

GW - 272

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

2006 - 1996

**Chavez, Carl J, EMNRD**

**From:** Chavez, Carl J, EMNRD  
**Sent:** Friday, December 22, 2006 1:16 PM  
**To:** 'Bays, David'  
**Subject:** RE: Expired Discharge Plan Permits

Mr. Bays:

I will double check our files for OCD closure correspondence for the discharge plan facilities (GWs) in your note below. However, I do not recall seeing OCD correspondence approving the closure of the facilities (except for the Hampton CS) or a closure report in our files.

The OCD requires that the company verify that environmental contamination is not present at the facility. In addition, we also need photos to help verify that the property where the facilities are located have been restored and closed in accordance with a closure plan.

You may also want to double check your files for OCD correspondence approving the closure of the facilities. Thank you.

---

**From:** Bays, David [mailto:David.Bays@Williams.com]  
**Sent:** Monday, December 18, 2006 6:16 AM  
**To:** Chavez, Carl J, EMNRD  
**Subject:** RE: Expired Discharge Plan Permits

As we discussed by telephone, the Hampton Straddle compressor is now located at the North Crandell Station, and is covered by permit GW-310.

The Division was notified in writing on August 22, 2001 that the Kernaghan B-8 and the Moore Stations were both permanently shut down and dismantled. These sites are no longer subject to WQCC 3106.F.

The Division was notified in writing on August 26, 2001 that the Hart Mountain and Trunk G Stations were both permanently shut down and dismantled. These sites are no longer subject to WQCC 3106.F.

David Bays, REM  
 Sr. Environmental Specialist  
 Williams Midstream  
 Phone: (505) 634-4951  
 Fax: (505) 632-4781

---

**From:** Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]  
**Sent:** Friday, December 15, 2006 4:40 PM  
**To:** Klein, Elisabeth A; rschmaltz@giant.com; ed.sloman@igeenergy.com; Moore, Darrell; Aparicio, Linda K.; Bays, David  
**Cc:** Price, Wayne, EMNRD  
**Subject:** Expired Discharge Plan Permits

Ladies and Gentlemen:

The Oil Conservation Division's (OCD) records indicate that your discharge plan has expired (see attached "Expired-No Expire Permits 12-15-06" file). New Mexico Water Quality Control Commission regulations (WQCC) Section 3106.F (20.6.2.3106.F NMAC) specifies that if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved. You may be operating without a permit. Please submit a permit renewal application with a filing fee (20.6.2.3114 NMAC) of \$100.00 by December 31, 2006. Please make all checks payable to the **Water Quality Management Fund** and addressed to the OCD Santa Fe Office. There is also a discharge plan permit fee, based on the type of facility, which OCD will assess after processing your application. An application form and guidance document is attached in order to assist in expediting this process.

12/22/2006

In accordance with the public notice requirements (Subsection A of 20.6.2.3108 NMAC) the newly revised (July 2006) WQCC regulations, "...to be deemed administratively complete, an application shall provide all of the information required by Paragraphs (1) through (5) of Subsection F of 20.6.2.3108 NMAC and shall indicate, for department approval, the proposed locations and newspaper for providing notice required by Paragraphs (1) through (4) of Subsection B or Paragraph (2) of Subsection C of 20.6.2.3108 NMAC." You are required to provide the information specified above in your permit renewal application submittal. Attached are a flow chart and the regulatory language pertaining to the new WQCC public notice requirements for your convenience. After the application is deemed administratively complete, the revised public notice requirements of 20.6.2.3108 NMAC must be satisfactory demonstrated to OCD. OCD will provide public notice pursuant to the revised WQCC notice requirements of 20.6.2.3108 NMAC to determine if there is any public interest.

Please find attached other relevant files for your consideration and use. If your discharge plan filing fee has been submitted, please inform me that it has been sent. You may contact me by phone at 505-476-3491 or email [carlj.chavez@state.nm.us](mailto:carlj.chavez@state.nm.us) if you have any questions regarding this matter. Thanks in advance for your cooperation.

Carl J. Chavez, CHMM  
New Mexico Energy, Minerals & Natural Resources Dept.  
Oil Conservation Division, Environmental Bureau  
1220 South St. Francis Dr., Santa Fe, New Mexico 87505  
Office: (505) 476-3491  
Fax: (505) 476-3462  
E-mail: [CarlJ.Chavez@state.nm.us](mailto:CarlJ.Chavez@state.nm.us)  
Website: <http://www.emnrd.state.nm.us/ocd/>  
(Pollution Prevention Guidance is under "Publications")

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**Chavez, Carl J, EMNRD**


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David Bays, REM  
 Sr. Environmental Specialist  
 Williams Midstream  
 Phone: (505) 634-4951  
 Fax: (505) 632-4781

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Carl J. Chavez, CHMM  
New Mexico Energy, Minerals & Natural Resources Dept.  
Oil Conservation Division, Environmental Bureau  
1220 South St. Francis Dr., Santa Fe, New Mexico 87505  
Office: (505) 476-3491  
Fax: (505) 476-3462  
E-mail: [CarlJ.Chavez@state.nm.us](mailto:CarlJ.Chavez@state.nm.us)  
Website: <http://www.emnrd.state.nm.us/ocd/>  
(Pollution Prevention Guidance is under "Publications")

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Environmental Affairs  
188 County Road 4900  
Bloomfield, New Mexico 87413  
(505) 634-4634  
(505) 632-4781 fax

August 22, 2001

Mr. Jack Ford  
NM Oil Conservation Division  
2040 S. Pacheco Street  
Santa Fe, NM 87505

Re: Kernaghan B-8 and Moore Straddle

Dear Mr. Ford:

This letter is in response to your request for additional information concerning the July 27, 2001 letter submitted to your office. The letter served as a notice that the compression, dehydration, and storage tanks at Kernaghan B-8 (GW-272) and Moore Straddle (GW-273) Compressor Stations have been removed. The compressor stations were removed from service in December 2000 and the equipment described above was removed by April 2001.

If compression equipment is installed at the site to meet future requirements, the NMOCD will be contacted and an updated OCD discharge plan will be submitted for you approval.

Although equipment has been removed from service, the site is part of the pipeline right-of-way and is still in operation. Site closure will occur when the pipeline is abandoned and is expected to occur no sooner than September 1, 2021. Upon site closure, the closure plan will be implemented.

Thank You,

A handwritten signature in black ink, appearing to read "Mark J. Bareta".

Mark J. Bareta  
Senior Environmental Specialist

Xc: file

OIL CONSERVATION DIV.  
01 AUG -6 PM 2:52



Environmental Affairs  
188 CR 4900  
Bloomfield, NM 87413  
505/634-4956  
505/632-4781 Fax

July 27, 2001

Mr. Jack Ford  
NM Oil Conservation Division  
2040 S Pacheco St.  
Santa Fe NM 87505

**Re: Kernagan B-8 and Moore Straddle**

Dear Mr. Ford

Williams Field Services would like this to serve as a notice that the compression, dehydration and storage tanks at the Kernagan B-8 and Moore Straddle Compressor stations have been removed. Therefore, GW-272 and GW-273, respectively, will not need to be renewed. Although equipment has been removed from service, the site is part of the pipeline right-of-way and is still in use. Upon site closure, the closure plan will be implemented.

Williams Field Services appreciates your assistance in handling these issues. If you have any questions or require additional information, please contact Mark Bareta at 505/632/4634.

Thank you,

Clara M. Garcia  
Environmental Compliance

Xc: Denny Foust, Aztec, OCD Dist III

8-7-01

Called & talked w/ Mark Bareta - He will  
send letter giving closure date.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

February 9, 2001

**Lori Wrotenbery**  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 5051 0074**

Ms. Clara M. Garcia  
Williams Field Services  
188 CR 4900  
Bloomfield, New Mexico 87413

**RE: Discharge Plan Renewal Notice for Williams Field Services Facilities**

Dear Ms. Garcia:

Williams Field Services has the following discharge plans, which expire during the current calendar year.

**GW-060 expires 3/21/2001 – Milagro Compressor Station**  
**GW-233 expires 4/1/2001 – La Jara Compressor Station**  
**GW-061 expires 6/6/2001 – Horse Canyon Compressor Station**  
**GW-062 expires 6/6/2001 – Manzanares Compressor Station**  
**GW-063 expires 6/6/2001 – Pump Mesa Compressor Station**  
**GW-064 expires 6/6/2001 – Middle Mesa Compressor Station**  
**GW-079 expires 6/21/2001 – Wild Horse Compressor Station**  
**GW-078 expires 6/21/2001 - 5-Points Compressor Station**  
**GW-250 expires 8/9/2001 – Coyote Springs Compressor Station**  
**GW-249 expires 8/9/2001 – Trunk B Booster Compressor Station**  
**GW-248 expires 8/9/2001 – Trunk A Booster Compressor Station**  
**GW-257 expires 9/18/2001 – Trunk C Compressor Station**  
**GW-256 expires 9/18/2001 – Koch-Gardner Compressor Station**  
**GW-087 expires 11/27/2001 – Cedar Hill Compressor Station**  
**GW-271 expires 12/17/2001 – Kernaghan Compressor Station**  
**GW-274 expires 12/17/2001 – Pritchard Straddle Compressor Station**  
**GW-273 expires 12/17/2001 – Moore Compressor Station**  
**GW-272 expires 12/17/2001 – Kernaghan B-8 Compressor Station**

**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]

The discharge plan renewal application for each of the above facilities is subject to WQCC Regulation 20NMAC 6.2.3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of \$100.00. After January 15, 2001 renewal discharge plans require a flat fee equal to the flat fee schedule for gas processing facilities pursuant to revised WQCC Regulations 20NMAC 6.2.3114. A copy of the revised fee schedule is included for your assistance. The \$100.00 filing fee is to be submitted with each discharge plan renewal application and is nonrefundable.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office. 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.** A complete copy of the regulations is also available on NMED's website at [www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)).

If any of the above-sited facilities no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If the Williams Field Services has any questions, please do not hesitate to contact Mr. Jack Ford at (505) 476-3489.

Sincerely,



Roger C. Anderson  
Oil Conservation Division

cc: OCD Aztec District Office

*Work copy*

SITE NAME	DISCHARGE PLAN #	CURRENT OCD PLAN # of Units/ HP	ACTUAL INSTALLS # of Units/ HP	AQB PERMITTED # of Units/ HP
<b>Category 1 - Update OCD Plans for actual compression; AQB permit allows additional installations</b>				
OK 31-6 #1	X	GW-118	6 units/990 HP ea <i>5+4</i>	15 units/1370 HP ea
No Mod. request → OK 32-7 #1	X	GW-117	4 units/895 HP ea <i>ok</i>	6 units/1357 HP ea
No Mod. request → OK 32-8 #2	X	GW-111	4 units/895 HP ea <i>4+2</i>	5 units/1357 HP ea
OK HORSE CYN. CDP	ok	GW-61	4 units/895 HP ea <i>14</i>	6 units/1390 HP ea
OK MIDDLE MESA CDP	X	GW-64	10 units/895 HP ea <i>10+4</i>	19 units/1362 HP ea
OK PUMP MESA CDP	ok	GW-63	6 units/895 HP ea <i>6+6</i>	10 units/1363 HP ea
OK TRUNK N C.S.	ok	GW-306	5 units/1140 HP ea	6 units/1140 HP ea
No Mod. request → OK TRUNK L C.S.	X	GW-180	6 units/990 HP ea	10 units/990 HP ea
<b>Category 2 - OCD Plan currently reflects all AQB permitted units; however, all units not yet installed</b>				
29-6 #4CDP		GW-122	10 units; total site HP 10,980 <i>4+3</i>	6 units/1377 HP ea.; 1 unit/1148 HP
32-9 CDP		GW-91	8 units/1379 HP ea	5 units/1379 HP ea
OK CEDAR HILL CDP		GW-87	10 units/1386 HP ea <i>ok 5+1</i>	7 units/1386 HP ea
KERNAGHAN B-8 STRADDLE		GW-272	2 units/764 HP ea	1 unit/764 HP
MANZANARES CDP		GW-62	4 units/895 HP ea	3 units/895 HP ea
MOORE STRADDLE		GW-273	2 units/ 778 HP ea	1 unit/ 778 hp
NAVAJO CDP		GW-182	4 units/2946 HP ea	3 units/2916 HP ea
TRUNK A BOOSTER C.S.		GW-248	6 units/1367 HP ea	3 units/1367 HP ea
TRUNK B BOOSTER C.S.		GW-249	7 units/1367 HP ea	3 units/1367 HP ea
MARTINEZ DRAW		GW-308	2 units/1380 HP ea	1 unit/1380 HP
QUINTANA MESA		GW-309	2 units/1380 HP & 1151 HP	1 unit/1232 HP
<b>Category 3 - Update OCD Plans for actual compression; all AQB permitted units installed</b>				
29-6 #2CDP	X	GW-121	5 units/895 HP ea. <i>5+2</i>	12 units/1370 HP ea.
ROSA #1 CDP	X	GW-292	1 unit/1372 HP	2 unit/1372 HP
TRUNK M C.S.	X	GW-181	1 unit/990 HP	2 units/1378 HP ea
PIPKIN		GW-120	2 units/856 HP total	1 unit/1403 HP
LA JARA FIELD	X	GW-233	1 Solar T-3000/ 2831 hp; 2 Solar T-4000/ 2897 hp ea.	2 Solar T-4000, 2 Solar T-4700S, 1 Solar T-4700=total 17,700 hp

*Notice of add. units 7-97. No Mod. req.*

*Notice on renewal*

*(Mod. to 14 units '91)*

*(14 units in renewal appl. '94)*

*(6 units in appl. '95)*

*(up to 8 units in renewal appl. '98)*

*OK*

*-change hp notation*

*No Mod. request → OK*

*No Mod. request → OK*



295 Chipeta Way  
P.O. Box 58900  
Salt Lake City, UT 84108  
801/584-6543  
801/584-7760

September 14, 1998

Mr. Jack Ford  
New Mexico Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

**Re: Underground Line Testing Results at various Williams Field Services Facilities**

Dear Mr. Ford:

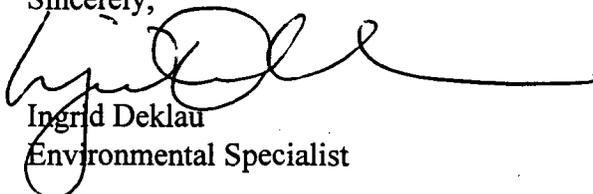
Enclosed, please find a copy of the results of the underground line testing that was performed at the Williams Field Services (WFS) facilities listed below.

