN IRRITATION OR MORE SERIOUS DISORDERS MAY OCCUR UPON PROLONGED AND REPEATED CONTACT DUE TO SKIN DEFATTING.	<input checked="" type="checkbox"/>
Ingestion	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.	<input checked="" type="checkbox"/>

**Summary of Chronic Hazards and Special Health Effects** 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 NO 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.

#### V. Protective Equipment and Other Control Measures

<b>Respiratory</b>	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.
<b>Eye</b>	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.
<b>Skin</b>	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.
<b>Engineering Controls</b>	GENERAL ROOM OR LOCAL EXHAUST VENTILATION IS USUALLY REQUIRED TO MEET EXPOSURE STANDARD(S).
<b>Other Hygienic and Work Practices</b>	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.

#### VI. Occupational Exposure Limits

Substance	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

METHANOL

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**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/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.
Waste Disposal Methods	FOR LARGE SPILLS, MAXIMIZE PRODUCT RECOVERY FOR REUSE OR RECYCLING. FREE LIQUID MAY BE COLLECTED 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 WASTES. AVOID FLAMEDUTS. 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)	67 56-1	N/AP GT	99.9 PERCENT

##Listed By: 1 = NTP, 2 = IARC, 3 = OSHA, 4 = Other      Compositions given are typical values, not specifications.

X. Physical and Chemical Data												
Boiling Point (At 760.0 mm Hg) AP 148° F	Viscosity Units, Temp. (Method) AP 1 CPS AT 30° C (D-445)		Dry Point N/AP									
Freezing Point AP -144° F	Vapor Pressure (MM HG AT 68° F) AP 96		Volatile Characteristics APPRECIABLE									
Specific Gravity (H <sub>2</sub> O = 1 at 39.2° F) AP 0.79	Vapor Sp. Gr. (Air = 1.0 at 60° = 90° F) AP 1.1	Solubility in Water COMPLETE	pH N/AP									
Hazardous Polymerization NOT EXPECTED TO OCCUR	Other Chemical Reactivity METHANOL FORMS AN AZETROPE WITH WATER.		Stability STABLE									
Other Physical and 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).											
Appearance and Odor	CLEAR, COLORLESS LIQUID; FAINT, CHARACTERISTIC ALCOHOL ODOR; ODOR THRESHOLD = 55 PPM IN AIR; ODOR IS NOT A GOOD INDICATOR OF EXPOSURE LEVEL.											
Conditions to Avoid	HEAT, SPARKS, OPEN FLAME, AND OXIDIZING CONDITIONS.											
Materials to 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.											
Hazardous Decomposition Products	EXCESSIVE HEATING AND/OR INCOMPLETE COMBUSTION WILL GENERATE HIGHLY POISONOUS CARBON MONOXIDE AND PERHAPS OTHER TOXIC VAPORS SUCH AS FORMALDEHYDE.											
XI. Additional Precautions												
Handling, Storage, and Decontamination Procedures	STORE AND TRANSPORT IN ACCORDANCE WITH ALL APPLICABLE LAWS. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME! KEEP CONTAINERS CLOSED AND PLAINLY LABELED! GROUND ALL DRUMS AND TRANSFER VESSELS WHEN HANDLING. USE ONLY WITH ADEQUATE VENTILATION! AVOID BREATHING VAPORS. STORE SAMPLES IN A COOL (LT 80° F.), WELL VENTILATED PLACE. THE STORAGE AREA AND VENTILATION EQUIPMENT SHOULD COMPLY WITH NFPA STANDARDS OF CLASS-1A/B FLAMMABLE LIQUIDS AND NEC REQUIREMENTS. "PETROLEUM DISTILLATE"-16 CFR 1500.14(B)(3). 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.											
General Comments	INGESTION OF THIS PRODUCT, EVEN IN SMALL AMOUNTS, CAN CAUSE BLINNESS AND DEATH. ONSET OF SYMPTOMS MAY BE DELAYED FOR 18-24 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 100-130 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.											
<p>--- Note --- Qualifications:</p> <table> <tr> <td>EQ = Equal</td> <td>AP = Approximately</td> <td>N/P = No Applicable Information Found</td> </tr> <tr> <td>LT = Less Than</td> <td>UK = Unknown</td> <td>N/AP = Not Applicable</td> </tr> <tr> <td>GT = Greater Than</td> <td>TR = Trace</td> <td>N/DA = No Data Available</td> </tr> </table>				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
EQ = Equal	AP = Approximately	N/P = No Applicable Information Found										
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<p align="center"><b>Disclaimer of Liability</b></p> <p>The information in this MSDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.</p> <p>The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.</p> <p>This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product this MSDS information may not be applicable.</p>												

METHANOL

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**XII.**

**Regulatory Information**

SEE SUPPLEMENT  
BEGINNING ON PAGE 6

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

**SECTION 311/312 HAZARD CATEGORIES**

IMMEDIATE (ACUTE) HEALTH HAZARD  
FIRE HAZARD

DELAYED (CHRONIC) HEALTH 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  
5000\*/2270KG

METHANOL (METHYL ALCOHOL)

**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 AS "KNOWN TO  
THE STATE TO CAUSE REPRODUCTIVE TOXICITY":  
ETHANOL (ETHYL ALCOHOL)

METHANOL

MSDS No.  
HCP001423  
Rev. Date  
02/02/95

**XIII. Label Information**

<b>Manufacturer:</b>	<b>LYONDELL PETROCHEMICAL COMPANY</b> 1221 MCKINNEY STREET, SUITE 1600 P.O. BOX 3646 HOUSTON, TEXAS 77253-3646	<b>Telephone Numbers</b> <b>EMERGENCY</b> 800/424-9300 CHEMTREC 800/245-4532 HOT LINE CUSTOMER SERVICE 713/652-7200 INFO ONLY
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**Use Statement:** FOR INDUSTRIAL USE ONLY  
KEEP OUT OF REACH OF CHILDREN

**Signal Word:** DANGER

**Physical Hazards:**  
EXTREMELY FLAMMABLE CORROSIVE TO SOME METALS  
AQUEOUS SOLUTIONS MAY PRODUCE FLAMMABLE VAPORS

<b>Health Hazards:</b> 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:** UN/NA ID Number- UN 1230  
**Hazard Class-** 3 (6.1) (FLAMMABLE LIQUID/POISON), PG-II  
**Proper Shipping-** METHANOL OR METHYL ALCOHOL

<b>Instructions:</b> In case of fire, use-	ALCOHOL TYPE FOAM DRY CHEMICAL CO2	INERT GAS - HALON/N2 FOAM
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<b>First Aid -Inhalation</b>	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**

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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)



WORLDWIDE



USA AND CANADA

OTHER COUNTRIES

**PRODUCT IDENTIFICATION**

Synonyms: NE

Chemical Name: Ethylene Glycol

Chemical Family: Glycol

Chemical Formula:  $C_2H_6O_2$ 

CAS Reg. No: 107-21-1

Product No: NE

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

Post-It* Fax Note 7671		Date:	# of pages
To:	Theresa	From:	COALVES CITY
Co./Dept.:	Malibu B.I.	Co.:	
Phone #:		Phone #:	
Fax #:	505-885-0022	Fax #:	

**HAZARDOUS COMPONENTS**

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

\* Ceiling Limit

NA-NOT APPLICABLE

NE -- NOT ESTABLISHED

FORM CP-O-10

EXHIBIT 6

# MATERIAL SAFETY DATA SHEET

Page 2 of 6

## 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  Unstable

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

**Hazardous Polymerization:** Will not Occur  May Occur

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

**MATERIAL SAFETY DATA SHEET**

Page 3 of 6

**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	<input type="checkbox"/>	<input type="checkbox"/>	Toxic	<input type="checkbox"/>	<input type="checkbox"/>
Suspect Carcinogen	<input type="checkbox"/>	<input type="checkbox"/>	Corrosive	<input type="checkbox"/>	<input type="checkbox"/>
Mutagen	<input type="checkbox"/>	<input type="checkbox"/>	Irritant	<input type="checkbox"/>	<input type="checkbox"/>
Teratogen	<input type="checkbox"/>	<input type="checkbox"/>	Target Organ Toxin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Allergic Sensitizer	<input type="checkbox"/>	<input type="checkbox"/>	Specify - <u>Causes kidney damage and</u>		
Highly Toxic	<input type="checkbox"/>	<input type="checkbox"/>	<u>eye damage.</u>		

**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

Page 4 of 6

## PHYSICAL DATA

Appearance: Liquid

Odor: Mild

Boiling Point: 330 (166°C)

Vapor Pressure: NE

Vapor Density (Air = 1): &gt; 1

Solubility in Water: Complete

Specific Gravity (H<sub>2</sub>O = 1): 1.11 - 1.14 at 60/60°F

Percent Volatile by Volume: 100

Evaporation Rate (\_\_\_\_\_ Butyl Acetate \_\_\_\_\_ = 1): &lt; 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<sub>2</sub>).