Trunk C (GW-259)	Carracas (GW-112)	30-5 (GW-108)
Hart Mountain (GW-208)	32-8#3 (GW-116)	30-8 (GW-133)
Decker Junction (GW-134)	Rosa #1 (GW-292)	Trunk B (GW-249)
Aztec (GW-155)	Manzanaras (GW-62)	32-9 (GW-91)
Cedar Hill (GW-87)	Simms Mesa (GW-68)	Kernaghan (GW-271)
Horse Canyon (GW-61)	Trunk A (GW-248)	Trunk N (GW-306)
32-7 (GW-117)	29-7 (GW-136)	32-8#2 (GW-111)

*Also Added:* Moore (GW-273)      Pritchard (GW-274)      Kernaghan B-8 (GW-272)

If you have any questions concerning this submittal, please call me at 801-584-6543.

Sincerely,



Ingrid Deklau  
Environmental Specialist

XC: Denny Foust, NM OCD



# TIME & EXPENSE REPORT

P.O. Box 40262  
Houston, Texas 77240-0262  
713/466-0980

REPORT NO.  
**10726**

DATE: 1 30 97

CUSTOMER WFS

LOCATION KERNAGHAN 138

BILLING ADDRESS \_\_\_\_\_

ORDER NO. GW 272  
11707 GW-272

PRODUCTION OPERATORS  
JOB NO. 2720023301

ITEM	NAMES	CLASSIFICATION	EXPENSE	MILEAGE	TRAVEL	REG. HOURS	O.T. HOURS	TOTAL HOURS	AMOUNT
1									
2	<del>W. WILKIN SUP</del>			84		8	2	10	
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
								10	
EQUIPMENT USED									
1 4x4 PICKUP								10	
								10	

DESCRIPTION OF WORK HYDRO FUEL GAS HEADER - LISTER WEIGHT  
TEST 2" PVC DRAINS - FABRICATE 2" WASTE SIC  
1 1/2" WASTE SIC PIPING  
1 1/2" INLET FILTER

Tom Mitchell  
Customer Approval

WILKIN  
Supervisor



P.O. Box 58900 Salt Lake City, Utah 84158-0900

1996

**RECEIVED**

**JAN - 2 1997**

Environmental Bureau  
Oil Conservation Division

December 31, 1996

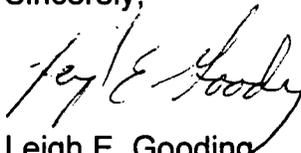
Mr. Roger Anderson  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87504

Re: Discharge Plans Fee - San Juan County  
Kernaghan Compressor Station GW-271  
Kernaghan B-8 Compressor Station GW-272  
Moore Compressor Station GW-273  
Pritchard Straddle Compressor Station GW-274

Dear Mr. Anderson:

Enclosed, please find the signed Conditions of Approval and payment to cover the discharge plan fees for the above referenced Williams Field Services Company facilities. If you have any questions or require additional information, please do not hesitate to contact me at (801) 584-6543.

Sincerely,



Leigh E. Gooding  
Sr. Environmental Specialist

enclosure

**ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH**

I hereby acknowledge receipt of check No. [REDACTED] dated 12/30/96  
or cash received on \_\_\_\_\_ in the amount of \$ 690.00  
from WFS

for Kennaghan B-8 C.S GW-272  
(Facility Name) (DP No.)

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

Submitted to ASD by: R. Anderson Date: 1/24/97

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

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

Organization Code 521.07 Applicable FY 97

To be deposited in the Water Quality Management Fund.

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

TAC (71) 08710 00000 12/26/96 07107100.00 14000 000.00

**WILLIAMS FIELD SERVICES COMPANY**   
ONE OF THE WILLIAMS COMPANIES

P. O. Box 58900  
Salt Lake City, Utah 84158-0900

Chase Manhattan Bank Delaware  
1201 Market Street  
Wilmington DE 19801

62-26 5736-09  
311

DATE	CHECK NO.	NET AMOUNT
12/30/96	<span style="background-color: black; color: black;">[REDACTED]</span>	690.00

PAY  
SIX HUNDRED NINETY AND 00/100-----

TO THE  
ORDER  
OF

NMED-WATER QUALITY MANAGEMENT  
2040 SO. PACHECO  
SANTA FE NM 87505

Williams Field Services Company  
J. Campbell  
VICE PRESIDENT  
AUTHORIZED REPRESENTATIVE



Williams Field Services Company

2289 NMED-WATER QUALITY MANAGEMENT

12/30/96

INVOICE NUMBER	DESCRIPTION	INVOICE DATE	AMOUNT	DISCOUNT	NET AMOUNT
P288258731	KERNAGHAN B8 C/S,	12/17/96	690.00	0.00	690.00
			690.00	0.00	690.00

PLEASE DETACH BEFORE DEPOSITING

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 11/6/96

or cash received on \_\_\_\_\_ in the amount of \$ 200.00

from Environmental Services for W.F.S.  
for Kernaghan C.S. GW 271 / Moore C.S. GW 273  
Kernaghan B-B C.S. GW 272 / Pulchard Straddle C.S. GW 2

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

Submitted to ASD by: [Signature] Date: 12/11/96

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

Filing Fee  New Facility \_\_\_\_\_ Renewal \_\_\_\_\_

Modification \_\_\_\_\_ Other \_\_\_\_\_

Organization Code 521.07 Applicable FY 97

To be deposited in the Water Quality Management Fund.

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

ENVIRONMENTAL SERVICES, INC. 4665 INDIAN SCHOOL RD. NE, STE. 106 PH. 266-6611 ALBUQUERQUE, NM 87110		DATE <u>11-6-96</u>	95-32/1070 0109676338
PAY TO THE ORDER OF	<u>NM Water Quality Management Fund \$ 200.00</u>		
	<u>Two hundred and no/100</u>	DOLLARS	 Security feature visible. Details on back.
<b>SUNWEST</b> SUNWEST BANK OF ALBUQUERQUE, N.A. ALBUQUERQUE, NEW MEXICO 87125-0500 (505) 785-2600		<u>[Signature]</u>	
MEMO	[redacted]		MP



November 6, 1996

RECEIVED

NOV 07 1996

Environmental Bureau  
Oil Conservation Division

Roger Anderson, Bureau Chief  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, NM 87505

Subject: Discharge Plan Applications, Kernaghan, Kernaghan B-8, Moore, Pritchard Straddle  
Compressor Stations, San Juan County, NM,

GW-271      GW-273  
                  ↑  
                  ↓      ↓  
GW-272      GW-274

Dear Mr. Anderson

On behalf of our client, Williams Field Services, I am enclosing two copies of four groundwater discharge plan applications for the Kernaghan, Kernaghan B-8, Moore, Pritchard Straddle Compressor Stations. A check for \$200.00 (\$50 fee for each application) is also enclosed. If you have any questions, please don't hesitate to contact me or Leigh Gooding at (808) 584-6543.

Sincerely

*Robin K. DeLapp*

Robin K. DeLapp  
Environmental Scientist

cc: Leigh Gooding, Williams Field Services Company  
Denny Foust, OCD Aztec

4665 INDIAN SCHOOL NE

SUITE 106

ALBUQUERQUE

NEW MEXICO

87110

PHO 505 266 6611

FAX 505 266 7738

RECEIVED

NOV 26 1996

**AFFIDAVIT OF PUBLICATION**

Environmental Bureau  
Oil Conservation Division

No. 37134

**COPY OF PUBLICATION**

**STATE OF NEW MEXICO**

**County of San Juan:**

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

Friday, November 15, 1996;

and the cost of publication is: \$115.68.

Robert Lovett

On 11/15/96 **ROBERT LOVETT** appeared before me, whom I know personally to be the person who signed the above document.

Denise H. Johnson  
My Commission Expires May 17, 2000

**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 renewal application and discharge plan applications have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-033) - Western Gas Resources, Inc., Mr. James Fleak, (303)-452-5603, 12200 N. Pecos Street, Denver, CO, 80234-3439, has submitted a Discharge Plan Renewal Application for their "San Juan River" Gas Plant located in Section 1, Township 29 North, Range 15 West, NMPM, San Juan County, New Mexico. Plant process waste water is discharged to a double lined surface evaporation pond, designed with a primary liner leak detection system. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 10 feet with a total dissolved solids concentration of approximately 4,500 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-271) - Williams Field Services, Ms. Leigh Gooding, (801)-584-6543, 295 Chipeta Way, Salt Lake City, UT, 84158, has submitted a Discharge Plan Application for their "Kernaghan" compressor station located in the SW/4 NW/4, Section 29, Township 31 North, Range 8 West NMPM, San Juan County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 570 feet with a total dissolved solids concentration of approximately 2000 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-272) - Williams Field Service, Ms. Leigh Gooding, (801)-584-6543, 295 Chipeta Way, Salt Lake City, UT, 84158, has submitted a Discharge Plan Application for their "Kernaghan B-8" compressor station located in the SE/4 SW/4 of Section 33, Township 31 North, Range 8 West, NMPM, San Juan County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 410 feet with a total dissolved solids concentration of approximately 2000 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-273) - Williams Field Services, Ms. Leigh Gooding, (801)-584-6543, 295 Chipeta Way, Salt Lake City, UT, 84158, has submitted a Discharge Plan Application for their "Moore" compressor station located in the NE/4 SW/4, Section 9, Township 30 North, Range 8 West, NMPM, San Juan County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 210 feet with a total dissolved solids concentration of approximately 2000 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

(GW-274) - Williams Field Services, Ms. Leigh Gooding, (801)-584-6543, 295 Chipeta Way, Salt Lake City, UT, 84158, has submitted a Discharge Plan Application for their "Pritchard Straddle" compressor station located in the SW/4 SW/4, Section 1, Township 30 North, Range 9 West, NMPM, San Juan County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 40 feet with a total dissolved solids concentration of approximately 2000 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 applications may be viewed at the above address between 8:00 a.m.



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

December 17, 1996

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-288-258-731**

Ms. Leigh E. Gooding  
Williams Field Services  
P.O. Box 58900, M.S. 2G1  
Salt Lake City, Utah 84158-0900

**RE: Approval of Discharge Plan GW-272  
Kernaghan B-8 Compressor Station  
San Juan County, New Mexico**

Dear Ms. Gooding:

The discharge plan GW-272 for the Williams Field Services Kernaghan B-8 Compressor Station located in SE/4 SW/4, Section 33, Township 31 North, Range 8 West, NMPM, San Juan County, New Mexico, is hereby approved under the conditions contained in the enclosed attachment. The discharge plan consists of the application dated October 21, 1996, from Williams Field Services and this approval letter with conditions of approval from OCD dated December 17, 1996. 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 ten working days of receipt of this letter.**

The discharge plan application was submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission Regulations. Please note Sections 3109.E and 3109.F which provide for possible future amendments or modifications of the plan. Please be advised that the approval of this plan does not relieve Williams Field Services of liability should the operations associated with this facility result in pollution of surface water, ground water, or the environment.

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

Ms. Leigh Gooding  
Williams Field Services  
GW-272  
December 17, 1996  
Page 2

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

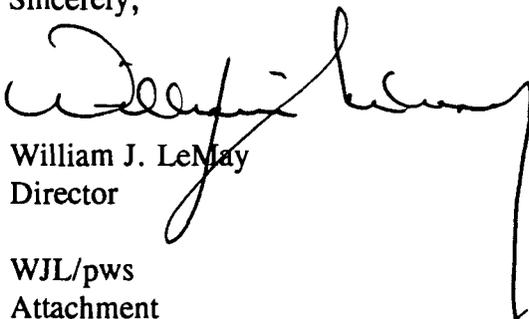
Pursuant to Section 3109.G.4, this plan is for a period of five (5) years. **This approval will expire December 17, 2001, and an application for renewal should be submitted in ample time before that date.** It should be noted that all discharge plan facilities will be required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan approval.

The discharge plan for the Williams Field Services Kernaghan B-8 Compressor Station GW-272 is subject to the WQCC Regulation 3114 discharge plan fee. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of fifty dollars (\$50) plus the flat fee of six-hundred and ninety dollars (\$690) for Compressor Stations between 1,001 and 3,000 horsepower.

**The \$50 filing fee has been received by the OCD. The flat fee for an approved discharge plan has not been received by the OCD.**

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

Sincerely,

  
William J. LeMay  
Director  
  
WJL/pws  
Attachment

xc: Mr. Denny Foust

P 288 258 731

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

Sent to	WFS - Gooding
Street & Number	GW-272
Post Office, State, & ZIP Code	SD 57001
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

Ms. Leigh Gooding  
Williams Field Services  
GW-272  
December 17, 1996  
Page 3

**ATTACHMENT TO DISCHARGE PLAN GW-272**  
**Williams Field Services - Kernaghan B-8 Compressor Station**  
**DISCHARGE PLAN REQUIREMENTS**  
(December 17, 1996)

1. **Payment of Discharge Plan Fees:** The \$690 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. **Williams Field Services Commitments:** Williams Field Services will abide by all commitments submitted in the application dated October 21, 1996, from Williams Field Services and this approval letter with conditions of approval from OCD dated December 17, 1996.
3. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad and curb type containment. 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 should also be stored on an impermeable pad and curb type containment.  
  
All drums and chemical containers shall be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill, or ignite.
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.
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. **Tank Labeling:** All tanks 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 pre-existing sumps and below-grade tanks that do not have secondary containment and leak detection must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks /or sumps.

Ms. Leigh Gooding  
Williams Field Services  
GW-272  
December 17, 1996  
Page 4

9. **Underground Process/Wastewater Lines:** All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Companies 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 so that an OCD representative may witness the testing.

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

Any soils contaminated with a non-exempt waste at the facility will be tested for hazardous constituents, and after receiving OCD approval, will be disposed of at an OCD approved site.

11. **Spill Reporting:** All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the Aztec OCD District Office at (505)-334-6178.

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

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

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

Accepted:

Williams Field Services

by \_\_\_\_\_  
Title

NEW MEXICO OIL CONSERVATION  
ATTN:SALLY MARTINEZ  
2040 S. PACHECO ST.  
SANTA FE, NM 87505

AD NUMBER:578341

ACCOUNT:56689

LEGAL NO: 60737

P.O. #:96199002997

341 LINES once at \$ 136.40

Affidavits: 5.25

Tax: 8.35

Total: \$ 150.50

### AFFIDAVIT OF PUBLICATION

# RECEIVED

NOV 18 1996

Environmental Bureau  
Oil Conservation Division

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 Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 60737 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 13th day of NOVEMBER 1996 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 13th day of NOVEMBER A.D., 1996



OFFICIAL SEAL

**Candace C. Ruiz**

NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 9/29/99

Candace C. Ruiz

**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, 2040 South Pacheco, Santa Fe, New Mexico, 87505, Telephone (505) 827-7131:

(GW-033) - Western Gas Resources, Inc., Mr. James Fleak, (303)-452-5603, 12200 N. Pecos Street, Denver, CO, 80234-3439, has submitted a Discharge Plan Renewal Application for their "San Juan River" Gas Plant located in Section 1, Township 29 North, Range 15 West, NMPM, San Juan County, New Mexico. Plant process waste water is discharged to a double lined surface evaporation pond, designed with a primary liner leak detection system. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 10 feet with a total dissolved solids concentration of approximately 4,500 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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total dissolved solids concentration of approximately 2000 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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County, New Mexico. Any potential discharge at the facility will be stored in a closed top receptacle. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 40 feet with a total dissolved solids concentration of approximately 2000 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 applications 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 modifications, 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 plans based on information available. If a public hearing is held, the director will approve or disapprove the proposed plans based on the information in the discharge plan renewal applications and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 8th day of November 1996.

STATE OF NEW MEXICO  
OIL CONSERVATION  
DIVISION  
WILLIAM J. LEMAY,  
Director  
Legal #60737

Pub. November 13, 1996

**RECEIVED**

NOV 18 1996

Environmental Bureau  
Oil Conservation Division

**Pat Sanchez**

---

**From:** Denny Foust  
**Sent:** Friday, November 08, 1996 9:48 AM  
**To:** Pat Sanchez  
**Subject:** WFS NEW COMPRESSOR APPLICATIONS

NOVEMBER 8, 1996

I DON'T SEE ANY PROBLEMS WITH THE GENERAL FORMAT. I DON'T THINK WE CAN CLASSIFY ALL MIXED WASTE STREAMS AS NON-HAZARDOUS BASED ON THE TEST SUBMITTED--NEEDS MORE TESTING TO GRANT A RECOGNITION OF NON HAZARDOUS STATUS DUE TO KNOWLEDGE OF PROCESS. THE PRITCHARD STRADDLE COMPRESSOR IS LOCATED NEAR A GAS SEEP IN PUMP CANYON, CURRENTLY I AM IN CONTACT WITH LEIGH GOODING ABOUT THIS POTENTIAL PROBLEM.

**Pat Sanchez**

---

**From:** Denny Foust  
**Sent:** Friday, November 08, 1996 7:28 AM  
**To:** Pat Sanchez  
**Subject:** Registered: Denny Foust

Your message

**To:** Denny Foust  
**Subject:** DISCHARGE PLAN APPLICATIONS  
**Sent:** 11/7/96 11:25:00 AM

was read on 11/8/96 7:28:00 AM

**Pat Sanchez**

---

**From:** Pat Sanchez  
**Sent:** Thursday, November 07, 1996 11:25 AM  
**To:** Denny Foust  
**Subject:** DISCHARGE PLAN APPLICATIONS  
**Importance:** High

MR. FOUST, I HAVE RECEIVED 4 NEW PERMIT APPLICATIONS FOR WFS, THEY ARE : KERNAGHAN GW-271, KERNAGHAN B-8 GW-272, MOORE GW-273, AND PRITCHARD STRADDLE GW-274. AND THE RENEWAL FROM WEST. GAS FOR GW-033 "SAN JUAN RIVER" GAS PLANT.

PLEASE REVIEW THE ABOVE LISTED APPLICATIONS AND SUBMIT YOUR COMMENTS BY E-MAIL BY

TUESDAY MORNING NOVEMBER 12, 1996 BY 8:30 AM.

THANKS!!!!!!

## NOTICE OF PUBLICATION

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

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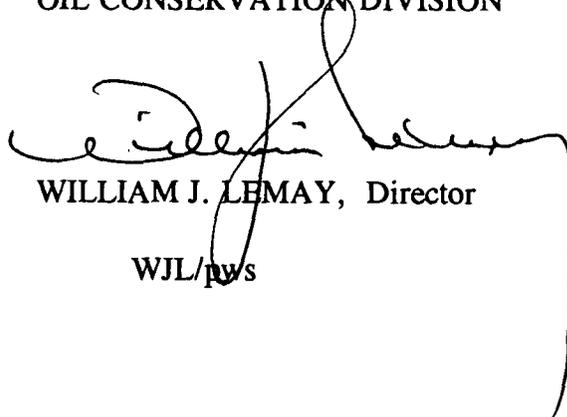
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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 8th day of November, 1996.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY, Director

WJL/pys

SEAL

6w-272  
Application for Groundwater Discharge Plan

**Kernaghan B-8 Compressor Station**  
Manzanares Gathering System

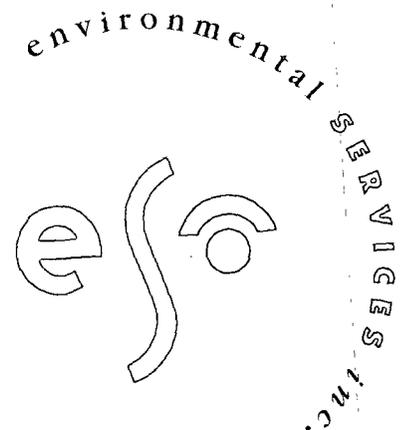
RECEIVED

NOV 07 1996

Environmental Bureau  
Oil Conservation Division

prepared for

**Williams Field Services Company**  
November 1996



4665 INDIAN SCHOOL NE  
SUITE 106  
ALBUQUERQUE  
NEW MEXICO  
87110



November 6, 1996

Roger Anderson, Bureau Chief  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, NM 87505

*GW-272*

Subject: Discharge Plan Applications, Kernaghan, Kernaghan B-8, Moore, Pritchard Straddle  
Compressor Stations, San Juan County, NM,

Dear Mr. Anderson

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Sincerely

*Robin K. DeLapp*

Robin K. DeLapp  
Environmental Scientist

cc: Leigh Gooding, Williams Field Services Company  
Denny Foust, OCD Aztec

4665 INDIAN SCHOOL NE

SUITE 106

ALBUQUERQUE

NEW MEXICO

87110

PHO 505 266 6611

**Application for Groundwater Discharge Plan**

**Kernaghan B-8 Compressor Station**

**Manzanares Gathering System**

**prepared for**

**Williams Field Services Company**

**November 1996**

District I - (505) 393-6161  
P. O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 S. First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Road  
Aztec, NM 87410  
District IV - (505) 827-7131

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

Revised 12/1/95

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

GW-272

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

New

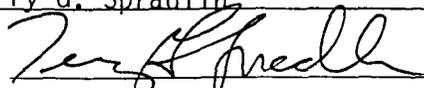
Renewal

Modification

1. Type: Kernaghan B-8 Natural Gas Compressor Station
2. Operator: Williams Field Services Company  
Address: 295 Chipeta Way, P. O. Box 58900, Salt Lake City, Utah 84158  
Contact Person: Ms. Leigh Gooding Phone: (801) 584-6543
3. Location: SE /4 SW /4 Section 33 Township 31 North Range 8 West  
Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
14. CERTIFICATION

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

NAME: Terry G. Spradlin Title: Manager, Environment Health & Safety

Signature:  Date: 10-21-96

**I. TYPE OF OPERATION**

The Kernaghan B-8 Compressor Station will provide metering and compression services to various producers for the gathering of coal seam natural gas on a contract basis for ultimate delivery to Williams Field Services (WFS) Milagro Plant in Bloomfield, New Mexico.

**II. LEGALLY RESPONSIBLE PARTY**

Williams Field Services Company  
295 Chipeta Way  
P.O. Box 58900  
Salt Lake City, Utah 84158-0900  
(801) 584-6543

**Contact Person:**

Ms. Leigh E. Gooding, Sr. Environmental Specialist  
Phone and Address, Same as Above

**III. LOCATION OF DISCHARGE**

The Kernaghan B-8 Compressor Station is located in the SE/4 of the SW/4 of Section 33, Township 31 North, Range 8 West, in San Juan County, New Mexico. A Site Location map is attached (USGS 7.5 Min. Quadrangle: Archuleta, New Mexico) as Figure 1. The site for this station will be 0.271 acres. The site boundary survey is provided in Figure 2. The facility layout is presented in Figure 3.

**IV. LANDOWNER**

Williams Field Services is leasing the subject property from:

Bureau of Land Management  
1235 N. La Plata Highway  
Farmington, NM 87401  
(505) 599-6332

**V. FACILITY DESCRIPTION**

Two (2) Waukesha L 7042 G natural gas reciprocating engines, site rated at 764 horsepower (hp) each, will be installed at the site. Only one unit will initially be installed at the site. The units will be skid-mounted and self-contained. This facility is classified as a field compressor station; consequently, there are no formal office or other support facilities not essential to field compression.

**VI. SOURCES, QUANTITIES AND QUALITY OF EFFLUENTS AND WASTE SOLIDS**

The sources, quantities and quality of effluent and waste solids generated at the compressor station are summarized in Table 1. Material Safety Data Sheets for lube oil used in the equipment were previously provided to New Mexico Oil Conservation Division (NMOCD) by WFS. Lube oil will be stored at the facility in a 500-gallon elevated steel tank. For reference, representative samples of washdown wastewater and used motor oil have previously been collected from representative WFS compressor stations and analyzed for the parameters listed below.

<u>Sample</u>	<u>Parameters</u>
Washdown Wastewater	pH, TDS, TOX, TPH, BTEX, As, Ba, Cd, Cr, Pb, Hg, Se, Ag
Used Motor Oil	As, Cd, Cr, Pb, TOX, Flash Point

The results of previous tests conducted on similar waste streams showed that the washdown water did not exhibit any of the hazardous characteristics and the used motor oil was suitable for recycling (Appendix 1). Additional chemicals listed in WQCC 1101.TT and 3103 are not expected to be present in any process fluids or in the gas transported at the Kernaghan B-8 Compressor Station.

Used oil filters have been collected from representative WFS compressor stations and analyzed for TCLP Metals. The results of the analysis found that the filters did not exceed TCLP concentrations for metals. The analyses were submitted to the San Juan County Regional Landfill along with the Waste Acceptance Profiles. These profiles are updated every two years or as required by the landfill.

**VII. TRANSFER AND STORAGE OF PROCESS FLUIDS, EFFLUENTS AND WASTE SOLIDS**

Used motor oil is collected in a closed-piping system to a 500-gallon above-ground storage tank and transported by an EPA-registered used oil marketer (D&D Oil, EPA ID# NMD986682102).

All liquids from the station inlet filter separator and the two skid-mounted suction scrubbers and fuel filter separators are collected separately in a 400-barrel (bbl) above-ground storage tank located on an existing Amoco Production facility. The liquids are transported by Triple S Trucking Company and disposed at Basin Disposal. Washdown wastewater from engine deck plates will be collected in a closed-piping system directly to a below-grade sump. The sump will be a 740-gallon, fiberglass, double-wall tank, equipped with leak detection. Wastewater accumulations will be removed from the inner tank using a vacuum truck and transported to an NMOCD-approved surface disposal facility. A schematic drawing of the sump is presented in Figure 4.

Used oil filters are drained, stored in 50-gallon plastic drums, and transported by Waste Management of Four Corners to the San Juan County Regional Landfill.

**VIII. EFFLUENT AND WASTE SOLIDS DISPOSAL**

Exempt and non-exempt wastes are managed separately. Only exempt wastes are disposed down Class II injection wells. Non-exempt wastes are characterized for hazardous constituents.

- \* Used motor oil is recycled by an EPA-registered used oil marketer (D&D Oil, EPA ID# NMD986682102).
- \* Natural gas liquids from the separators and scrubbers are disposed at Basin Disposal.
- \* Washdown water has been shown to be non-hazardous and as such, is disposed at an NMOCD-approved surface disposal facility.
- \* Porta-pottys present at the facility are serviced under a contract requiring proper sewage disposal in accordance with applicable laws and regulations.
- \* Used oil filters are disposed at the San Juan Regional Landfill. Current Waste Acceptance Profiles are on file at the landfill.

TABLE 1  
 SOURCES, QUANTITIES AND QUALITY OF EFFLUENT AND WASTE SOLIDS  
 KERNAGHAN B-8 COMPRESSOR STATION

PROCESS FLUID/WASTE	SOURCES	QUANTITY	QUALITY	DISPOSITION
Used oil	Compressors	250 gal/yr	Used motor oil w/no additives	Collected separately in 500-gal AST at each compressor. Transported to D&D Oil for recycling.
Natural Gas Liquids	Station inlet filter Suction scrubbers Filter separators	500 gal/yr	No additives	Collected separately in 400-bbl AST. Transported by Triple S to Basin Disposal.
Washdown Water	Compressors	500 gal/yr	Soap and tap water w/traces of used oil	Collected in a below-grade tank. Transported to NMOCD-approved surface disposal facility for disposal.
Oil Filters	Compressors	20/yr	No additives	Drained and placed in 55-gallon plastic drums. Transported to the San Juan County Landfill for disposal.

**IX. INSPECTION, MAINTENANCE AND REPORTING**

Production Operators, Incorporated (POI) is under contract to operate and maintain the compression units at the facility. The facility is inspected several times per week at a minimum and a POI operator is on call 24 hours per day, 7 days per week, 52 weeks per year. The facility is remotely monitored for equipment malfunctions. POI must comply with WFS' spill response procedures. In the event of a release of a reportable quantity, POI will immediately notify WFS' Environmental Service Department and WFS will report the release to the NMOCD. The below-grade wastewater tank (sump) is monitored monthly for leak detection.

**X. SPILL/LEAK PREVENTION AND REPORTING (CONTINGENCY PLANS)**

For overflow containment, lube oil/waste oil tanks on saddle racks are underlain by concrete splash aprons equipped with retainment curbs. Fluids which collect within the curbed area drain through a pipe into a closed containment system. A drip pan is placed beneath the catwalk adjacent to the oil filter on each compressor unit to contain spillage during maintenance activities. Spill containment dikes around the bulk storage tanks will contain 1-1/3 volume of the largest vessel. Spill containment will also be provided around the tank loading valves. Surface runoff within the site is diverted around facility processes into the natural drainage path to the south.