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**

Page 5 of 6

**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):

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Not Hazardous      | <input type="checkbox"/> Flammable Solid                       | <input type="checkbox"/> Oxidizer       |
| <input type="checkbox"/> Combustible Liquid | <input type="checkbox"/> Flammable Aerosol                     | <input type="checkbox"/> Pyrophoric     |
| <input type="checkbox"/> Compressed Gas     | <input type="checkbox"/> Explosive                             | <input type="checkbox"/> Unstable       |
| <input type="checkbox"/> Flammable Gas      | <input checked="" type="checkbox"/> Health Hazard (See Page 3) | <input type="checkbox"/> Water Reactive |
| <input type="checkbox"/> Flammable Liquid   | <input type="checkbox"/> Organic Peroxide                      |   |

**MATERIAL SAFETY DATA SHEET**

Page 6 of 6

**ADDITIONAL COMMENTS**

---

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

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

MALLON OIL COMPANY

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

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

GAVILAN COMPRESSOR STATION

CONDENSATE



**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

PERCENT OFF	TEMP. DEG. F
I.B.P.	117
5%	154
10%	176
15%	186
20%	196
25%	202
30%	208
35%	211
40%	216
45%	222
50%	226
55%	230
60%	235
65%	242
70%	250
75%	260
80%	272
85%	295
90%	346
95%	398
E.P.	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 NAPHTHA; 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

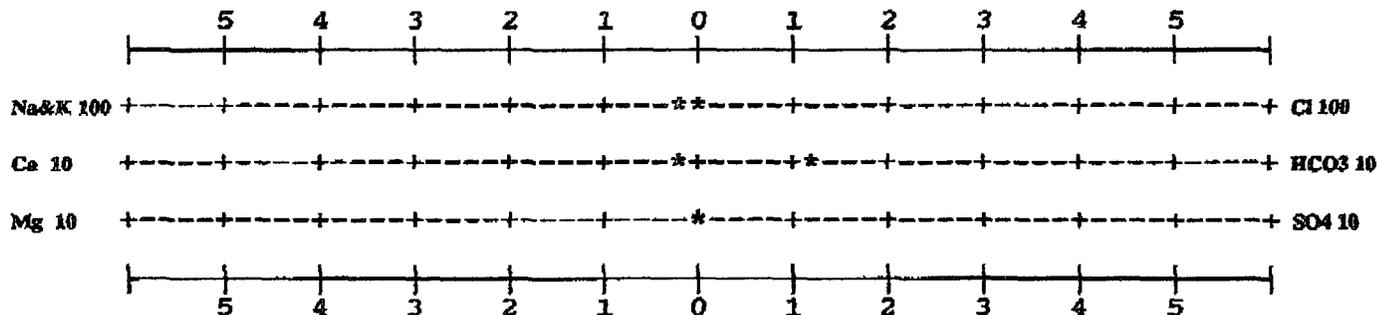
FW01W292

**BJ SERVICES COMPANY**  
**WATER ANALYSIS #FW01W292**  
**FARMINGTON LAB**

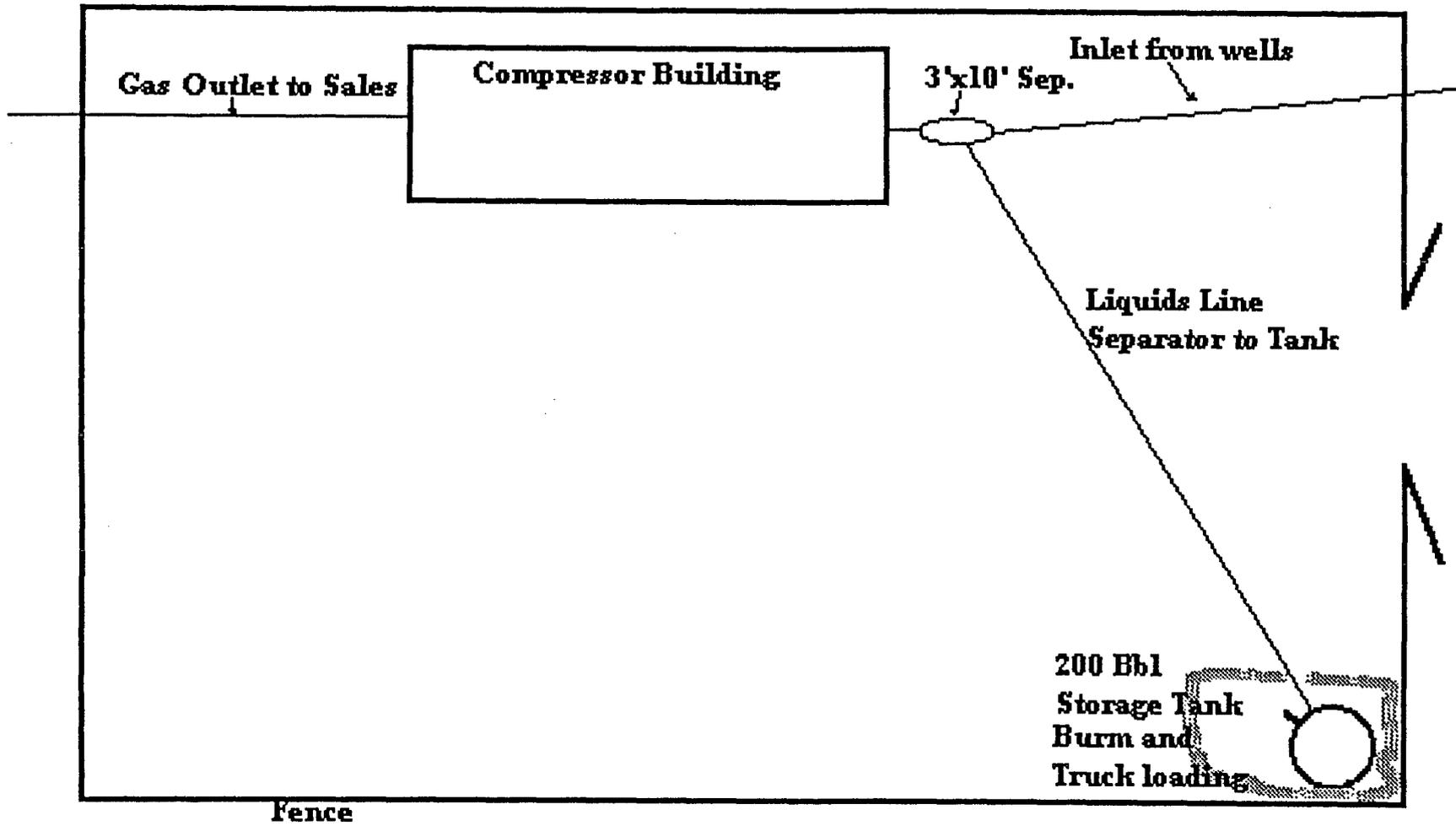
GENERAL INFORMATION			
OPERATOR:	MALLON	DEPTH:	
WELL:	CONDENSATE GAVILAN PLANT	DATE SAMPLED:	07/23/97
FIELD:		DATE RECEIVED:	07/23/97
SUBMITTED BY:		COUNTY:	STATE:
WORKED BY	:D. SHEPHERD	FORMATION:	
PHONE NUMBER:			

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



**Mallon Oil Company**  
**Gavilan Compressor Station**  
**Wastewater Flow Schematic**  
9/29/92 JHC

Water Bearing Formation	Number of Samples	Total Dissolved Solids, mg/l	Total Hardness as CaCO <sub>3</sub> , mg/l
Quaternary 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.

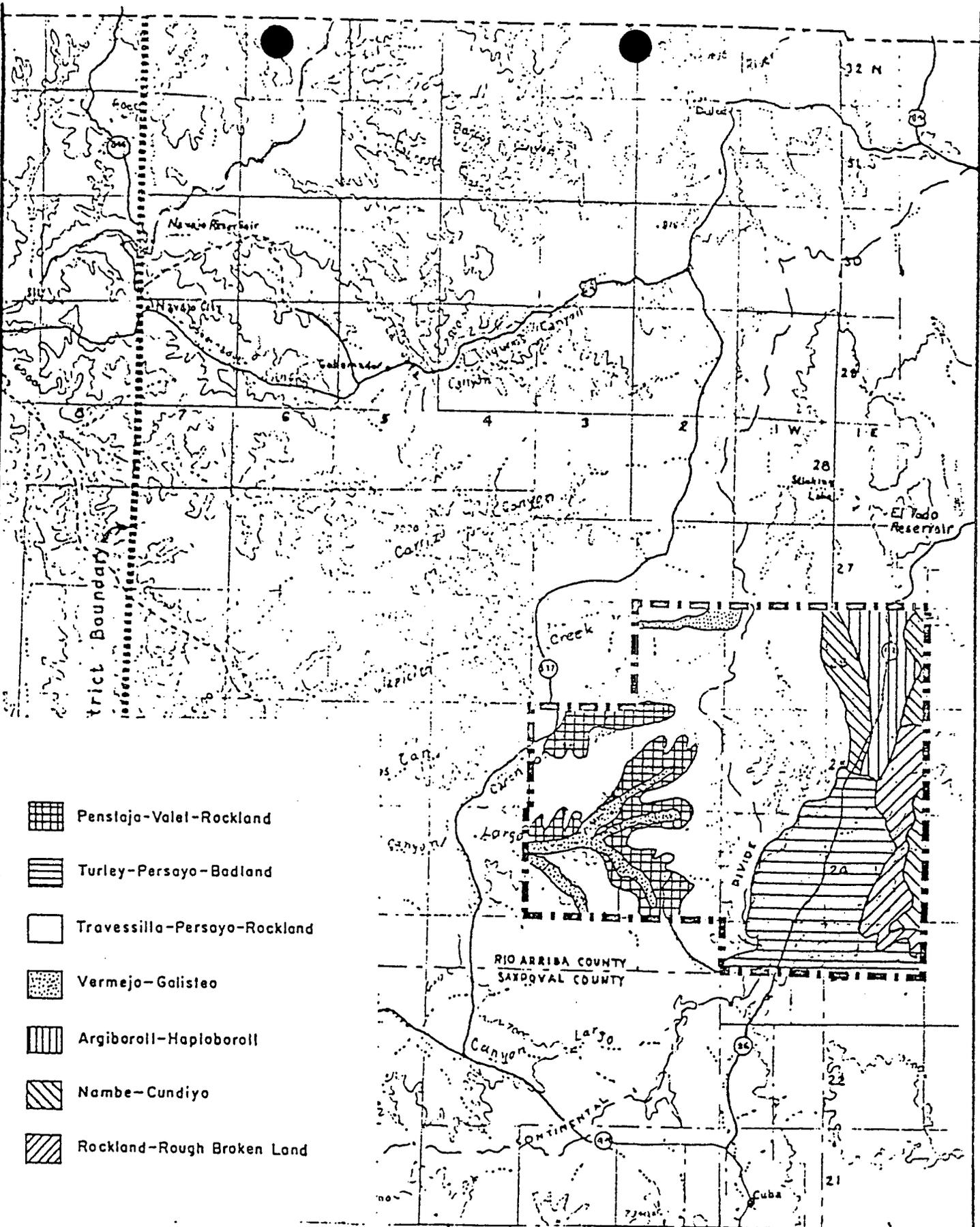
Table 3. Summary of five groundwater chemical samples collected from the San Jose and Pictured Cliffs Formation within and adjacent to the Canyon Largo study area (west of the Lindrith Area).