All pressure vessels on site will be tested in accordance with the requirements of the ASME Boiler and Pressure Vessel Code. All interconnecting gas piping on site will be tested in accordance with the requirements of the ASME Code for Pressure Piping, B31.8, Gas Transmission and Distribution Piping Systems.

WFS corporate policy and procedures for the controlling and reporting of Discharges or Spills of Oil or Hazardous Substances are provided in Appendix 2. Significant spills and leaks are reported to the NMOCD pursuant to NMOCD Rule 116 and WQCC 1203 using the NMOCD form (see Appendix 3).

**XI. SITE CHARACTERISTICS**

The Kernaghan B-8 Compressor Station is located in the SE/4 of the SW/4 of Section 33, Township 31 North, Range 8 West, San Juan County, New Mexico approximately 6.4 kilometers north-northeast of Archuleta, New Mexico. The site elevation is approximately 6410 feet above mean sea level. The undeveloped site is covered mainly by native grasses.

**Hydrologic Features:** The site is located along a dirt road on Pump Mesa approximately 4000 feet north of a branch of Simon Canyon. The site is underlain by alluvial and eolian material over a thick layer of sandstones and shales of the San Jose Formation. Surface runoff from the area surrounding the site is diverted around the yard and to the south. Runoff continues to tributary of the San Juan River located approximately 1500 feet south of the site in Simon Canyon. The San Juan River is located approximately two (2) miles south/southeast of the site.

A review of the available hydrologic data<sup>1</sup> for this area revealed that the closest documented source of groundwater from the subject source is a well owned by El Paso Natural Gas (SJ-0198) located in the SE/4 SE/4 SW/4 of Section 32, Township 31 N, Range 8 West (approximately 0.8 miles southwest of the site). The well, used for drilling, is at an elevation of 6272 feet above mean sea level. The depth to water in the well is reported at 1992 feet below ground surface. The closest documented source of groundwater downgradient of the subject site appears to be the Simon Canyon drainage. Groundwater within the alluvial deposits of the drainage channel is expected to have a total dissolved solids (TDS) concentration of approximately 2000 mg/l. Based on the elevation of the Simon Canyon (6000 feet), the depth to groundwater at the site is approximately 410 feet below ground surface.

**Flood Protection:** Stormwater runoff from the area surrounding the site is diverted around the facility into a natural drainage path.

## **XII. FACILITY CLOSURE PLAN**

All reasonable and necessary measures will be taken to prevent the exceedance of WQCC Section 3103 quality standards should WFS choose to permanently close the facility. WFS will submit a detailed closure plan to the NMOCD prior to closure.

Generally, closure measures will include removal or closure in place of all underground piping and equipment. All tanks will be emptied. No potentially toxic materials or effluents will remain on the site. All potentially toxic pollutants will be inspected. Should contaminated soil be discovered, any necessary reporting under NMOCD Rule 116 and WQCC Section 1203 will be made and clean-up activities will commence. Post-closure maintenance and monitoring plans would not be necessary unless contamination is encountered.

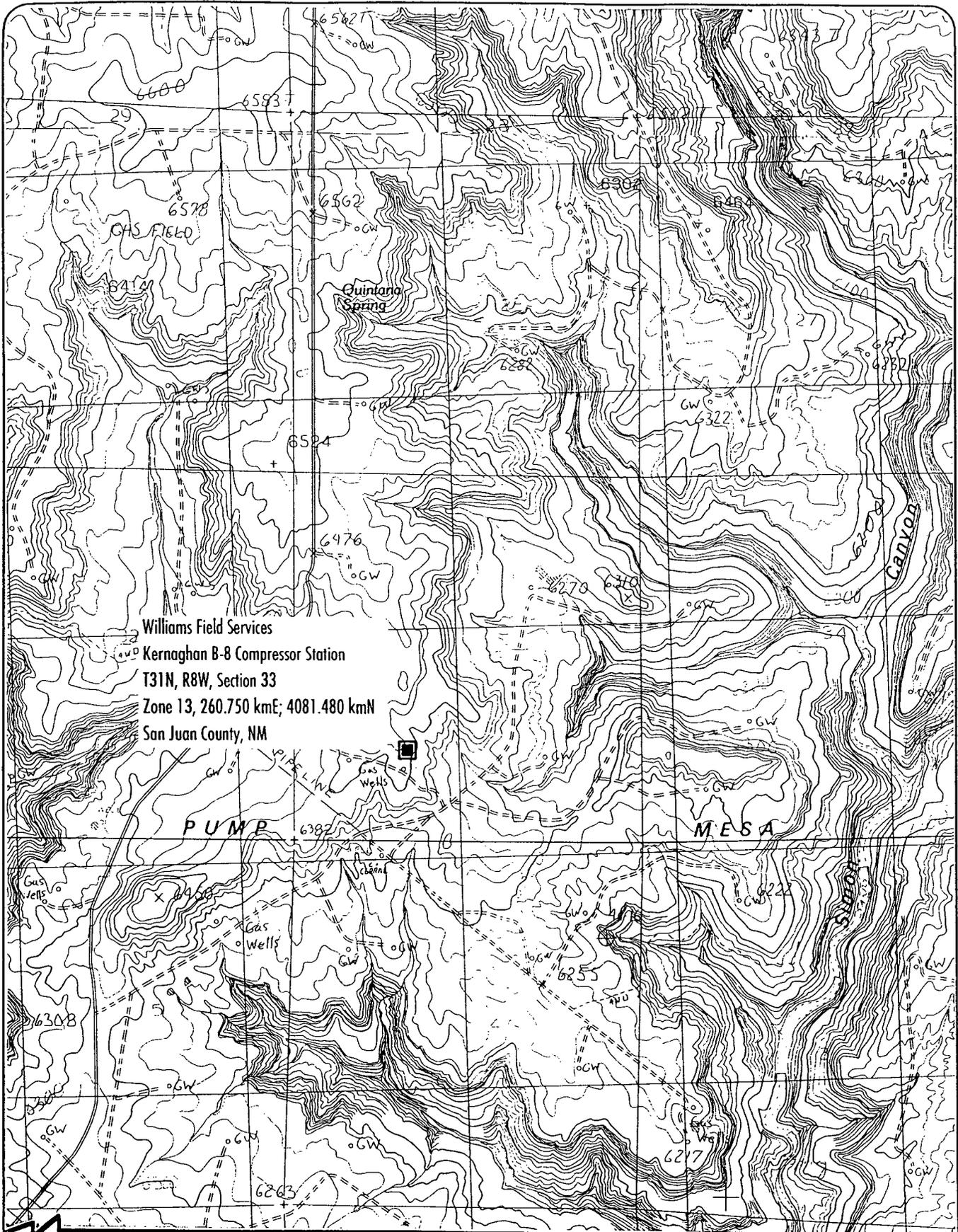
Keetch, C. W. "Soil Survey of San Juan County, New Mexico, Eastern Part", U.S. Department of Agriculture in cooperation with U.S. Department of the Interior, Bureau of Indian Affairs, Bureau of Reclamation, and the New Mexico Agricultural Experiment Station, 1980.

Klausing, R.L. and G.E. Welder, "Availability of Hydrologic Data in San Juan County, New Mexico", USGS Open-file Report 84-608, 1984.

Lyford, F.P., "Ground Water in the San Juan Basin, New Mexico and Colorado", USGS Water-Resource Investigations 79-73, May, 1979.

Stone, W.J., F.P. Lyford, P.F. Frenzel, N.H. Mizel, E.P. Padgett, "Hydrogeology and Water Resources of San Juan Basin, New Mexico", Hydrologic Report 6. New Mexico Bureau of Mines & Mineral Resources.

**FIGURE 1**  
**SITE LOCATION MAP**



Williams Field Services  
 Kernaghan B-8 Compressor Station  
 T31N, R8W, Section 33  
 Zone 13, 260.750 kmE; 4081.480 kmN  
 San Juan County, NM

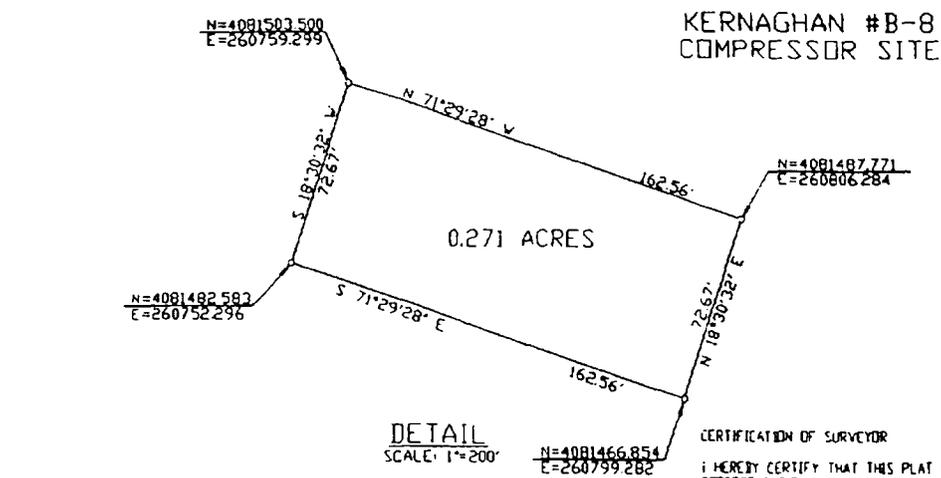
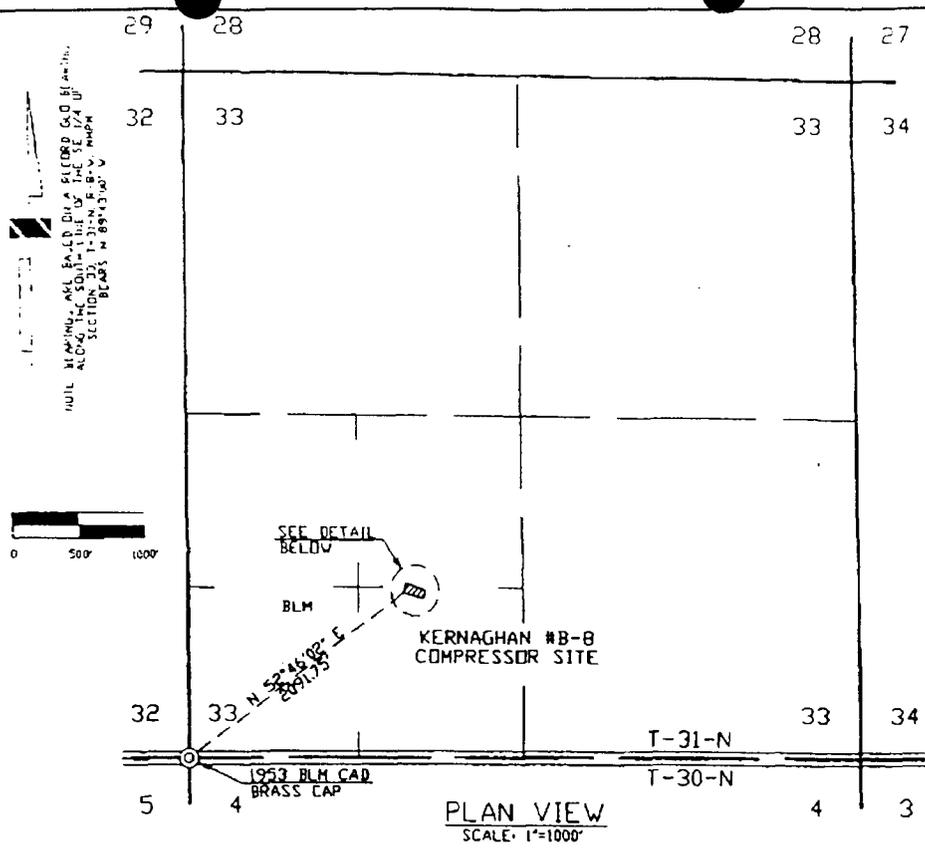


Scale: 1 in = 2000 ft = 0.610 km  
 1:24,000

**Location of Facility**

Archuleta, New Mexico 7.5 Minute Quadrangle

**FIGURE 2**  
**SITE SURVEY PLAN**



- NOTES**
1. ALL COORDINATES AS SHOWN ARE DERIVED FROM U.S.G.S. QUAD MAP. UTM COORDINATES, ZONE 13, IN METERS.
  2. ○ DENOTES SET 1/2\"/>

**CERTIFICATION OF SURVEYOR**

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE REPRESENTATION OF A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE: \_\_\_\_\_  
 HARVEY G. PETERSON  
 NEW MEXICO L.S. #6707

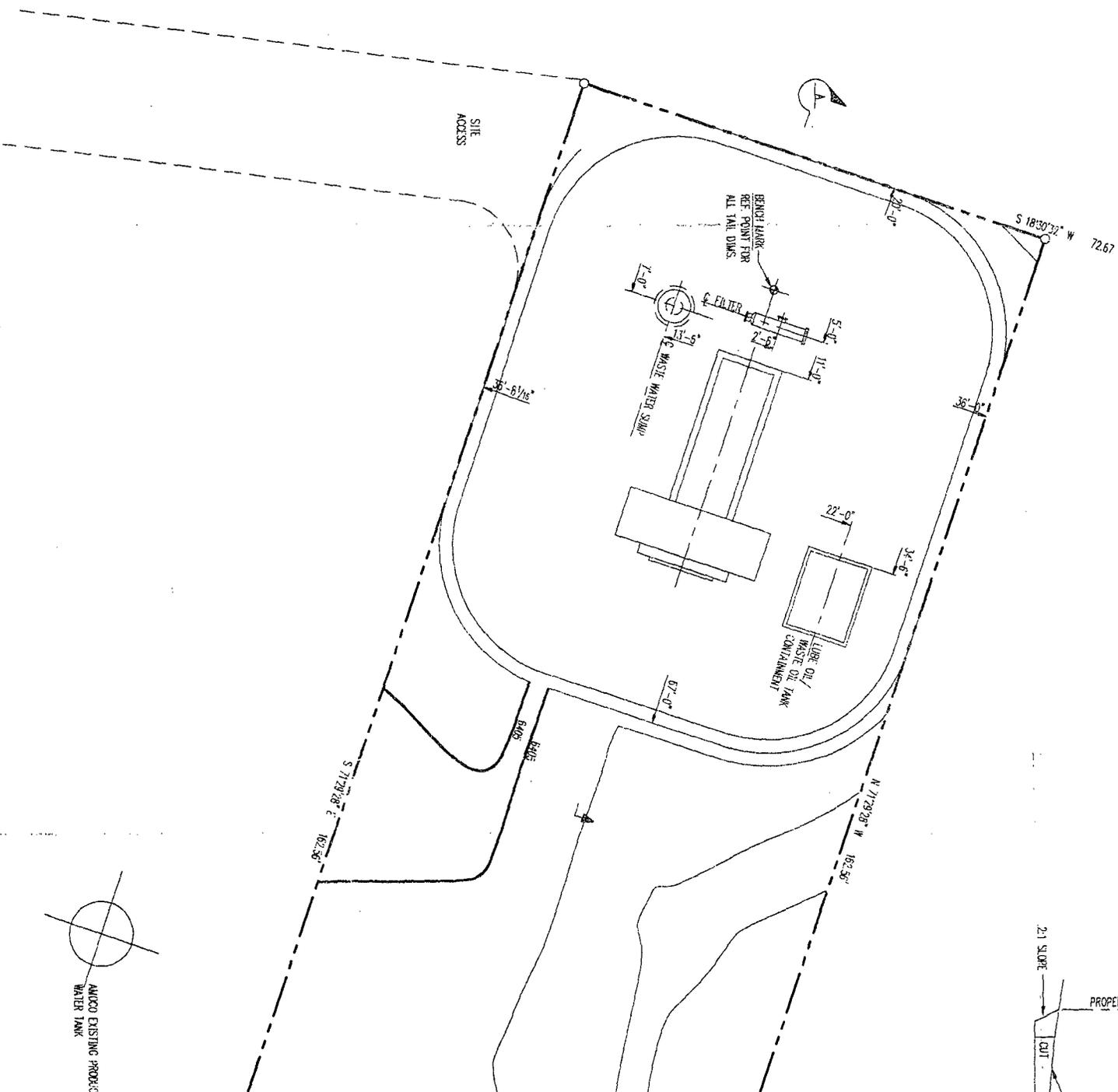
NO.	DATE	BY	REVISION
1	9/10/96	PB	ISSUED FOR REVIEW
R/V NO.	SUPPLIER	9/6/96	REF. ENCL.
V.D. NO.	FILE PATH	OWNER	BLM

<b>WILLIAMS GAS PROCESSING</b> <small>ONE OF THE WILLIAMS COMPANIES</small>			
SAN JUAN GATHERING SYSTEM KERNAGHAN #B-8 COMPRESSOR SITE SEC. 33, T-31-N, R-8-W, NMPM SAN JUAN COUNTY, NEW MEXICO			
SCALE	1"=1000'	DATE	9/10/96
APPROVED BY		ORDER BY	CJF
REV		DWG NO.	765.12-X-37



**Site Survey**  
 Williams Field Services—Kernaghan B-8 Compressor Station

FIGURE 3  
FACILITY PLOT PLAN



SITE ACCESS

BENCH MARK  
REF. POINT FOR  
ALL TIE DIMS.

7'-0"

13'-5"

WASTE WATER SUMP

2'-5"

5'-0"

11'-0"

36'-8 1/2"

136'

S 18°30'22" W 72.67'

22'-0"

34'-6"

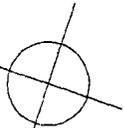
LEAK OIL /  
WASTE OIL TANK  
CONTAINMENT

17'-0"

S 71°29'28" E 162.36'

RAVE

N 71°29'28" W 162.36'



ARICO EXISTING PROPOSED  
WATER TANK

2:1 SLOPE

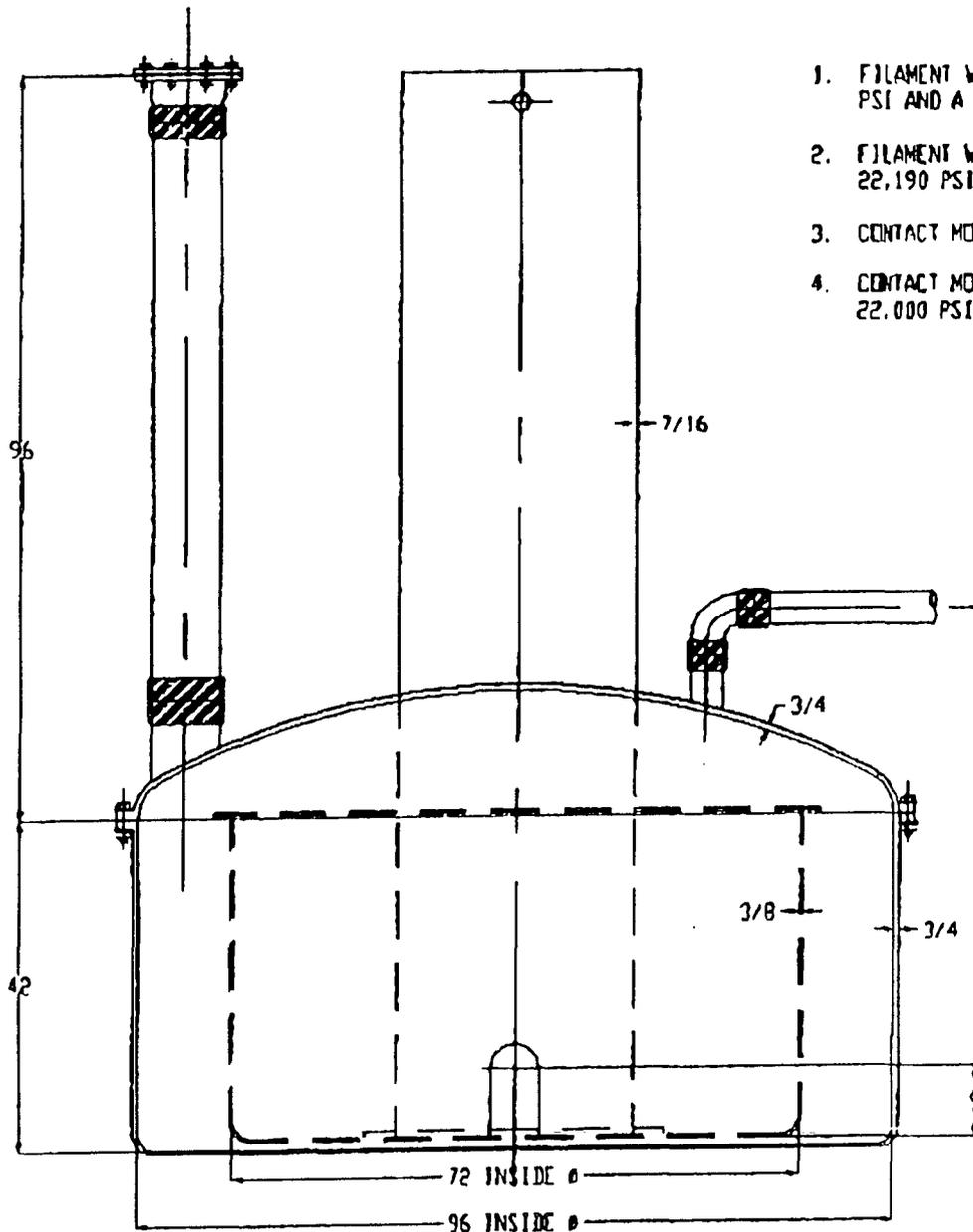
PROPERTY BOUND

CUT



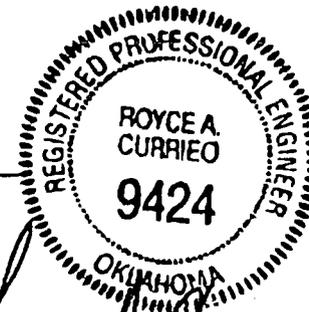
**FIGURE 4**

**BELOW-GRADE WASTEWATER SUMP**



NOTES

1. FILAMENT WOUND LAMINATE TO HAVE A FLEXURAL MODULUS OF 1,000,000 PSI AND A TENSILE MODULUS OF 1,800,000 PSI.
2. FILAMENT WOUND LAMINATE TO HAVE AN ULTIMATE FLEXURAL STRENGTH OF 22,190 PSI, AND AN ULTIMATE TENSILE STRENGTH OF 18,500 PSI.
3. CONTACT MOLDED LAMINATE TO HAVE A FLEXURAL MODULUS OF 1,000,000 PSI.
4. CONTACT MOLDED LAMINATE TO HAVE AN ULTIMATE FLEXURAL STRENGTH OF 22,000 PSI AND AN ULTIMATE TENSILE STRENGTH OF 15,000 PSI.



<b>PERVIAN TANK MFG. Inc.</b>	
P. O. BOX 4430 DIXON, ILLINOIS 62521	TEL (312) 343-3700 FAX (312) 333-3422
<b>8' Ø DOUBLE CONTAINMENT TANK</b>	
DESIGN BY <b>CURRIE</b>	PROJECT NO.
DATE <b>9-7-96</b>	DWG
FOR BY <b>WILLIAMS GAS PROC.</b>	APPROVED BY
TITLE <b>DWG STD-1-D-4042</b>	SCALE
REVISIONS	DATE
DATE OF REVIEW	



Load Analysis for Tank Described on DWG # STD-D-1-4042

VERTICAL BEARING LOAD OF SOIL PACKED TO 95% PROCTOR DENSITY: 145

LATERAL BEARING LOAD COEFFICIENT PER UNIFORM BUILDING CODE, TABLE 29-8:

LATERAL BEARING LOAD: 36.25 LBS/FT<sup>2</sup>/FOOT OF DEPTH

VERTICAL BEARING LOAD ON THE TANK DOME: 7.55 psi

FROM ASME RTP-1, PARA. 3A-320

DESIGNING FRP TANK DOMES TO CONSTRAIN EXTERNAL PRESSURE

$$P_a = 0.36(E/F)(V/R_o)^{-2}$$

WHERE:  $P_a$  = EXTERNAL BEARING PRESSURE (7.55 psi)  
E = FLEXURAL MODULUS (1,000,000 psi PER CUSTOMER DWG #STD-D-1-4042)  
F = SAFETY FACTOR (USUALLY 10)  
 $R_o$  = RADIUS OF THE TANK (48")  
t = REQUIRED DOME THICKNESS inches

$$P_a = 7.55$$

$$(V/R_o)^{-2} = 7.55 / (.36 * (1000000/10))$$

$t = 0.695$ inches
--------------------

The specified dome thickness of 3/4" is adequate

EXTERNAL PRESSURE BEARING ON THE OUTER TANK

Ref: ASME RTP-1 PARA. 3A-310

BURIAL DEPTH = 8' TO 11' 6"

MAXIMUM EXTERNAL PRESSURE DUE TO SOIL BEARING LOADS

PRESSURE = LATERAL BEARING LOAD AT 11.5 FEET

$$P = 36.5 \times 11.5 / 144$$

$$P = 2.915 \text{ psi}$$

Specified Wall Thickness = 1/2

Per 3A-310 calculate  $L/D_o$   $L/D_o = 3.5/8 = 0.4375$

$$\text{Calculate } 1.73(D_o/5)^{-2} \quad 66459.68$$

Load Analysis for Tank Described on DWG # STD-D-1-4042

Use the second equation in 3A-310

$$P_a = 2.6(E/F)((\sqrt{D_o})^{2.5})/[L/D_o - 0.45(\sqrt{D_o})^{.5}] \quad \text{where } t = 1/2$$

$$P_a = 1.105 \text{ psi}$$

Note: If a 1/2" wall thickness is used the Safety Factor will be 3.5

If a 3/4" in thick wall is used for the external tank then

$$P_a = 2.6(E/F)((\sqrt{D_o})^{2.5})/[L/D_o - 0.45(\sqrt{D_o})^{.5}] \quad \text{where } t = 3/4$$

$$P_a = 3.045 \text{ psi}$$

**A Wall Thickness of 3/4" for the External Tank Will Constrain the External Bearing Loads with a Safety factor of 10**

Calculate Required Wall Thickness for the 30" Dia Riser

Lateral Bearing Pressures on the Riser at 7' 6" Burial Depth

$$P_a = 1.888 \text{ psi}$$

Wall Thickness = 3/8" per Customer's Dwg # STD-1-D-4042

$$P_a = 2.6(E/F)((\sqrt{D_o})^{2.5})/[L/D_o - 0.45(\sqrt{D_o})^{.5}] \quad \text{where } t = 3/8 \text{ and } D_o = 30$$

$$P_a = 1.540 \text{ psi} - \text{which is less than the Design Pressure of 1.888 psi}$$

**If Wall Thickness = 7/16 (0.438) inches then:**

$$P_a = 2.273 \text{ psi} - \text{which will satisfy the Design Requirements with a Safety Factor greater than 10}$$

Determine the Req'd Wall Thickness of the Outer and Inner Tanks to Constrain the Stresses Induced by Hydrostatic Pressure

According to ASTM D3299, Para. 6.1.4 and ASME RTP-1, Para. 3A-210

$$t = PD/S \quad \text{Where: } t = \text{Req'd Wall Thickness, Inches } 3/4$$

P = Hydrostatic Pressure, psi	1.516 psi
D = Tank ID, Inches	30"
S = Allowable Stress = Ultimate Stress/Safety Factor	
S = 15,000/10	1500 psi

$$t = 0.097 \text{ inches} \quad \text{Bearing Loads require } 3/4 \text{ thickness}$$

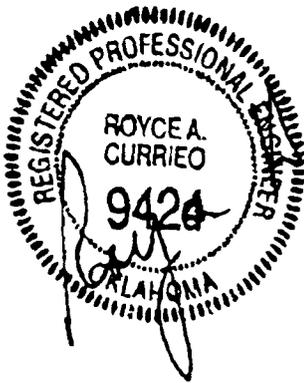
For the Internal Tank  $D_o = 72$ " and  $t = 3/8$ " per Customer's Dwg # STD-D-1-4042

Load Analysis for Tank Described on DWG # STD-D-1-4042

$t = 0.078$  inches — Customer spec requires  $3/8$ "

Synopsis: Required Dome Thickness:  $3/4$ "  
Required Riser Wall Thickness:  $7/16$ "  
Required External Tank Wall Thickness:  $3/4$ "  
Required Internal Wall Thickness:  $3/8$ "

Royce A. Currieo, P. E.  
Oklahoma Certificate No. 9424



*Currieo*

Enseco Incorporated

CEDAR HILL C.D.P.  
WASTE OIL +  
WASTEWATER

ANALYTICAL RESULTS

FOR

NORTHWEST PIPELINE CORPORATION

ENSECO-RMAL NO. 024601

SEPTEMBER 21, 1992

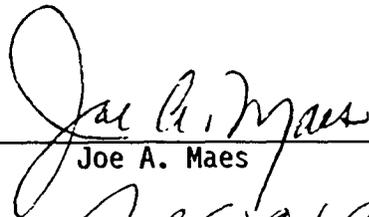


ANALYTICAL RESULTS  
FOR  
NORTHWEST PIPELINE CORPORATION  
ENSECO-RMAL NO. 024601



SEPTEMBER 21, 1992

Reviewed by:

  
\_\_\_\_\_

Joe A. Maes

  
\_\_\_\_\_

Joel E. Holtz



AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

## ORGANIC ANALYSIS REPORT

Client: Williams Field Services  
Date Sampled: July 19, 1995  
Date Received: July 20, 1995

Contact: Mark Harvey  
Date Analyzed: July 26, 1995

Analysis Requested:  
Volatile Aromatics  
Total Purgeable Hydrocarbons

Method Ref. Number:  
SW-846 #8260  
(Purge & Trap GC/MS)

Field Sample ID:  
SAN JUAN AREA  
CEDAR HILL #1

Lab Sample ID:  
L23218-8

463 West 3600 South  
Salt Lake City, Utah  
84115

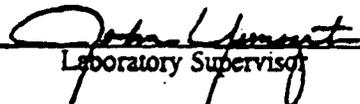
### Analytical Results Units = mg/L(ppm)

BTX/TPH-P

<u>Compound:</u>	<u>Detection Limit:</u>	<u>Amount Detected:</u>
Benzene	0.020	0.036
Toluene	0.020	0.046
Ethylbenzene	0.020	0.14
Total Xylene	0.020	0.95
Total Purgeable Hydrocarbons	0.20	19.