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

Ground Water Sample Number and Aquifer

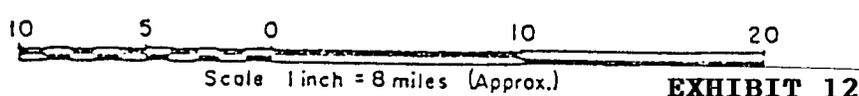
Parameter	1-Tsj	2-Tsj	3-Kpc	4-Tsj	5-Tsj	New Mexico Gr Water Standar
Silica, $\text{SiO}_2$	8.3	13	--	20	12	
Iron, Fe	.01	.02	--	--	.03	
Calcium, Ca	140	1.7	51	92	10	
Magnesium, Mg	1.5	.0	17	19	4.4	
Sodium, Na	300	250	340	252	301	
Potassium, K	2.5	.9	1.6	--	--	
Bicarbonate, $\text{HCO}_3$	100	318	413	406	386	
Carbonate, $\text{CO}_3$	0	31	0	0	0	
Sulfate, $\text{SO}_4$	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 $\text{NO}_3$	.2	.2	1.0	1.4	.1	
Total Dissolved Solids	1430	694	1060	1080	886	1000
Total Hardness ( $\text{CaCO}_3$ )	360	4	200	308	43	
pH (Units)	7.6	9.1	8.0	7.4	7.7	6-9





-  Penstaja-Valel-Rockland
-  Turley-Persayo-Badland
-  Travessilla-Persayo-Rockland
-  Vermejo-Galisteo
-  Argiboroll-Haploboroll
-  Nambe-Cundiyo
-  Rockland-Rough Broken Land

-  Paved Highway
-  Gravel Roads
-  Intermittant Streams
-  Flowing Streams



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 sparse 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.



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

June 11, 1997

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-326-936-602**

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

**RE: Discharge Plan GW-132  
Mallon Oil Company (MOC)  
Gavilan Compressor Station  
Rio Arriba County, New Mexico**

Dear Mr. Cox:

On December 9, 1992, the groundwater discharge plan, GW-132, for the **Gavilan Compressor Station** located in the SW/4 SE/4, Section 11, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, was approved by the Director of the New Mexico Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years. **The approval will expire on December 9, 1997.**

If the facility continues to have potential or actual effluent or leachate discharges and MOC wishes to continue operation, the discharge plan must be renewed. Pursuant to WQCC Section 3106.F, if an application for renewal is submitted at least 120 days before the discharge plan expires (on or before August 9, 1997), then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several weeks to months. Please indicate whether MOC has made, or intends to make, any changes in the system, and if so, please include these modifications in the application for renewal.

The discharge plan renewal application for the **Gavilan Compressor Station** is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of \$50 for Compressor Stations less than 1,000 horsepower. The \$50 filing fee is to be submitted with the discharge plan renewal application and is nonrefundable.

Mr. Joe H. Cox  
MOC, GW-132  
6 Month Notice  
June 11, 1997  
Page 2

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

Please submit the original discharge plan renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Aztec District Office. **Note that the completed and signed application form must be submitted with your discharge plan renewal request.** Copies of the WQCC regulations, discharge plan application form, and guidelines are enclosed to help MOC in the renewal application process. ( If you require copies of these items notify the OCD at (505)-827-7152. A complete copy of the regulations is also available on OCD's website at [www.emnrd.state.nm.us/ocd.htm](http://www.emnrd.state.nm.us/ocd.htm).)

If MOC no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If MOC has any questions, please do not hesitate to contact Pat Sanchez at (505) 827-7156.

Sincerely,

*RCA* for Roger C. Anderson.

Roger C. Anderson  
Environmental Bureau Chief

RCA/pws

xc: Mr. Denny Foust - OCD Aztec District

P 326 936 602

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

Sent to <b>Mallon</b>	
Street & Number <b>GW-132</b>	
Post Office, State, & ZIP Code <b>6 Month Ren. Notice.</b>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

AFFIDAVIT OF PUBLICATION

No. 30162

STATE OF NEW MEXICO,  
County of San Juan:

CHRISTINE HILL being duly sworn, says: "That she is the NATIONAL AD MANAGER of The Farmington Daily Times, a daily newspaper of general circulation published in English in Farmington, said county and state, and that the hereto attached LEGAL NOTICE

was published in a regular and entire issue of the said Farmington Daily Times, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for ONE consecutive (days) (///// ) on the same day as follows:

First Publication WEDNESDAY, OCTOBER 14, 1992  
Second Publication \_\_\_\_\_  
Third Publication \_\_\_\_\_  
Fourth Publication \_\_\_\_\_  
and the cost of publication was \$ 43.95

*Christine Hill*

Subscribed and sworn to before me this 2nd day of OCTOBER ~~November~~ 1992.

*Sunny Beck*  
Notary Public, San Juan County,  
New Mexico

My Comm expires: JULY 3, 1993 *April 2, 1996*

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-131) - Northwest Pipeline Co., Carol Revelt Environmental Specialist, P.O. Box 58900, M.S. 10-368, Salt Lake City, Utah 84158-0900, has submitted a discharge plan application for their Trunk C Cox Canyon Compressor Station located in the W/2 Section 9, Township 32 North, Range 11 West, NMPM, San Juan County, New Mexico. Approximately 170 gallons per day of waste water with a total dissolved solids concentration of approximately 1500 mg/l will be collected in an above ground fiberglass tank prior to disposal at an OCD approved offsite disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 300 feet with a total dissolved solids concentration ranging from 1500 mg/l to 2000 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-132) - Mallon Oil Company, Joe H. Cox Jr., Production Manager, 999 18th Street, Suite 1700, Denver, Colorado 80202, has submitted a discharge plan application for their Gavilan Compressor Station located in the SW/4 SE/4, Section 11, Township 25 North, Range 2 West, NMPM, Rio Arriba County, New Mexico. Approximately 40 gallons per day of waste water with a total dissolved solids concentration of approximately 12000 mg/l is stored in an above ground steel tank prior to disposal at an OCD approved off site disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 200 feet with a total dissolved solids concentration of approximately 1200 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 10th day of October, 1992.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
Ecological Services  
Suite D, 3530 Pan American Highway, NE  
Albuquerque, New Mexico 87107

OIL CONSERVATION DIVISION  
RECEIVED  
'92 OCT 23 AM 8 53

October 22, 1992

Mr. William J. LeMay  
Director, State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Dear Mr. LeMay:

This responds to the notice of publication received by the U.S. Fish and Wildlife Service (Service) on October 9, 1992, regarding the Oil Conservation Division (OCD) discharge permits GW-131 and GW-132, on fish, shellfish, and wildlife resources in New Mexico.

The Service has the following comments on the issuance of the following discharge permits.

GW-131 - Northwest Pipeline Co., Trunk C - Cox Canyon Compressor Station located in Section 9, T32N, R11W, NMPM, San Juan County, New Mexico. Approximately 170 gallons per day of waste water will be collected in an above ground fiberglass tank prior to disposal at an OCD approved offsite disposal facility.

GW-132 - Mallon Oil Company, Gavilan Compressor Station located in Section 11, T25N, R2W NMPM, Rio Arriba County, New Mexico. Approximately 40 gallons per day of waste water is stored in an above ground steel tank prior to disposal at an OCD approved offsite disposal facility.

Natural gas pipeline condensates contain many organic constituents including benzene, C1 to C5 alkylated benzenes, and toluene. Polychlorinated bi-phenyls may also be incorporated into the condensate through some compressor lubricants. The Service is concerned that washdown water at the compressor site may contain any, or all, of these organic constituents and that accidental spills could result in potential toxicity to Department of the Interior Trust Resources over time. The Service suggests a surface soil monitoring program be implemented and open storage tanks be netted. Such precautions would ensure the compressor site would not be a potential threat to endangered species or migratory birds that may be found in the area.

The Service is the Federal agency responsible for the protection of migratory

birds and endangered species. Please note the following legal mandates.

1. Endangered Species Act of 1973, as amended. Section 9 prohibits any "take" (harass, harm, pursue, hunt, shoot, would, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of listed species without a special exemption. Harm is further defined to include specific habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.

2. Migratory Bird Treaty Act (Act). Section 703 prohibits anyone at anytime or in any manner to capture, transport, or kill any migratory birds unless permitted by regulations promulgated under the Act. If migratory birds become exposed to and/or accumulate harmful levels of contaminants, this constitutes "take" under the Act. The courts have stated the Act can be constitutionally applied to impose penalties to persons, associations, partnerships, or corporations which did not intend to "kill" migratory birds and that the Act includes poisoning by any means. The unlawful killing of even one migratory birds is an offense.

If you have any questions concerning our comments, please contact Mary Orms at (505) 883-7877.

Sincerely,



Jennifer Fowler-Propst  
Field Supervisor

cc:

Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico  
Regional Administrator, U.S. Environmental Protection Agency, Dallas, Texas

**NOTICE OF PUBLICATION**

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

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

hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 10th day of October, 1992.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*William J. Lemay*  


WILLIAM J. LEMAY, Director

S E A L

OIL CONSERVATION DIVISION  
RECEIVED

'92 OCT 5 PM 9 56

**MALLON OIL COMPANY**

999 18th Street, Suite 1700, Denver, Colorado 80202  
(303) 293-2333

GW 132

October 1, 1992

State of New Mexico  
Energy, Minerals and Resources Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87501

Attention: Mr. Bill Olson

Dear Mr. Olson:

Enclosed please find a copy of Mallon Oil Company's Discharge Plan Application for Natural Gas Processing Plants, Oil Refineries and Gas Compressor Stations.

Sincerely,

MALLON OIL COMPANY

*Theresa A. McAndrews*

Theresa A. McAndrews  
Production Assistant

/tam

Enclosure

cc: Aztec District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department  
OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, NM 87501

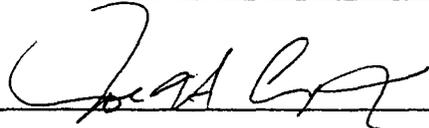
**DISCHARGE PLAN APPLICATION FOR NATURAL GAS PROCESSING PLANTS,  
OIL REFINERIES AND GAS COMPRESSOR STATIONS**

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

- I. TYPE: Compressor Station
- II. OPERATOR: Mallon Oil Company  
ADDRESS: 999 18th St., Suite 1700, Denver, Colorado 80202  
CONTACT PERSON: Joe H. Cox, Jr. PHONE: (303) 293-2333
- III. LOCATION: SW /4 SE /4 Section 11 Township 25N Range 2W  
Submit large scale topographic map showing exact location.
- IV. Attach the name and address of the landowner(s) of the disposal facility site.
- V. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.
- VI. Attach a description of sources, quantities and quality of effluent and waste solids.
- VII. Attach a description of current liquid and solid waste transfer and storage procedures.
- VIII. Attach a description of current liquid and solid waste disposal procedures.
- IX. Attach a routine inspection and maintenance plan to ensure permit compliance.
- X. Attach a contingency plan for reporting and clean-up of spills or releases.
- XI. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact fresh water. Depth to and quality of ground water must be included.
- XII. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
- XIII. CERTIFICATION

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

Name: Joe H. Cox, Jr. Title: Production Manager

Signature: 

Date: 9-30-92

**DISTRIBUTION: Original and one copy to Santa Fe with one copy to appropriate Division District Office.**

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

**I. Type of Operation**

The Gavilan Compressor Station will be a small compressor facility handling about 800 MCFD initially with a maximum throughput of 2 MMCFD in its proposed configuration. The facility will be located at, and includes parts of, the former Phelps Dodge, Gavilan Gas Processing Plant. The Phelps Dodge Plant operated for almost six years and the portions of the plant affecting this Plan remain essentially the same giving adequate background information for the proposed facility.