< Value = None detected above the specified detection limit, or a value that reflects a reasonable limit due to interferences.

Released By:

  
Laboratory Supervisor

Report Date: July 31, 1995

1 of 1



AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Client: Williams Field Service  
Date Sampled: July 19, 1995  
Lab Sample ID.: 23218-08  
Field Sample ID: San Juan Area/Cedar Hill #1

Contact: Mark Harvey  
Date Received: July 20, 1995  
Received By: Laurie Hastings  
Set Description: One Water and  
Seven Soil Samples

**INORGANIC ANALYSIS REPORT**

**Analytical Results**

463 West 3600 South  
Salt Lake City, Utah  
84115

(801) 263-8686  
Fax (801) 263-8687

	Method Used:	Detection Limit: mg/L	Amount Detected: mg/L
<b>TOTAL METALS</b>			
Arsenic	7060	0.005	<0.005
Barium	6010	0.002	2.8
Cadmium	6010	0.004	0.013
Chromium	6010	0.01	0.03
Lead	6010	0.05	0.13
Mercury	7471	0.001	<0.001
Selenium	7740	0.005	<0.005
Silver	6010	0.01	<0.01

**OTHER CHEMISTRIES**

pH	150.1	0.1	6.8
TDS	160.1	1.0	3,600.
TOX	9020	0.5	1.6

Released by:

Laboratory Supervisor

## Introduction

This report presents the analytical results as well as supporting information to aid in the evaluation and interpretation of the data and is arranged in the following order:

- o Sample Description Information
- o Analytical Test Requests
- o Analytical Results
- o Quality Control Report

All analyses at Enseco are performed so that the maximum concentration of sample consistent with the method is analyzed. Dilutions are at times required to avoid saturation of the detector, to achieve linearity for a specific target compound, or to reduce matrix interferences. In this event, reporting limits are adjusted proportionately. Surrogate compounds may not be measurable in samples which have been diluted.

Sample 024601-0001 was diluted for Method 8020 due to concentrations of target compounds present beyond linear range; the reporting limits have been increased accordingly.

Sample 024601-0002 was diluted for Method 9020 due to matrix interferences; the reporting limits have been increased accordingly.

## Sample Description Information

The Sample Description Information lists all of the samples received in this project together with the internal laboratory identification number assigned for each sample. Each project received at Enseco-RMAL is assigned a unique six digit number. Samples within the project are numbered sequentially. The laboratory identification number is a combination of the six digit project code and the sample sequence number.

Also given in the Sample Description Information is the Sample Type (matrix), Date of Sampling (if known) and Date of Receipt at the laboratory.

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## Analytical Test Requests

The Analytical Test Requests lists the analyses that were performed on each sample. The Custom Test column indicates where tests have been modified to conform to the specific requirements of this project.

SAMPLE DESCRIPTION INFORMATION  
for  
Northwest Pipeline Corporation

Lab ID	Client ID	Matrix	Sampled Date	Time	Received Date
024601-0001-SA	CEDAR HILL CDP WASTE WATER TAN	AQUEOUS	18 AUG 92	12:40	19 AUG 92
024601-0002-SA	WASTE OIL TANK CEDAR HILL	AQUEOUS	18 AUG 92	11:30	19 AUG 92
024601-0003-TB	TRIP BLANK	AQUEOUS			19 AUG 92

ANALYTICAL TEST REQUESTS  
for  
Northwest Pipeline Corporation

Lab ID: 024601	Group Code	Analysis Description	Custom Test?		
0001	A	pH	N		
		Total Dissolved Solids (TDS)	N		
		ICP Metals (Total)	Y		
		Prep - Total Metals, ICP	N		
		Total Organic Halogen (TOX)	N		
		Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)	N		
		Arsenic, Furnace AA (Total)	N		
		Prep - Total Metals, Furnace AA	N		
		Lead, Furnace AA (Total)	N		
		Mercury, Cold Vapor AA (Total)	N		
		Prep - Mercury, Cold Vapor AA (Total)	N		
		0002	B	Arsenic, Furnace AA	N
				Prep - Total Metals, Furnace AA	N
				ICP Suite	Y
Prep - Total Metals, ICP	N				
Lead, Furnace AA	N				
Total Organic Halogen (TOX)	N				
Ignitability, Closed Cup	N				
0003	C	Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)	N		

## Analytical Results

The analytical results for this project are presented in the following data tables. Each data table includes sample identification information, and when available and appropriate, dates sampled, received, authorized, prepared and analyzed. The authorization data is the date when the project was defined by the client such that laboratory work could begin.

Data sheets contain a listing of the parameters measured in each test, the analytical results and the Enseco reporting limit. Reporting limits are adjusted to reflect dilution of the sample, when appropriate. Solid and waste samples are reported on an "as received" basis, i.e. no correction is made for moisture content.

The results from the Standard Enseco QA/QC Program, which generates data which are independent of matrix effects, are provided subsequently.

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)

Method 8020

Client Name: Northwest Pipeline Corporation  
Client ID: CEDAR HILL CDP WASTE WATER TANK  
Lab ID: 024601-0001-SA  
Matrix: AQUEOUS  
Authorized: 19 AUG 92  
Sampled: 18 AUG 92  
Prepared: NA  
Received: 19 AUG 92  
Analyzed: 22 AUG 92

Parameter	Result	Units	Reporting Limit
Benzene	19	ug/L	1.2
Toluene	63	ug/L	1.2
Ethylbenzene	12	ug/L	1.2
Xylenes (total)	240	ug/L	1.2
Surrogate	Recovery		
a,a,a-Trifluorotoluene	112	%	

ND = Not detected  
NA = Not applicable

Reported By: Steve Shurgot

Approved By: Stan Dunlavy

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)

Method 8020

Client Name: Northwest Pipeline Corporation

Client ID: TRIP BLANK

Lab ID: 024601-0003-TB

Matrix: AQUEOUS

Authorized: 19 AUG 92

Sampled: Unknown

Prepared: NA

Received: 19 AUG 92

Analyzed: 24 AUG 92

Parameter	Result	Units	Reporting Limit
Benzene	ND	ug/L	0.50
Toluene	ND	ug/L	0.50
Ethylbenzene	ND	ug/L	0.50
Xylenes (total)	ND	ug/L	0.50
Surrogate	Recovery		
a,a,a-Trifluorotoluene	106	%	

ND = Not detected  
NA = Not applicable

Reported By: Steve Shurgot

Approved By: Stan Dunlavy

Metals

Total Metals

Client Name: Northwest Pipeline Corporation  
 Client ID: CEDAR HILL CDP WASTE WATER TANK  
 Lab ID: 024601-0001-SA  
 Matrix: AQUEOUS  
 Authorized: 19 AUG 92  
 Sampled: 18 AUG 92  
 Prepared: See Below  
 Received: 19 AUG 92  
 Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Arsenic	ND	mg/L	0.0050	7060	10 SEP 92	12 SEP 92
Barium	0.11	mg/L	0.010	6010	10 SEP 92	15 SEP 92
Cadmium	ND	mg/L	0.0050	6010	10 SEP 92	15 SEP 92 B
Chromium	0.15	mg/L	0.010	6010	10 SEP 92	15 SEP 92
Lead	0.020	mg/L	0.010	7421	10 SEP 92	11 SEP 92
Mercury	ND	mg/L	0.00020	7470	13 SEP 92	13 SEP 92

Note B : Compound is also detected in the blank.

ND = Not detected  
 NA = Not applicable

Reported By: Jeff Malecha

Approved By: Sandra Jones

Metals

Total Metals

Client Name: Northwest Pipeline Corporation

Client ID: WASTE OIL TANK CEDAR HILL

Lab ID: 024601-0002-SA

Matrix: WASTE

Authorized: 19 AUG 92

Sampled: 18 AUG 92

Prepared: See Below

Received: 19 AUG 92

Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Arsenic	ND	mg/kg	1.0	7060	14 SEP 92	16 SEP 92
Cadmium	ND	mg/kg	0.50	6010	14 SEP 92	15 SEP 92
Chromium	1.0	mg/kg	1.0	6010	14 SEP 92	15 SEP 92
Lead	2.8	mg/kg	2.2	7421	14 SEP 92	14 SEP 92

ND = Not detected  
NA = Not applicable

Reported By: Bob Reilly

Approved By: Sandra Jones

General Inorganics

Enseco  
A Corning Company

Client Name: Northwest Pipeline Corporation  
Client ID: CEDAR HILL CDP WASTE WATER TANK  
Lab ID: 024601-0001-SA  
Matrix: AQUEOUS  
Authorized: 19 AUG 92  
Sampled: 18 AUG 92  
Prepared: See Below  
Received: 19 AUG 92  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
pH	4.9	units	--	9040	NA	19 AUG 92
Total Organic Halogen as Cl	71.4	ug/L	30.0	9020	NA	10 SEP 92
Total Dissolved Solids	498	mg/L	10.0	160.1	NA	25 AUG 92

ND = Not detected  
NA = Not applicable

Reported By: Pam Rosas

Approved By: Steve Shurgot

General Inorganics

Enseco  
A Corning Company

Client Name: Northwest Pipeline Corporation  
Client ID: WASTE OIL TANK CEDAR HILL  
Lab ID: 024601-0002-SA  
Matrix: WASTE  
Authorized: 19 AUG 92  
Sampled: 18 AUG 92  
Prepared: See Below  
Received: 19 AUG 92  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Ignitability	>160	deg. F	--	1010	NA	03 SEP 92 o
Total Organic Halogen as Cl	ND	mg/kg	3.0	9020	NA	15 SEP 92

Note o : This test is unreliable for any sample other than a non-aqueous liquid.

ND = Not detected  
NA = Not applicable

Reported By: Leslie Gergurich

Approved By: Steve Shurgot

## Quality Control Report

The Enseco laboratories operate under a vigorous QA/QC program designed to ensure the generation of scientifically valid, legally defensible data by monitoring every aspect of laboratory operations. Routine QA/QC procedures include the use of approved methodologies, independent verification of analytical standards, use of Duplicate Control Samples to assess the precision and accuracy of the methodology on a routine basis, and a rigorous system of data review.

In addition, the Enseco laboratories maintain a comprehensive set of certifications from both state and federal governmental agencies which require frequent analyses of blind audit samples. Enseco-Rocky Mountain Analytical Laboratory is certified by the EPA under the EPA/CLP program for Organic analyses, under the USATHAMA (U.S. Army) program, by the Army Corps of Engineers, and the states of Colorado, New Jersey, Utah, and Florida, among others.

The standard laboratory QC package is designed to:

- 1) establish a strong, cost-effective QC program that ensures the generation of scientifically valid, legally defensible data
- 2) assess the laboratory's performance of the analytical method using control limits generated with a well-defined matrix
- 3) establish clear-cut guidelines for acceptability of analytical data so that QC decisions can be made immediately at the bench, and
- 4) provide a standard set of reportables which assures the client of the quality of his data.

The Enseco QC program is based upon monitoring the precision and accuracy of an analytical method by analyzing a set of Duplicate Control Samples (DCS) at frequent, well-defined intervals. Each DCS is a well-characterized matrix which is spiked with target compounds at 5-100 times the reporting limit, depending upon the methodology being monitored. The purpose of the DCS is not to duplicate the sample matrix, but rather to provide an interference-free, homogeneous matrix from which to gather data to establish control limits. These limits are used to determine whether data generated by the laboratory on any given day is in control.

Control limits for accuracy (percent recovery) are based on the average, historical percent recovery +/- 3 standard deviation units. Control limits for precision (relative percent difference) range from 0 (identical duplicate DCS results) to the average, historical relative percent difference + 3 standard deviation units. These control limits are fairly narrow based on the consistency of the matrix being monitored and are updated on a quarterly basis.

For each batch of samples analyzed, an additional control measure is taken in the form of a Single Control Sample (SCS). The SCS consists of a control matrix that is spiked with either representative target compounds or surrogate compounds appropriate to the method being used. An SCS is prepared for each sample lot for which the DCS pair are not analyzed.

Accuracy for DCS and SCS is measured by Percent Recovery.

$$\% \text{ Recovery} = \frac{\text{Measured Concentration}}{\text{Actual Concentration}} \times 100$$

Precision for DCS is measured by Relative Percent Difference (RPD).

$$\text{RPD} = \frac{|\text{Measured Concentration DCS1} - \text{Measured Concentration DCS2}|}{(\text{Measured Concentration DCS1} + \text{Measured Concentration DCS2})/2} \times 100$$

All samples analyzed concurrently by the same test are assigned the same QC lot number. Projects which contain numerous samples, analyzed over several days, may have multiple QC lot numbers associated with each test. The QC information which follows includes a listing of the QC lot numbers associated with each of the samples reported, DCS and SCS (where applicable) recoveries from the QC lots associated with the samples, and control limits for these lots. The QC data is reported by test code, in the order that the tests are reported in the analytical results section of this report.