**II. Operator/Legally Responsible Party and Local Representative**

**Operator:** Mallon Oil Company  
999 18th Street, Suite 1700  
Denver, Colorado 80202  
(303) 293-2333  
Attention: Mr. Joe H. Cox, Jr.

**Local Representative:** Mr. Charles Oleson (Contract Pumper)  
P. O. Box 55  
Lindrith, New Mexico 87029  
(505) 774-6567

**III. Location of Facility**

The Gavilan Compressor station is to be located in the SW/4 SE/4, Sec. 11, T25N, R2W, Rio Arriba County, New Mexico. (Exhibits 1, 2)

**IV. Landowners**

The landowner for the Gavilan Compressor Station is the Frederick Harold Davis and Sarah Alma Davis Family Trust, c/o Mr. H. F. Davis, P. O. Box 868, Cuba, New Mexico 87013.

V. 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)

VI. Sources, Quantities and Quality of Effluent and Waste Solids

1. Separator

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 1 BWPD and 4 BOPD are extracted by the separator with the present production stream of about 800 MCFD.

2. Boilers - Not applicable.

3. Engine Cooling Waters - Closed system, not applicable.

4. Cooling Tower - Not applicable.

5. Sewage - Not applicable.

6. Waste lubrication and motor oils

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

7. Waste and slop oil

No unsellable oil has accumulated from the plant in the past.

8. Used Filters

Oil filters from the compressor engine will be burned and the metal cores sent to a landfill in Cuba, New Mexico.

*How do you  
store*

*?*

*?*

9. Solids and sludges from tanks - Not applicable.

10. Cleaning operations using solvents/degreasers

*what soap  
what tank*

Cleaning will be limited to "bucket and brush" type work using detergent and water. No solvents or petroleum based degreasers will be used. Waste water will be caught in drip pans and put in the holding tank.

11. Truck, tank and drum washing - Not applicable.

12. Other liquid and solid wastes

Drip pans under the compressor and engine will catch any leaking oil and/or coolant. The wastes will be disposed of as described in sections 6 and 10, above.

13. Quality Characteristics

1. A water analysis for produced formation water is attached and should be representative of the water extracted at the separator. (Exhibit 4)
2. No hydrocarbon analysis is presently available.
3. No WQCC Section 3-103 analyses are presently available.
4. No analysis for toxic pollutants as defined in WQCC Section 1-101 UU has been done. 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.
5. The water sample for #1, above, is from the Davis '3' Comm. #15, located in the SW/4, SE/4, Sec. 3, T25N, R2W, Rio Arriba County, New Mexico. The well produces from the Mesaverde Group and is the greatest producer of water of the seven wells feeding the compressor. The water was taken from a collection pit and should be a "time-composite" sample. Analysis was done by The Western Company in October, 1989.
6. The variation of flow rates should not significantly affect the water sample values.

## VII. Transfer and Storage of Process Fluids and Effluents

- A. All handling and storage of the liquids discussed in Section VI, above, is in an enclosed system originating at the separator and held in the 200 Bbl steel storage tank. The tank is on a gravel pad to facilitate leak detection and surrounded by a berm enclosing sufficient volume to contain at least 133% of the tank volume. Off-site transport is by truck.
- B. Wastewater flow schematic - Attached. (Exhibit 5)
- C. Potential for Wastewater Discharge

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 at least 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.

Any machinery fluids will be caught in drip pans and handled as discussed in Section VI, above.

## VIII. Effluent Disposal

### A. On-site Operations

There are no on-site disposal operations proposed.

### B. Off-Site Disposal

1. Produced Water - Will be trucked to commercial saltwater disposal facility, probably the Schmitz Ranch (TNT) evaporation facility initially.
2. Engine Lubricants - Will be pumped into drums and hauled to waste oil recyclers in Albuquerque.

**IX. Inspection, Maintenance and Reporting**

- A. All facilities except for buried pipeline will be visually inspected daily through routine operation of the proposed facility. In the event of a leak, the leak point will be isolated and any recoverable fluid collected by vacuum truck as soon as possible. The Oil Conservation Division will be notified of any significant leak in accordance with Rule 116.
- B. The holding tank is the only point where a "large" volume of waste water or condensate could be released. As discussed above, the surrounding berm should contain any possible spill.

**X. Spill/Leak Prevention & Reporting (Contingency Plan)**

- A. 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 Bbl, any spill of any hazardous material, or of any spill entering or threatening a watercourse as stipulated in OCD Rule 116.

**XI. Site Characteristics.**

**A. Hydrologic Features.**

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.

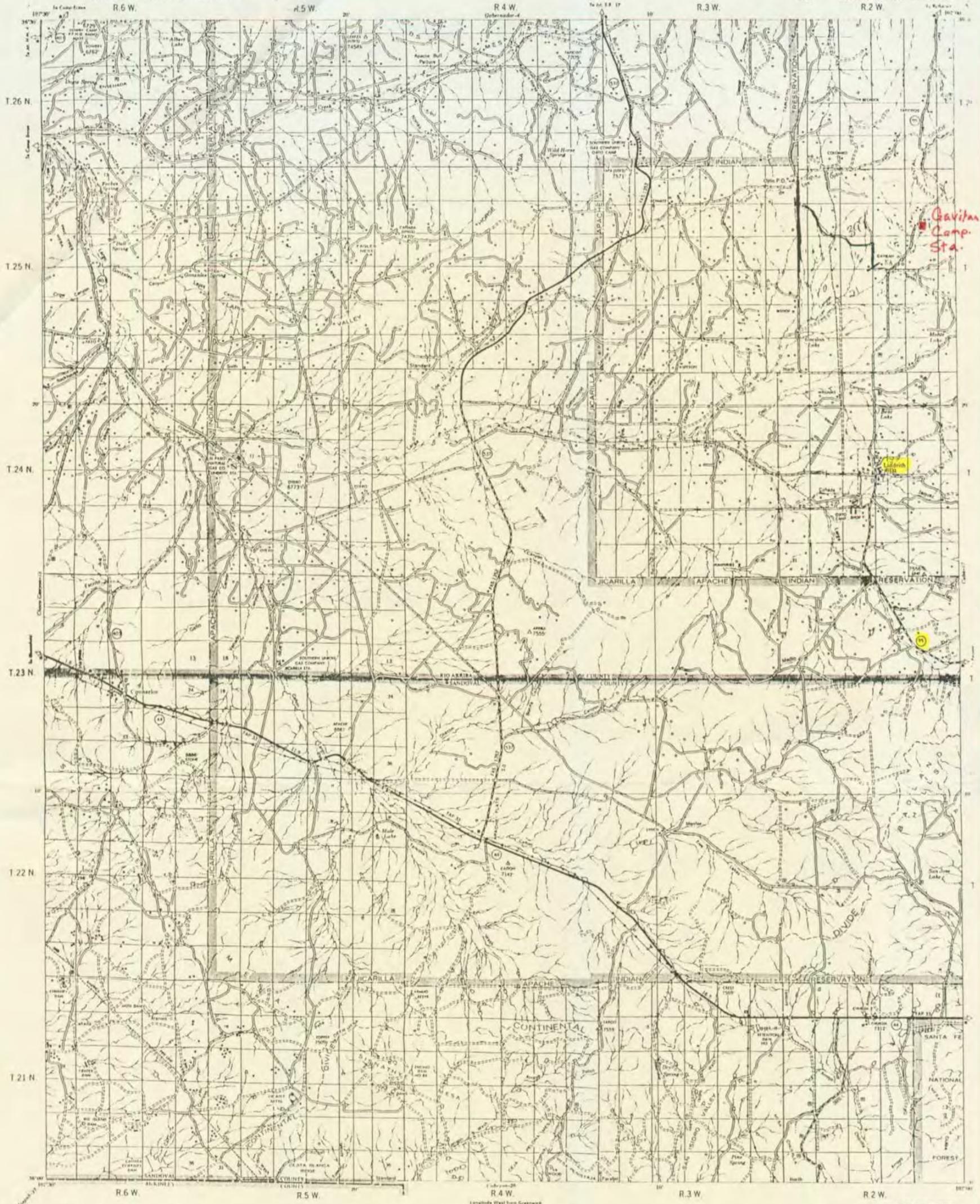
Water wells in the area are about 200 feet deep. Water analysis from the April, 1979 USGS Blanket Environmental Impact Analysis of the Lindrith Area are attached. (Exhibit 6, 7)

**B. Geologic Description of "Discharge" Site**

The soil 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 8, 9)

**C. Flood Protection**

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



Control by National Geodetic Survey; U.S. Geologist Survey;  
U.S. Forest Service; Bureau of Land Management and Planning Division  
Modified Cass Projection Standard Parallel 34' North American Datum