QC LOT ASSIGNMENT REPORT  
Organics by Chromatography

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
024601-0001-SA	AQUEOUS	602-A	18 AUG 92-1H	22 AUG 92-1H
024601-0003-TB	AQUEOUS	602-A	18 AUG 92-1H	24 AUG 92-1H

DUPLICATE CONTROL SAMPLE REPORT  
Organics by Chromatography

Analyte	Concentration Spiked	Concentration Measured		AVG	Accuracy Average(%)		Precision (RPD)		
		DCS1	DCS2		DCS	Limits	DCS	Limit	
Category: 602-A									
Matrix: AQUEOUS									
QC Lot: 18 AUG 92-1H									
Concentration Units: ug/L									
Benzene	5.0	5.28	5.29	5.28	106	72-112	0.2	10	
Toluene	5.0	4.99	5.01	5.00	100	74-109	0.4	10	
Ethylbenzene	5.0	4.85	4.89	4.87	97	76-105	0.8	10	
Xylenes (total)	5.0	4.82	4.88	4.85	97	74-111	1.2	10	
1,3-Dichlorobenzene	5.0	4.83	4.94	4.88	98	72-121	2.3	15	

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

SINGLE CONTROL SAMPLE REPORT  
Organics by Chromatography

Analyte	Concentration		Accuracy(%)	
	Spiked	Measured	SCS	Limits

Category: 602-A  
Matrix: AQUEOUS  
QC Lot: 18 AUG 92-1H QC Run: 22 AUG 92-1H  
Concentration Units: ug/L

a,a,a-Trifluorotoluene	30.0	31.2	104	90-113
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Category: 602-A  
Matrix: AQUEOUS  
QC Lot: 18 AUG 92-1H QC Run: 24 AUG 92-1H  
Concentration Units: ug/L

a,a,a-Trifluorotoluene	30.0	30.9	103	90-113
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Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT  
Organics by Chromatography

Analyte	Result	Units	Reporting Limit
Test: 8020-BTEX-AP			
Matrix: AQUEOUS			
QC Lot: 18 AUG 92-1H QC Run: 22 AUG 92-1H			
Benzene	ND	ug/L	0.50
Toluene	ND	ug/L	0.50
Ethylbenzene	ND	ug/L	0.50
Xylenes (total)	ND	ug/L	0.50

Test: 8020-BTEX-AP  
Matrix: AQUEOUS  
QC Lot: 18 AUG 92-1H QC Run: 24 AUG 92-1H

Benzene	ND	ug/L	0.50
Toluene	ND	ug/L	0.50
Ethylbenzene	ND	ug/L	0.50
Xylenes (total)	ND	ug/L	0.50

QC LOT ASSIGNMENT REPORT  
Metals Analysis and Preparation

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
024601-0001-SA	AQUEOUS	ICP-AT	10 SEP 92-1A	10 SEP 92-1A
024601-0001-SA	AQUEOUS	AS-FAA-AT	10 SEP 92-1A	10 SEP 92-1A
024601-0001-SA	AQUEOUS	PB-FAA-AT	10 SEP 92-1A	10 SEP 92-1A
024601-0001-SA	AQUEOUS	HG-CVAA-AT	13 SEP 92-1A	13 SEP 92-1A
024601-0002-SA	SOIL	AS-FAA-S	11 SEP 92-1A	11 SEP 92-1A
024601-0002-SA	SOIL	ICP-S	14 SEP 92-1R	14 SEP 92-1R
024601-0002-SA	SOIL	PB-FAA-S	14 SEP 92-1R	14 SEP 92-1R

DUPLICATE CONTROL SAMPLE REPORT  
Metals Analysis and Preparation

Analyte	Concentration			AVG	Accuracy		Precision	
	Spiked	DCS1	Measured DCS2		Average(%) DCS	Limits	(RPD) DCS Limit	
Category: ICP-AT								
Matrix: AQUEOUS								
QC Lot: 10 SEP 92-1A								
Concentration Units: mg/L								
Aluminum	2.0	2.03	2.04	2.03	102	75-125	0.2	20
Antimony	0.5	0.510	0.499	0.505	101	75-125	2.2	20
Arsenic	0.5	0.480	0.453	0.467	93	75-125	5.7	20
Barium	2.0	1.92	1.93	1.92	96	75-125	0.4	20
Beryllium	0.05	0.0500	0.0497	0.0498	100	75-125	0.6	20
Cadmium	0.05	0.0468	0.0442	0.0455	91	75-125	5.7	20
Calcium	100	103	102	103	103	75-125	1.0	20
Chromium	0.2	0.190	0.195	0.192	96	75-125	2.6	20
Cobalt	0.5	0.471	0.467	0.469	94	75-125	0.9	20
Copper	0.25	0.281	0.269	0.275	110	75-125	4.4	20
Iron	1.0	1.01	1.00	1.01	101	75-125	1.0	20
Lead	0.5	0.472	0.475	0.473	95	75-125	0.7	20
Magnesium	50	51.1	50.6	50.8	102	75-125	1.0	20
Manganese	0.5	0.489	0.477	0.483	97	75-125	2.5	20
Nickel	0.5	0.483	0.478	0.480	96	75-125	1.1	20
Potassium	50	52.5	51.9	52.2	104	75-125	1.2	20
Silver	0.05	0.0488	0.0477	0.0483	97	75-125	2.2	20
Sodium	100	110	109	109	109	75-125	1.6	20
Vanadium	0.5	0.495	0.497	0.496	99	75-125	0.4	20
Zinc	0.5	0.496	0.489	0.492	98	75-125	1.6	20

Category: AS-FAA-AT  
Matrix: AQUEOUS  
QC Lot: 10 SEP 92-1A  
Concentration Units: mg/L

Arsenic	0.03	0.0329	0.0348	0.0338	113	75-125	5.6	20
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Category: PB-FAA-AT  
Matrix: AQUEOUS  
QC Lot: 10 SEP 92-1A  
Concentration Units: mg/L

Lead	0.03	0.0349	0.0313	0.0331	110	75-125	11	20
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Calculations are performed before rounding to avoid round-off errors in calculated results.

DUPLICATE CONTROL SAMPLE REPORT  
Metals Analysis and Preparation (cont.)

Analyte	Concentration				AVG	Accuracy		Precision	
	Spiked	DCS1	Measured DCS2	DCS		Average(%) Limits	(RPD) DCS Limit		
Category: HG-CVAA-AT Matrix: AQUEOUS QC Lot: 13 SEP 92-1A Concentration Units: mg/L									
Mercury	0.0010	0.000967	0.00100	0.000983		98	75-125	3.4	20
Category: AS-FAA-S Matrix: SOIL QC Lot: 11 SEP 92-1A Concentration Units: mg/kg									
Arsenic	145	102	104	103		71	59-141	1.0	20
Category: ICP-S Matrix: SOIL QC Lot: 14 SEP 92-1R Concentration Units: mg/kg									
Aluminum	10700	6840	7480	7160		67	47-153	8.8	20
Antimony	55.2	54.8	57.4	56.1		102	18-362	4.6	50
Arsenic	145	128	135	131		91	59-141	4.9	20
Barium	503	435	459	447		89	76-124	5.5	20
Beryllium	129	118	124	121		94	53-131	4.9	20
Cadmium	154	140	147	144		93	68-132	4.6	20
Calcium	7390	6600	6960	6780		92	79-121	5.4	20
Chromium	151	127	136	132		87	66-133	6.9	20
Cobalt	122	110	116	113		93	70-130	5.4	20
Copper	162	156	165	161		99	70-132	5.4	20
Iron	15400	12400	13400	12900		84	66-134	7.2	20
Lead	148	129	139	134		90	66-135	6.9	20
Magnesium	3740	3250	3480	3360		90	74-126	7.0	20
Manganese	423	376	397	387		91	74-125	5.5	20
Molybdenum	159	145	152	148		93	71-129	5.1	20
Nickel	166	154	162	158		95	67-133	5.1	20
Potassium	4050	3530	3770	3650		90	68-132	6.6	20
Silver	104	98.2	106	102		98	76-124	7.6	20
Sodium	747	717	766	741		99	57-130	6.6	20
Vanadium	154	135	142	138		90	73-127	5.2	20
Zinc	530	478	504	491		93	65-135	5.3	20

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

DUPLICATE CONTROL SAMPLE REPORT  
Metals Analysis and Preparation (cont.)

Analyte	Concentration Spiked	Concentration Measured		AVG	Accuracy Average(%)		Precision (RPD)		
		DCS1	DCS2		DCS	Limits	DCS	Limit	
Category: PB-FAA-S Matrix: SOIL QC Lot: 14 SEP 92-1R Concentration Units: mg/kg									
Lead	150	132	148	140	93	50-150	11	20	

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

METHOD BLANK REPORT  
Metals Analysis and Preparation

Analyte	Result	Units	Reporting Limit
Test: ICP-AT Matrix: AQUEOUS QC Lot: 10 SEP 92-1A QC Run: 10 SEP 92-1A			
Barium	ND	mg/L	0.010
Cadmium	0.0099	mg/L	0.0050
Chromium	ND	mg/L	0.010
Test: AS-FAA-AT Matrix: AQUEOUS QC Lot: 10 SEP 92-1A QC Run: 10 SEP 92-1A			
Arsenic	ND	mg/L	0.0050
Test: PB-FAA-AT Matrix: AQUEOUS QC Lot: 10 SEP 92-1A QC Run: 10 SEP 92-1A			
Lead	ND	mg/L	0.0050
Test: HG-CVAA-AT Matrix: AQUEOUS QC Lot: 13 SEP 92-1A QC Run: 13 SEP 92-1A			
Mercury	ND	mg/L	0.00020
Test: AS-FAA-W Matrix: WASTE QC Lot: 11 SEP 92-1A QC Run: 11 SEP 92-1A			
Arsenic	ND	mg/kg	0.50
Test: ICP-W Matrix: WASTE QC Lot: 14 SEP 92-1R QC Run: 14 SEP 92-1R			
Cadmium	ND	mg/kg	0.50
Chromium	ND	mg/kg	1.0

METHOD BLANK REPORT  
Metals Analysis and Preparation (cont.)

Analyte	Result	Units	Reporting Limit
Test: PB-FAA-W			
Matrix: WASTE			
QC Lot: 14 SEP 92-1R	QC Run: 14 SEP 92-1R		
Lead	ND	mg/kg	0.50

QC LOT ASSIGNMENT REPORT  
Wet Chemistry Analysis and Preparation

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
024601-0001-SA	AQUEOUS	PH-A	19 AUG 92-1G	-
024601-0001-SA	AQUEOUS	TDS-A	25 AUG 92-1A	25 AUG 92-1A
024601-0001-SA	AQUEOUS	TOX-A	10 SEP 92-1A	-
024601-0002-SA	SOIL	TOX-S	15 SEP 92-1A	-

DUPLICATE CONTROL SAMPLE REPORT  
Wet Chemistry Analysis and Preparation

Analyte	Spiked	Concentration		AVG	Accuracy		Precision		
		DCS1	Measured DCS2		DCS	Limits	(RPD) DCS Limit		
Category: PH-A Matrix: AQUEOUS QC Lot: 19 AUG 92-1G Concentration Units: units									
pH	9.1	9.04	9.05	9.04	99	98-102	0.1	5	
Category: TDS-A Matrix: AQUEOUS QC Lot: 25 AUG 92-1A Concentration Units: mg/L									
Total Dissolved Solids	1170	1150	1130	1140	97	90-110	1.8	10	
Category: TOX-A Matrix: AQUEOUS QC Lot: 10 SEP 92-1A Concentration Units: ug Cl/L									
Total Organic Halogen as Cl	100	90.0	90.6	90.3	90	80-120	0.7	20	
Category: TOX-S Matrix: SOIL QC Lot: 15 SEP 92-1A Concentration Units: mg/kg									
Total Organic Halogen as Cl	1.0	0.955	1.05	1.00	100	75-125	9.5	20	

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

METHOD BLANK REPORT  
Wet Chemistry Analysis and Preparation

Analyte	Result	Units	Reporting Limit
Test: TDS-BAL-A			
Matrix: AQUEOUS			
QC Lot: 25 AUG 92-1A QC Run: 25 AUG 92-1A			
Total Dissolved Solids	ND	mg/L	10.0



Appendix



Rocky Mountain Analytical Laboratory  
 4955 Yarrow Street  
 Arvada, CO 80002  
 303/421-6611 FAX: 303/431-7171

CHAIN OF CUSTODY

		SAMPLE SAFE™ CONDITIONS	
ENSECO CLIENT		PACKED BY	SEAL NUMBER
PROJECT		SEAL INTACT UPON RECEIPT BY SAMPLING COMPANY	CONDITION OF CONTENTS
SAMPLING COMPANY		SEALED FOR SHIPPING BY	INITIAL CONTENTS TEMP. °C
SAMPLING SITE		SEAL NUMBER	SAMPLING STATUS <input type="checkbox"/> Done <input type="checkbox"/> Continuing Until
TEAM LEADER		SEAL INTACT UPON RECEIPT BY LAB <input type="checkbox"/> Yes <input type="checkbox"/> No	CONTENTS TEMPERATURE UPON RECEIPT BY LAB JM °C

DATE	TIME	SAMPLE ID/DESCRIPTION	SAMPLE TYPE	# CONTAINERS	ANALYSIS PARAMETERS	REMARKS
18-92	12:49	WASTE CEDAR HILL CDP WATER TANK	LIQUID AQUEOUS	1	PH / TOS	01
18-92	12:50	" "	LIQUID AQUEOUS	1	PH / TOS	02
18-92	12:45	" "	LIQUID METALS	4T	METALS	01 01
18-92	12:47	" "	LIQUID METALS	4T	METALS	02
18-92	12:40	" "	LIQUID	15	TOX -- SINGLE	01
18-92	12:40	" "	LIQUID	15	TOX -- SINGLE	02
18-92	11:30	WASTE OIL TANK CEDAR HILL	USED OIL			
18-92	11:45	WASTE OIL TANK CEDAR HILL	USED OIL			02
18-92	11:50	WASTE OIL TANK CEDAR HILL	USED OIL			
18-92	12:00	WASTE OIL TANK CEDAR HILL	USED OIL			

CUSTODY TRANSFERS PRIOR TO SHIPPING				SHIPPING DETAILS	
RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME	DELIVERED TO SHIPPER BY	
<i>[Signature]</i>	<i>[Signature]</i>	8/18/92	2:07		
				METHOD OF SHIPMENT	AIRBILL NUMBER
				RECEIVED FOR LAB PMNL	SIGNED <i>[Signature]</i>
				ENSECO PROJECT NUMBER 24601	DATE/TIME 0845 8/19/92