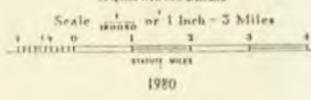
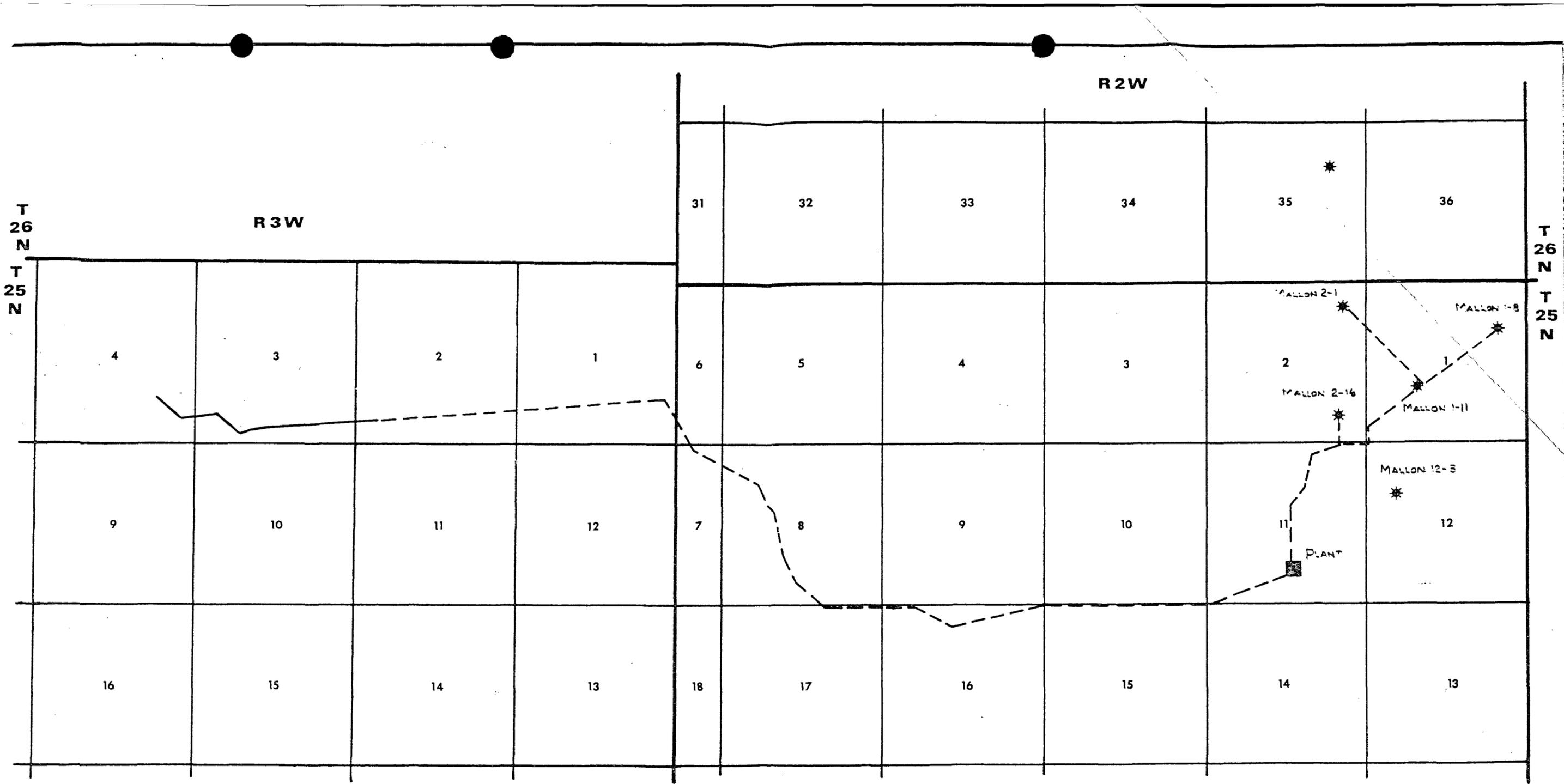


Exhibit 1



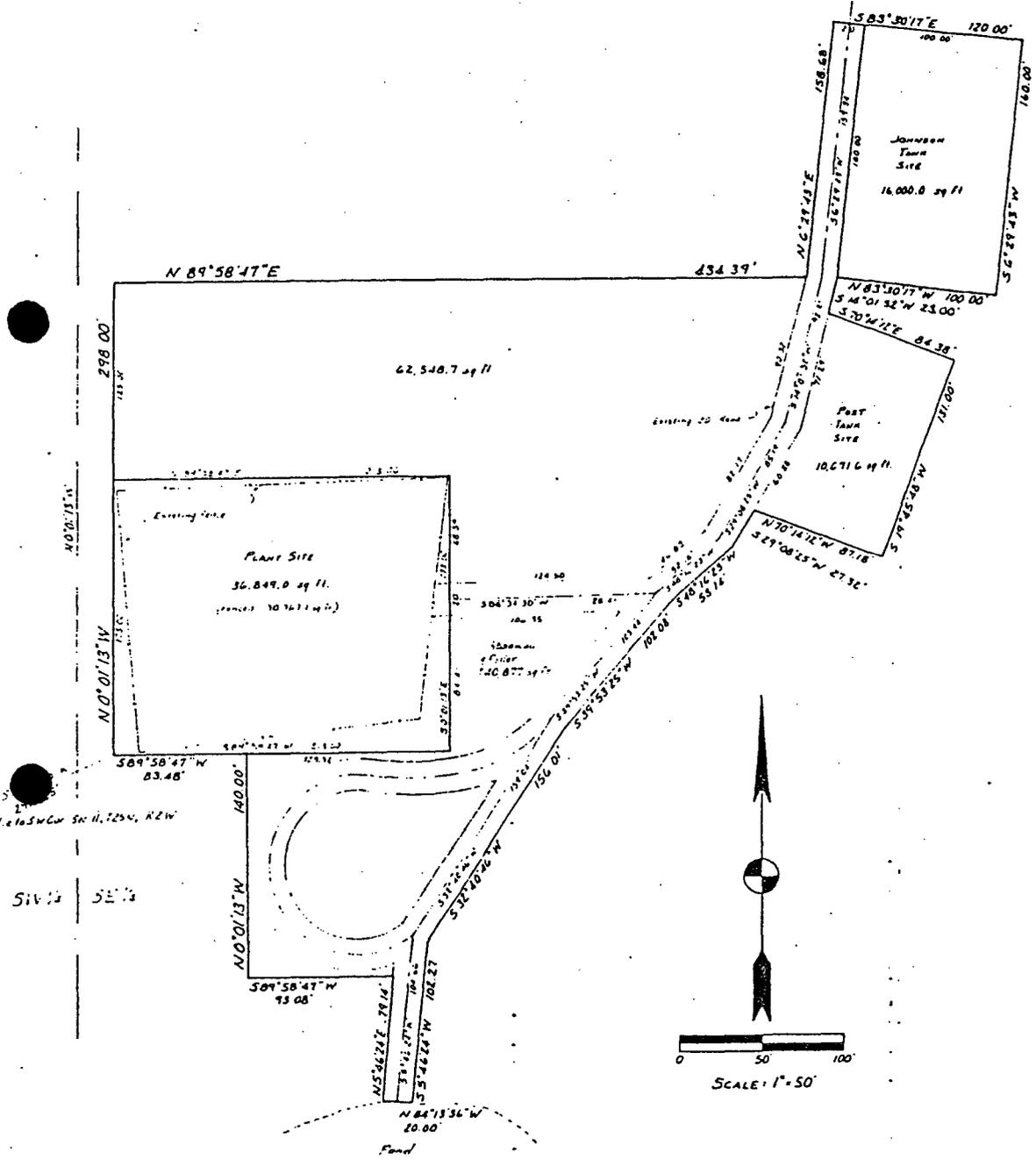
EXISTING PIPELINE: 

PROPOSED EXTENSION: 

**CUSTOM ENERGY CONST., INC.**  
 DESIGN, FABRICATION, & INSTALLATION OF OIL & GAS EQUIP.  
 BOX 9486 PHONE  
 CASPER, WYOMING 82609 (307) 265-8563

GAVILAN FIELD AREA  
PIPELINE MAP  
 RIO ARRIBA COUNTY NEW MEXICO  
 CUSTOMER: MALLON OIL COMPANY

Exhibit 2



**DESCRIPTION**

A tract of land situate in the SW 1/4 of Sec. 11, T25N, R24, N.M.P.M., Rio Arriba County, New Mexico, being more particularly described as follows:  
 Beginning at a point whence the SW Cor. of said Sec. 11 bears S 66°15'05" W, a distance of 2,911.05 feet;  
 Thence N 0°01'11" W, a distance of 296.00 feet;  
 Thence N 89°48'47" E, a distance of 424.19 feet;  
 Thence N 6°29'43" E, a distance of 128.68 feet;  
 Thence S 87°30'17" E, a distance of 170.00 feet;  
 Thence S 6°29'43" W, a distance of 160.00 feet;  
 Thence N 87°30'17" W, a distance of 100.00 feet;  
 Thence S 16°01'52" W, a distance of 23.00 feet;  
 Thence S 70°11'12" E, a distance of 64.38 feet;  
 Thence S 19°45'16" W, a distance of 111.00 feet;  
 Thence N 70°11'12" W, a distance of 67.18 feet;  
 Thence S 79°08'04" W, a distance of 27.12 feet;  
 Thence S 48°16'23" W, a distance of 53.14 feet;  
 Thence S 39°53'20" W, a distance of 102.08 feet;  
 Thence S 37°40'16" W, a distance of 156.01 feet;  
 Thence S 5°46'24" W, a distance of 102.27 feet;  
 Thence N 84°13'36" W, a distance of 20.00 feet;  
 Thence N 5°46'24" E, a distance of 79.14 feet;  
 Thence S 89°58'47" W, a distance of 91.08 feet;  
 Thence N 0°01'13" W, a distance of 160.00 feet;  
 Thence S 89°58'47" W, a distance of 83.48 feet to the point of beginning.

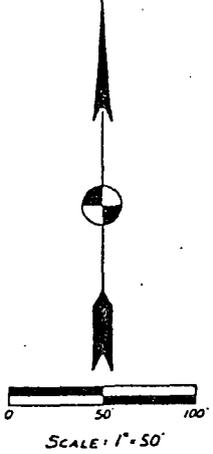
Said tract contains 166,918.3 sq. ft. or 3.8 Ac., more or less.

**CERTIFICATION**

I, William E. Mahnke II, do hereby certify that I am a Professional Land Surveyor duly Registered under the Laws of the State of New Mexico, and that I prepared this plat at the direction of the Owners from field notes of an actual survey, and that the representations hereon are true and correct to the best of my knowledge and belief.



*William E. Mahnke II*  
 William E. Mahnke II  
 New Mexico P.L.S. No. 8466



GAVILAN FIELD JOINT VENTURE		
GAS PLANT SITE	SCALE 1"=50'	DRAWN BY W.E.M. II
DATE SURVEYED: 11-3-86		
BASIS OF BEARINGS: G.L.D.		
DATE 11-6-86	KERR LAND SURVEYING	DRAWING NUMBER

RECEIVED G. 1. 1989

ANALYSIS NO. 54-07-89

API FORM 25-1

FIELD RECEIPT NO. \_\_\_\_\_

API WATER ANALYSIS REPORT FORM

Company <u>Mallon Oil Co.</u>		Sample No.	Date Sampled <u>10-02-89</u>	
Field	Legal Description	County or Parish	State	
Lease or Unit	Well <u>DAVIS 3-15 Com.</u>	Depth	Formation <u>Mesa Verde</u>	Water, B/D
Type of Water (Produced, Supply, etc.) <u>Produced</u>		Sampling Point	Sampled By	

DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc.)	<u>4334</u>	<u>188.42</u>
Calcium, Ca	<u>12</u>	<u>.60</u>
Magnesium, Mg	<u>7</u>	<u>.58</u>
Barium, Ba	<u>    </u>	<u>    </u>
Potassium, K <sup>+</sup>	<u>16</u>	<u>.41</u>

ANIONS	mg/l	meq/l
Chloride, Cl	<u>4860</u>	<u>137.09</u>
Sulfate, SO <sub>4</sub>	<u>0</u>	<u>0</u>
Carbonate, CO <sub>3</sub>	<u>120</u>	<u>4.00</u>
Bicarbonate, HCO <sub>3</sub>	<u>2984</u>	<u>48.92</u>
OH	<u>0</u>	<u>0</u>

Total Dissolved Solids (calc.) 12,333

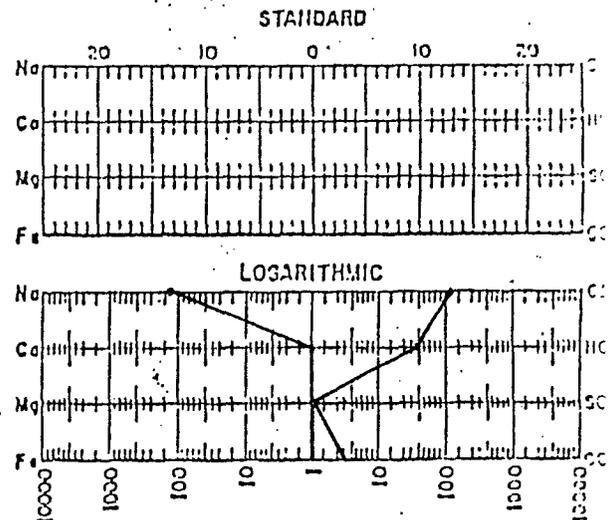
Iron, Fe (total) <sup>#, ##</sup> 0,0  
Sulfide, as H<sub>2</sub>S neg

REMARKS & RECOMMENDATIONS:

OTHER PROPERTIES

pH	<u>8.45</u>
Specific Gravity, 60/60 F.	<u>1.00</u>
Resistivity (ohm-meters) <u>75°</u> F.	<u>.62</u>
Total hardness	<u>60</u>

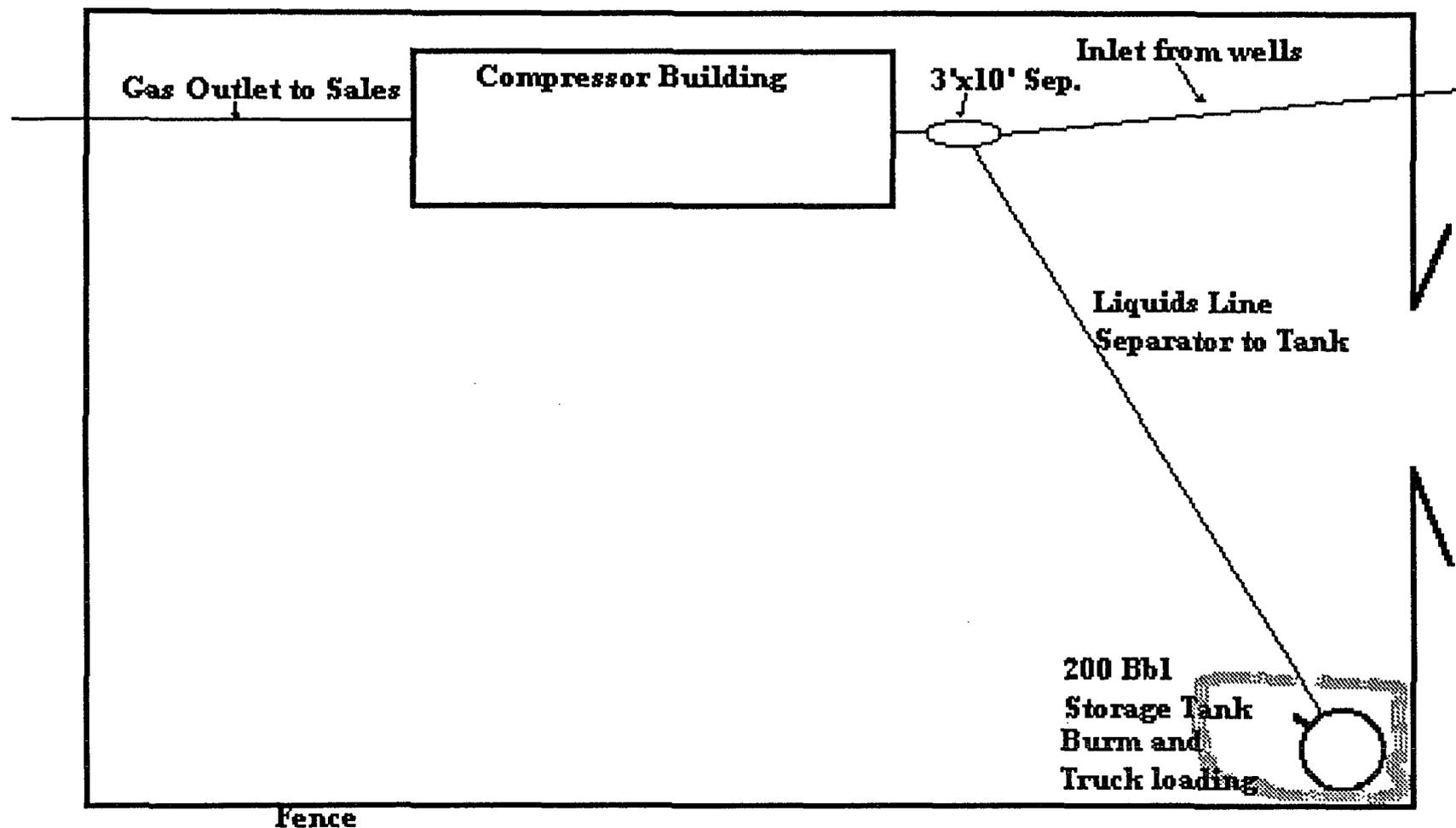
WATER PATTERNS — me/l



ANALYST: L. Lee

THE WESTERN COMPANY OF  
NORTH AMERICA, FARMINGTON, N.  
(505) 327-6222

Please refer any questions to: BRIAN AULT District Engineer



**Mallon Oil Company**  
**Gavilan Compressor Station**  
**Wastewater Flow Schematic**  
9/29/92 JHC

Water Bearing Formation	Number of Samples	Total Dissolved Solids, mg/l	Total Hardness as CaCO <sub>3</sub> , mg/l
Quaternary 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

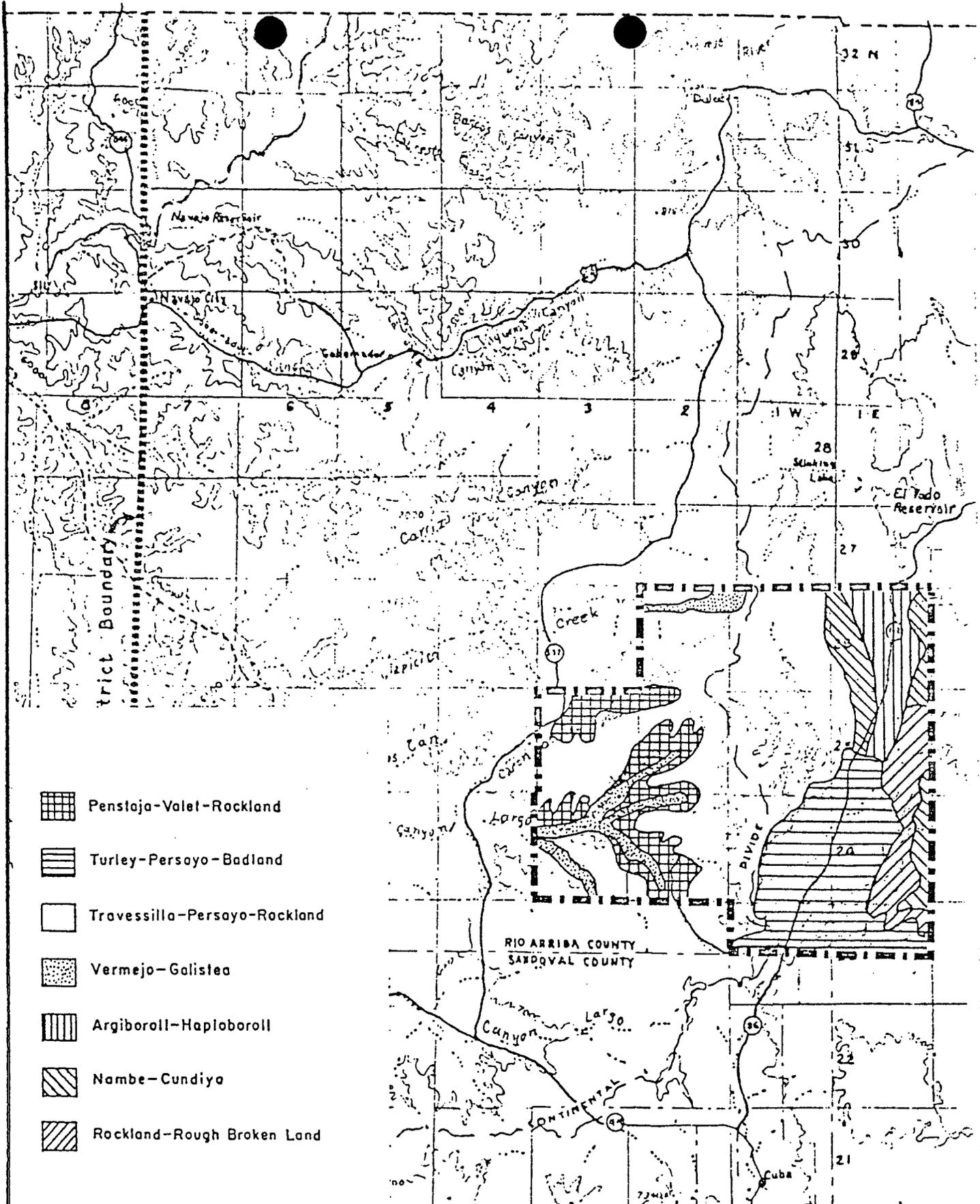
Table 2. Concentration range of total dissolved solids and hardness encountered in several water bearing zones within and adjacent to the Lindrith Area. Data source, Water Resources Division, Albuquerque, New Mexico, 1978.

Table 3. Summary of five groundwater chemical samples 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).

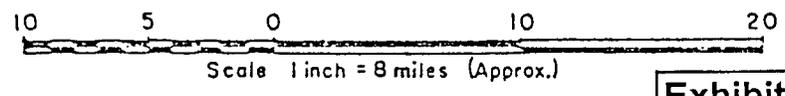
Ground Water Sample Number and Aquifer

Parameter	1-Tsj	2-Tsj	3-Kpc	4-Tsj	5-Tsj	New Mexico Gr Water Standar
Silica, $\text{SiO}_2$	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, $\text{HCO}_3$	100	318	413	406	386	
Carbonate, $\text{CO}_3$	0	31	0	0	0	
Sulfate, $\text{SO}_4$	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 $\text{NO}_3$	.2	.2	1.0	1.4	.1	
Total Dissolved Solids	1430	694	1060	1080	886	1000
Total Hardness ( $\text{CaCO}_3$ )	360	4	200	308	43	
pH (Units)	7.6	9.1	8.0	7.4	7.7	6-9



-  Penslaja-Valet-Rockland
-  Turley-Persayo-Badland
-  Travessilla-Persayo-Rockland
-  Vermejo-Galisteo
-  Argiboroll-Haploboroll
-  Nambe-Cundiya
-  Rockland-Rough Broken Land

-  Paved Highway
-  Gravel Roads
-  Intermittant Streams
-  Flowing Streams



**Exhibit 8**

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.



2600 N. Central Avenue, Phoenix, AZ 85004-3014 • (602) 234-8100

Henry W. Konerko  
President

September 18, 1992

Mallon Oil Company  
1099 18th Street  
Suite 2750  
Denver, Colorado 80202

Attn: Kevin M. Fitzgerald, President

RE: Gavilan Gas Plant (the "Plant")

Dear Mr. Fitzgerald:

This letter sets forth the offer of Phelps Dodge Refining Corporation, a New York corporation ("Phelps Dodge"), to sell and assign all of its right, title and interest in and to the property described on Schedule "I" hereto (the "Property"), including associated noise abatement facilities, on an "as-is" basis, to Mallon Oil Company ("Mallon") for the following consideration:

- A. [REDACTED] cash to Phelps Dodge at closing;
- B. the acceptance by Mallon of an express written disclaimer by Phelps Dodge of all representations and warranties whatsoever, either express or implied, including but not limited to those relating in any way to: the Property, other property associated with the Plant (the "Other Property"), or the operation of the Plant, heretofore or hereafter, by any party; the condition or environmental status, heretofore or hereafter, of the Property, the Other Property, and the Plant; the compliance, heretofore or hereafter, by any party with any laws, regulations, ordinances, permits, orders or agreements pertaining to, but not limited to, matters concerning the environment, culture, history, safety, welfare, or any other matter whatsoever; the presence, heretofore or hereafter, of any substance, material, contaminant, or pollutant on, under or associated with the Property, the Other Property or the Plant; the release by any party heretofore or hereafter, of any such substance, material, contaminant or pollutant; the adequacy of any reclamation efforts heretofore or hereafter conducted by or for Phelps Dodge or any other party on, near or in any way relating to or associated with the Property, the Other Property or the Plant; any liability under the Comprehensive

Mr. Kevin M. Fitzgerald  
Mallon Oil Company  
September 18, 1992  
Page 2

Environmental Response, Compensation, and Liability Act of 1980, as heretofore or hereafter amended ("CERCLA"), or the Resource Conservation and Recovery Act, as heretofore or hereafter amended ("RCRA"); the completeness, accuracy, and representative nature of any information or data whatsoever, heretofore or hereafter provided by Phelps Dodge to Mallon; or title, merchantability or fitness for a particular purpose;

- C. an express written assumption by Mallon of all obligations and liabilities whatsoever, including, but not limited to, liabilities relating in any way to the environment, culture, history, safety, welfare, CERCLA, RCRA, or any other matter whatsoever, accruing at any time hereafter, relating to or associated in any way with the Property hereafter, the Other Property or the Plant, and an express release by Mallon of Phelps Dodge from all such obligations and liabilities; and
- D. express written indemnification (subject to NMSA 1978, §§ 56-7-1 and -2) and agreement by Mallon to hold Phelps Dodge, and its parent, shareholders, directors, officers, employees, agents, attorneys, representatives, and subsidiaries and affiliated companies, harmless for any and all claims, losses, liabilities and obligations whatsoever, including, but not limited to, those under RCRA or CERCLA, arising at any time, hereafter, relating to or associated in any way with the Property, the Other Property or the Plant;
- E. an express written agreement by Mallon that provisions based on the terms summarized in paragraphs B, C and D above shall survive closing and have perpetual effect, regardless of any subsequent law, rule, regulation, statute of limitation, or anything else; and
- F. an express written release to Phelps Dodge by Mallon of all duties, obligations and liabilities whatsoever, accrued or accruing at any time, heretofore or hereafter, under or pursuant to the Gas Purchase Agreement dated as of December 15, 1986, by and between Mallon, as seller, and Phelps Dodge, as buyer/processor, and the express written agreement of Mallon with Phelps Dodge that said Gas Purchase Agreement has terminated and is of no further force or effect.

Mr. Kevin M. Fitzgerald  
Mallon Oil Company  
September 18, 1992  
Page 3

The foregoing offer and the consummation of the transaction described herein are subject to:

- 1 . Mallon's acceptance of the foregoing offer, which acceptance Mallon may evidence only by dating and executing the attached copy hereof, without modification, in the spaces provided below and faxing the dated and executed copy to the undersigned today; and
2. the execution by Phelps Dodge and Mallon, on or before September 30, 1992, of a definitive sale and purchase agreement to be drafted by Phelps Dodge, which will be generally similar in form to the Agreement for the Purchase and Sale of Assets dated December 12, 1986, by and between Gavilan Field Joint Venture, as seller, and Phelps Dodge Refining Corporation, as purchaser, but which does not include provisions inconsistent in any way with the foregoing offer and does include provisions based upon the terms summarized in paragraphs A-F of such offer, and otherwise mutually satisfactory to Phelps Dodge and Mallon, and requires a closing on or before September 30, 1992.

For Mallon's information, there are attached hereto copies of (i) a Compliance Order In the Matter of Phelps Dodge Refining, dated May 7, 1992 by David M. Vackar, Director of the Environmental Protection Division of the New Mexico Environment Department, and (ii) a letter dated May 8, 1992 from William J. LeMay, Director of the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department, to Phelps Dodge. The undersigned will, at your request, respond to any questions you may have about the Compliance Order, the letter, any matters referred to in either, or any other matters relating to the Property, the Other Property or the Plant.

Phelps Dodge intends to do certain environmental clean-up work at and near the Plant location before any sale and assignment of the Property to Mallon.

Phelps Dodge may without cost or expense to it locate all or any parts of the Other Property at or near the present site of the Plant until all of the Other Property is sold. Mallon will until all such Other Property is sold supply fuel gas to Phelps Dodge,

Mr. Kevin M. Fitzgerald  
Mallon Oil Company  
September 18, 1992  
Page 4

without cost or expense to Phelps Dodge, so that Phelps Dodge may operate the same for demonstration to potential purchasers.

Very truly yours,

PHELPS DODGE REFINING CORPORATION

By  \_\_\_\_\_

ACCEPTED THIS 18th DAY OF SEPTEMBER, 1992.

MALLON OIL COMPANY

By  \_\_\_\_\_  
Kevin M. Fitzgerald  
President  
MM12967

SCHEDULE I

REAL PROPERTY

SURFACE LEASE:

The Restated Surface Lease, effective as of October 23, 1985, between Cedar Mountain Petroleum Corporation, as lessee, and The Frederick Harold Davis and Sarah Alma Davis Family Trust, Frederick Harold Davis, and Sarah Alma Davis, as lessors, which covers the following two tracts of land situated in SE $\frac{1}{4}$  Section 11, Township 25N, Range 2W, N.M.P.M., Rio Arriba County, New Mexico.

Tract I. PLANT SITE

Beginning at a point whence the SW Cor. of said Section 11 bears S 66°15'05" W, a distance of 2,911.05 feet;  
Thence: N 0°01'13" W, a distance of 173.00 feet;  
Thence: N 89°58'47" E, a distance of 213.00 feet;  
Thence: S 0°01'13" E, a distance of 173.00 feet;  
Thence: S 89°58'47" W, a distance of 213.00 feet to the point of beginning

Said tract contains 36,849.0 sq. ft. or 0.85 Ac., more or less.

TRACT II. ADDITION TO PLANT SITE

Beginning at a point whence the SW Cor. of said Section 11 bears S 63°12'36" W, a distance of 2,984.87 feet;  
Thence: N 0°01'13" W, a distance of 125.00 feet;  
Thence: N 89°58'47" E, a distance of 434.39 feet;  
Thence: S 14°01'52" W, a distance of 90.32 feet;  
Thence: S 29°08'25" W, a distance of 82.17 feet;  
Thence: S 48°16'23" W, a distance of 46.83 feet;  
Thence: S 88°34'30" W, a distance of 124.50 feet;  
Thence: N 0°01'13" W, a distance of 68.59 feet;  
Thence: S 89°58'47" W, a distance of 213.00 feet to the point of beginning

Said tract contains 62,548.7 sq. ft. or 1.44 Ac., more or less.

**SCHEDULE I**  
**REAL PROPERTY**  
**(Continued)**

**EASEMENTS (all in Rio Arriba County, New Mexico)**

	Grantor Name	Date	Book/Page	Description
1.	Frederick Harold Davis and Sarah Alma Davis Family Trust	06/06/86	109/641	E½ Section 11, Township 25N, Range 2W, NMPM
2.	Frederick Harold Davis and Sarah Alma Davis Family Trust	06/06/85	109/639	SE¼SE¼ Section 3, NE¼ Section 10, Township 25N, Range 2W NMPM
3.	Frederick Harold Davis and Sarah Alma Davis Family Trust	10/23/85	109/633	W½ Section 11, S½ Section 10, SW¼SW¼ Section 6, Township 25N, Range 2W
4.	Trudy Schmitz	09/09/85	109/637	SE¼ Section 9, NE¼NE¼, NW¼NE¼, NE¼NW¼ Section 16, Township 25N, Range 2W
5.	County of Rio Arriba County Road #398	11/01/85	N/A	From County Road 402 to State Road 95, in Sections 7,8 and 9, Township 25N, Range 2W
6.	Paul Brown and Marie Brown Estate	11/11/85	109/645	All Section 7, All Section 8, Township 25N, Range 2W
7.	New Mexico Highway Department	12/01/86	N/A	20 feet North of power pole #30337 of the Jemez Mountain Electric Company, in Section 11, Township 25N, Range 2W
8.	James N. Volkman and Donna Volkman	12/17/85	110/343	E½SE¼ Section 1, Township 25N, Range 3W
9.	Bureau of Land Management, NM-64124	04/10/86	N/A	SW¼SE¼ Section 1, Township 25N, Range 3W
10.	Frederick Harold Davis and Sarah Alma Davis Family Trust	10/23/85	109/635	SW¼ Section 1, Township 25N, Range 3W
11.	Olivia Cordova	09/10/85	109/643	S½S½ Section 2, Township 25N, Range 3W
12.	Tony Schmitz, Jr. and Darlene L. Schmitz	05/12/86	113/27	S½S½ Section 3, SE¼ Section 4, N½NW¼ Section 10, Township 25N, Range 3W

**SCHEDULE I**

**PERSONAL PROPERTY AND EQUIPMENT**

Inlet Separator

3' x 10'-0"

Compressor Building

ABB 21' x 42' x 11'6" insulated metal

Office Building

8' x 40' skid mounted with restrooms and heating system, 500 gal. water storage tank and septic tank

Plant Yard

Enclosed with 8' chain link fence with one double drive-in gate and two walk-in gates

Yard Lighting

4 pole mounted sodium lights

Compressor Unit

JGW-2 Ariel compressor driven by Cat G342TA gas engine

Meters

All gas meters owned by Phelps Dodge relating to the Mallon Wells

Gathering Lines

That portion of all gathering lines owned by Phelps Dodge connecting the Mallon Wells to the Plant, that lies downstream from the meters

Pipelines

All pipelines downstream from the Plant to the connection with Gas Company of New Mexico



State of New Mexico

ENVIRONMENT DEPARTMENT

JUDITH M. ESPINOSA  
SECRETARY

RON CURRY  
DEPUTY SECRETARY

BRUCE KING  
GOVERNOR

TRANSMITTAL MEMORANDUM

TO: Jerry D. Worsham, III  
Phelps Dodge Corporation  
2600 N. Central Avenue  
Phoenix, AZ 85004-3014

DATE: May 7, 1992

RE: In the Matter of Phelps Dodge Refining Corp.

The following documents are enclosed: Copy of Compliance Order n the above-referenced matter.

PLEASE:

- File
- Record
- Serve, complete Return of Service and return to us
- Per your request
- For your information
- Approve and sign
- Return conformed copies
- Check for \$ \_\_\_\_\_ enclosed for proper fee
- Self-addressed, stamped envelope(s) enclosed
- Other:

Thank you very much,

*Linda D. Romeo*

Louis W. Rose  
Acting General Counsel

Enclosure

*7/27/92 Ms. Tracy Haskes  
Acty General Counsel*

lmr



NEW MEXICO ENVIRONMENT DEPARTMENT

IN THE MATTER OF:

Phelps Dodge Refining Corp.  
2600 N. Central Avenue  
Phoenix, Arizona 85004-3014

Respondent.

COMPLIANCE ORDER

Complainant David M. Vackar, Director of the Environmental Protection Division of the New Mexico Environment Department ("NMED"), pursuant to delegation from the Secretary of Environment, hereby states:

Introduction

1. This Compliance Order is issued pursuant to the New Mexico Air Quality Control Act, §74-2-12.A NMSA 1978 (as amended by Laws 1992, Chapter 20, Section 14) to enforce the New Mexico Air Quality Control Act, §74-2-1 et seq. NMSA 1978 and the Environmental Improvement Board's Air Quality Control Regulation ("AQCR") 702--Permits and to assess a civil penalty for Respondent's, Phelps Dodge Refining Corporation ("Phelps Dodge"), violation of those requirements at its facility located near Gavilan, New Mexico.

Claim--Construction and Operation Without a Permit

2. Phelps Dodge owns and operates a natural gas compressor station near Gavilan, New Mexico.

3. The compressor station is comprised of the following air contaminant emission sources:

a. three (3) 265 hp Caterpillar G342 natural gas fired engines;

b. one (1) 250 hp Waukesha L1616GU natural gas fired engine;

c. one (1) reboiler: Crawford Tank Manufacturing Company, 3 ft. X 17 ft. K-3 No.1. 300,000 Btu/hr. natural gas fired burner;

d. one (1) reboiler: Crawford Tank Manufacturing Company, 3 ft. X 10 ft. K-2 E-3-C. 206,000 Btu/hr. natural gas fired burner; and

e. one (1) Glycol Regenerator: Custom Energy, 2 ft. X 9 ft. 50,000 Btu/hr. natural gas fired burner.

4. Upon information and belief, the compressor station was constructed by Mallon Oil Company ("Mallon") on or before November 25, 1985 and was operated by Mallon until it was purchased by Phelps Dodge.

5. Phelps Dodge purchased the compressor station on December 12, 1986 and has operated the station ever since.

6. At the time the compressor station was constructed, AQCR 702 required that a "person constructing a stationary source which has a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Ambient Air Quality Standard" first obtain a permit from the Environmental Improvement Division of the New Mexico Health and Environment Department ("EID") (predecessor to the New Mexico Environment Department).

7. Further, the Act and AQCR 702 prohibited the operation of such stationary source, except in accordance with the permit issued under that regulation.

8. Mallon did not obtain a permit from EID prior to construction or operation of the station.

9. At no time during its operation of the compressor station did Phelps Dodge obtain a permit from EID for the operation of the station.

10. Therefore, since December 12, 1986, Phelps Dodge has been operating the station in violation of the Act and AQCR 702.

Order and Assessment of Penalty

11. IT IS HEREBY ORDERED, pursuant to §74-2-12.A(1) NMSA 1978, that Phelps Dodge, immediately upon receipt of this Order, cease operation of the Gavilan compressor station until it obtains a permit from NMED, pursuant to AQCR 702.

12. IT IS FURTHER ORDERED that, pursuant to §74-2-12.A(1) NMSA 1978, as amended, and based upon all relevant factors, including but not limited to, the size of the business, the economic impact of the penalty on the business, the Respondent's full compliance history and good faith efforts to comply, the duration of the violations alleged above, payment by the Respondent of penalties previously assessed for any similar violation, the economic benefit of noncompliance, and the seriousness of the violations alleged above, Phelps Dodge is hereby assessed a civil penalty in the amount of fifty thousand dollars (\$50,000) for the violations alleged in this Compliance Order.

13. The payment shall be made by certified or cashier's check made payable to the State of New Mexico and mailed or hand-delivered to the New Mexico Environment Department, Office of General Counsel, Attention: Linda Romero, 1190 St. Francis Dr., Post Office Box 26110, Santa Fe, New Mexico 87502-6110.

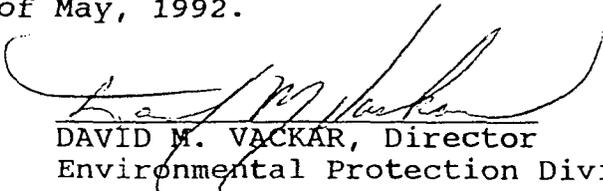
Notice of Opportunity for Hearing

14. In accordance with §74-2-12.C NMSA 1978, this Compliance Order, including the civil penalty, shall become final unless Respondent, within thirty (30) days after service of this Order, files a written request for a public hearing with the Hearing Clerk.

15. The request for hearing and answer must satisfy the requirements of the Rules Governing Appeals from Compliance Orders under the Hazardous Waste Act and the Solid Waste Act, HED 90-10 (EID), a copy of which is enclosed with this Order. The request for hearing and answer must be filed with the Hearing Clerk, New Mexico Environment Department, 1190 St. Francis Dr., Post Office Box 26110, Santa Fe, New Mexico 87502-6110.

16. If Respondent does not request a public hearing in accordance with HED 90-10 or §74-2-12.C, supra. and pays the assessed civil penalty, all issues between NMED and Phelps Dodge concerning the natural gas compressor station near Gavilan, New Mexico are hereby resolved.

DATED this 2 day of May, 1992.

  
DAVID M. VACKAR, Director  
Environmental Protection Division

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

May 8, 1992

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

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-670-683-589**

Mr. Jerry D. Worsham, II  
Phelps Dodge Refining Corporation  
2600 N. Central Avenue  
Phoenix, Arizona 85004-3014

**RE: DISCHARGE PLAN REQUIREMENT  
GAVILAN GAS PROCESSING PLANT  
RIO ARRIBA COUNTY, NEW MEXICO**

Dear Mr. Worsham:

The Oil Conservation Division (OCD) has received your April 28, 1992 letter advising the OCD that Phelps Dodge Refining Corporation (PDRC) discontinued operations at the Gavilan Gas Processing Plant on April 24, 1992. The OCD required a discharge plan for this facility pursuant to Part 3-104 and Part 3-106 of the New Mexico Water Quality Control Commission Regulations in a letter dated February 3, 1992.

The OCD no longer requires PDRC to submit a discharge plan for the referenced facility since it is no longer in operation. Please note, if PDRC wishes to reactivate the facility in the future then a discharge plan is required prior to start-up of operations. If PDMC sells the facility to another party then that party must be notified of the discharge plan is required prior to reactivation. If the facility is sold then PDRC must provide the OCD with documentation of the sale and notification of the discharge plan requirement to the third party.

If you have any questions on this matter, please feel free to contact me at (505) 827-5884.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay".

William J. LeMay  
Director

xc: Denny Foust, OCD Aztec Office