Rocky Mountain Analytical Laboratory  
 4955 Yarrow Street  
 Arvado, CO 80002  
 303/421-6611 FAX: 303/431-7171

# CHAIN OF CUSTODY

		SAMPLE SAFE™ CONDITIONS	
SECO CLIENT		PACKED BY	SEAL NUMBER
OBJECT		SEAL INTACT UPON RECEIPT BY SAMPLING COMPANY	CONDITION OF CONTENTS
SAMPLING COMPANY		SEALED FOR SHIPPING BY	INITIAL CONTENTS TEMP. °C
SAMPLING SITE		SEAL NUMBER	SAMPLING STATUS <input type="checkbox"/> Done <input type="checkbox"/> Continuing Until
CHAIN LEADER		SEAL INTACT UPON RECEIPT BY LAB. <input type="checkbox"/> Yes <input type="checkbox"/> No	CONTENTS TEMPERATURE UPON RECEIPT BY LAB. °C

DATE	TIME	SAMPLE ID/DESCRIPTION	SAMPLE TYPE	# CONTAINERS	ANALYSIS PARAMETERS	REMARKS
18-92	12:51	CEDAR HILL COP WASTE WATER	LIQUIDS AQUEOUS	11	VOA	> 01
18-92	12:53	"	LIQUIDS AQUEOUS	11	VOA	
18-92	12:55	"	LIQUIDS AQUEOUS	11	VOA	

CUSTODY TRANSFERS PRIOR TO SHIPPING				SHIPPING DETAILS		
RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME	DELIVERED TO SHIPPER BY		
				METHOD OF SHIPMENT		AIRBILL NUMBER
				RECEIVED FOR LAB <i>PH/7AL</i>	SIGNED <i>[Signature]</i>	DATE/TIME 0845 8/19/92
				ENSECO PROJECT NUMBER 24601		

**WILLIAMS FIELD SERVICES COMPANY**  
 ONE OF THE WILLIAMS COMPANIES  
**OPERATIONS**

Manual O & M Procedure	Department	
Section Safety/General	Tab 10	Document No. 21.10.020
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Subject of Title

DISCHARGES OR SPILLS OF OIL OR HAZARDOUS SUBSTANCES; Preventing, Controlling and Reporting of

**A. PURPOSE AND SCOPE**

- A.1 To establish the policy and procedure for preventing, controlling, and reporting of spills or discharges of oil or hazardous substances to the environment in accordance with Company practices and federal, state, and local requirements, including Title 40 of the Code of Federal Regulations - Part 112 (Oil Pollution Prevention).
- A.2 This document pertains to Company personnel and Company and non-company facilities. The spill prevention and control requirements in this Policy and Procedure are Federally mandated guidelines for oil pollution prevention. The Company policy is to also apply these standards, where appropriate, to facilities containing hazardous substances. This is a discretionary application of the standards; however, variations from the standards should be approved by the responsible Director.

**B. CONTENTS**

**C. POLICY**

- C.1 General
- C.2 Bulk Storage Tanks
- C.3 Facility Drainage
- C.4 Transfer Operations, Pumping, and In-Plant/Station Process
- C.5 Facility Tank Car and Tank Truck Loading/Unloading Rack

**D. PROCEDURE**

- D.1 Identifying, Containing and Initial Reporting of a Discharge or Spill of a Hazardous or Toxic Substance
- D.2 Submitting Written Notification of a Discharge or Spill

ATTACHMENT A: Discharge or Spill Containment Procedures and Materials

**C. POLICY**

**C.1 GENERAL**

- C.1.1 All Company facilities which could discharge or spill oil or hazardous substances which may affect natural resources or present an imminent and substantial danger to the public health or welfare including, but not limited to fish, shellfish, wildlife, shorelines, and beaches are subject to the provisions of this document.
- C.1.2 Hazardous Substance, for purposes of this procedure, is defined as any chemical or material that has or should have a Material Safety Data Sheet (MSDS); however, hazardous substances are further defined by the following environmental statutes:
  - a. Section 101 (N) and Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
  - b. Section 307(a) and Section 311 (b)(2)(A) of the Clean Water Act
  - c. Section 3001 of the Solid Waste Act (excluding items suspended by Congress)
  - d. Section 112 of the Clean Air Act
  - e. Section 7 of the Toxic Substance Control Act

Supersedes Policy and Procedure 12.10.020 dated July 7, 1989.

Approval (Page 1 Only) <i>[Signature]</i>	Approval (Page 1 Only) <i>[Signature]</i> 6/16/93	Approval (Page 1 Only) <i>[Signature]</i>
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- C.1.3 The term hazardous substance does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance in the first sentence of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
- C.1.4 Oil, for the purpose of this document, means oil of any kind or in any form, including but not limited to petroleum, fuel oil, Y grade, mixed products, sludge, oil refuse, and oil mixed with wastes other than dredged spoil (earth and rock). LPG (propane, butane, ethane) are not considered to be oil.
- C.1.5 Facilities which could discharge or spill oil or hazardous substances into a watercourse must comply with the required federal, state, or local laws and regulations. A discharge includes but is not limited to any spilling, leaking, pumping, pouring, emitting, emptying, or dumping. A watercourse is any perennial or intermittent river, stream, gully, wash, lake, or standing body of water capable of collecting or transporting an oil or hazardous substance.
- C.1.6 Facilities which are subject to the requirements stated in this policy are as follows:
- a. Non-Transportation Related Facilities
    - (1) Storage or drip tanks and other aboveground containers (excluding pressurized or inline process vessels) having a capacity in excess of 660 gallons for each single container or an aggregate capacity of 1,321 gallons or more for multiple containers.
    - (2) Underground storage facilities having a total capacity in excess of 42,000 gallons.
  - b. Transportation Related Facilities
    - (1) All vehicles, pipeline facilities, loading/unloading facilities, and other mobile facilities which transport oil or hazardous substances.
- C.1.7 Each Company location which has facilities subject to paragraph C.1.1 shall have a site specific Spill Prevention Control and Countermeasure Plan (SPCC Plan) which identifies all facilities subject to 40 CFR 112. The plan shall identify all hazardous substance storage vessels at the facility and the spill prevention measures in place to control discharges or spills. This plan shall also identify all regulatory agencies that must be notified in case of a spill.
- C.1.8 The facility supervisor is responsible for spill prevention. His/her duties include, but are not limited to, the following:
- a. Instructing personnel in the operation and maintenance of equipment to prevent the discharge of oil.
  - b. Conduct briefings for operating personnel at intervals frequent enough to assure adequate understanding of the Spill Plan at that facility.
  - c. Briefings should highlight and describe known discharges or spills, and recently developed precautionary measures.
- C.1.9 Each individual facility is checked by the supervisor or designee to determine the potential for discharges or spills of oil or hazardous substances in harmful quantities that violate water quality standards or which may cause a film, sheen, or discoloration on the surface of water. All facilities which have the potential for discharging or spilling harmful quantities of oil or hazardous substances into a watercourse are required to have the following preventive measures:
- a. Examination of all tanks, valves and fittings, at least annually, to determine any maintenance requirements.

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- b. All tank batteries should, as far as practicable, have a secondary means of containment for the entire contents of the largest single tank plus sufficient freeboard in the containment facility to allow for precipitation.
- c. A annual monitoring and inspection program to prevent accidental spills or discharges into watercourses. This includes annual inspection for faulty systems and monitoring line valves and liquid pipelines for leaks or blowouts.

C.1.10 Any field drainage ditches, road ditches, traps, sumps, or skimmers should be inspected at annual scheduled intervals for accumulation of liquid hydrocarbons or other hazardous substances which may have escaped from small leaks. Any such accumulations should be removed.

C.2 BULK STORAGE TANKS

C.2.1 A tank should not be used for storage of oil or hazardous substances unless the material and construction of the tank is compatible with the material stored and conditions of storage such as pressure and temperature. Buried storage tanks must be protected from corrosion by coatings, cathodic protection, or other methods compatible with local soil conditions. Aboveground tanks should be subject to visual inspection for system integrity.

C.2.2 The facility supervisor should evaluate level monitoring requirements to prevent tank overflow.

C.2.3 Leaks which result in loss of oil or hazardous substances from tank seams, gaskets, rivets and bolts sufficiently large to cause accumulation of oil or hazardous substances in diked areas should be promptly corrected.

C.2.4 Mobile or portable oil or hazardous substances storage tanks should be positioned or located to prevent the contents from reaching a watercourse. The mobile facilities should be located so their support structure will not be undermined by periodic flooding or washout.

C.3 FACILITY DRAINAGE

C.3.1 Make provisions for drainage from diked storage areas where necessary in areas with high precipitation levels. Drainage from dike areas should be restrained by valves or other means to prevent a discharge or spill. Diked areas should be emptied by pumps or ejectors which are manually activated. Valves used for the drainage of diked areas should be of manual, open-and-closed design.

C.3.2 Rain water may be drained from diked areas providing drainage water does not contain oil or hazardous substances that may cause a harmful discharge. Drain valves must be closed following drainage of diked areas.

C.3.3 When possible, drainage systems from undiked areas should flow into ponds, lagoons, or catchment basins designed to retain oil or hazardous substances or return the substances to the facility. Any drainage system which is not designed to allow flow into ponds, lagoons, or catchment basins should be equipped with a diversion system that could, in the event of a discharge or spill, contain the oil or hazardous substances on the Site.

C.3.4 The principal means of containing discharges or spills is the use of dikes which are constructed wherever regulated quantities of oil or hazardous substances have the potential of reaching a watercourse. The construction of dikes must meet the following requirements:

- a. Capacity must be at least equivalent to the storage capacity of the largest tank of the battery plus sufficient freeboard to allow for precipitation, or displacement by foreign materials.
- b. Small dikes for temporary containment are constructed at valves where potential leaking of oil or hazardous substances may occur.

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- c. Any dike three feet or higher should have a minimum cross section of two feet at the top.

C.3.5 Other means of containment or spill control include, but are not limited to:

- a. Berms or retaining walls;
- b. Curbing;
- c. Culverting, gutters, or other drainage systems;
- d. Weirs, booms, or other barriers;
- e. Spill diversion ponds or retention ponds;
- f. Sorbent materials

C.4 TRANSFER OPERATIONS, PUMPING, AND IN-PLANT/STATION PROCESS

C.4.1 Aboveground valves and pipelines should be examined annually by operating personnel to determine whether there are any leaks from flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, valve locks, and metal surfaces.

C.5 FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK

C.5.1 Rack area drainage which does not flow into a catchment basin or treatment facility designed to handle spills should have a quick drainage system for use in tank truck loading and unloading areas. The containment system should have a maximum capacity of any single compartment of a truck loaded or unloaded in the station.

C.5.2 Aboveground piping that has potential for damage by vehicles entering the Site should be protected by logically placed warning signs or by concrete-filled pipe barriers.

C.5.3 Loading and unloading areas should be provided with an interlocked warning light, grounding shutdown, physical barrier system, or warning signs to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines. All drains and outlets of any truck should be closely examined for leakage prior to filling and departure. All drains and outlets which may allow leakage should be tightened, adjusted, or replaced to prevent liquid leakage while in transit.

NOTE: LPG loading facilities and remote field loading of condensate are exempt from the C.5 requirements of this document.

D. PROCEDURE

D.1 IDENTIFYING, CONTAINING AND INITIAL REPORTING OF A DISCHARGE OR SPILL OF OIL OR HAZARDOUS SUBSTANCE

Any Employee

D.1.1 Upon noticing a discharge or spill of an oil or hazardous substance in any quantity initiates immediate containment procedures and notifies facility supervisor.

NOTE: Refer to Attachment A for containment procedures.

Facility Supervisor

D.1.2 Contacts Gas Control and responsible Director immediately by telephone and provides the following information:

- a. Name of company facility and/or location of facility and nature of discharge or spill
- b. Description and quantity of emission or substance discharged
- c. Name, title, and telephone number of person initially reporting the discharge or spill and person reporting to Gas Control
- d. Action taken or being taken to mitigate and correct discharge or spill.
- e. Water bodies or streams involved
- f. Time and duration of discharge or spill
- g. Outside involvement during discharge or spill (public government agencies, etc. See Emergency Operating Procedure Manuals)

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Gas Control Personnel

D.1.3 Advises Environmental Services departments immediately by telephone concerning the incident including any incidents reported by persons not employed with the Company.

NOTE: If Gas Control is contacted by a person not employed with the Company, the necessary information is obtained as indicated in D.1.2 and the Supervisor and Environmental Services are immediately contacted to begin containment and clean-up of the discharge or spill.

D.1.4 If Environmental Services cannot be contacted, notifies Director over Environmental Services.

Facility Supervisor

D.1.5 Coordinates containment and clean-up of discharge or spill, keeping the responsible Director informed.

D.1.6 If the discharge or spill is too large for Company personnel to contain, contacts qualified local contractors for assistance. (See Emergency Operating Procedure Manuals tab #11, contractors with available equipment and services).

D.1.7 Advises Environmental Services by telephone if emergency containment or clean-up assistance from a state agency or a response team from the U.S. Coast Guard is required.

Environmental Services

D.1.8 Contacts Legal Department (and Right-of-Way Department, if appropriate) and assesses reporting requirements to state and federal agencies. (See Emergency Operating Procedure Manuals).

D.1.9 Makes appropriate contacts with U.S. Coast Guard and state agencies when necessary.

D.1.10 If spill is significant, dispatches Environmental Specialist to scene to oversee cleanup and reporting responsibilities.

D.2 SUBMITTING WRITTEN NOTIFICATION OF A DISCHARGE OR SPILL

Facility Supervisor

D.2.1 Completes a written description of the incident as soon as possible after initial notification is given, which should include the following:

- a. Time and date of discharge or spill
- b. Facility name and location
- c. Type of material spilled
- d. Quantity of material spilled
- e. Area affected
- f. Cause of spill
- g. Special circumstances
- h. Corrective measures taken
- i. Description of repairs made
- j. Preventative measures taken to prevent recurrence.

D.2.2 Forwards the completed report to Environmental Services and a copy to Legal Department. Retains a copy for future reference.

NOTE: Environmental Services, in coordination with the Legal Department, submits written reports to government agencies.

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ATTACHMENT A

Discharge or Spill Containment Procedures and Materials

Type of Facility where the Discharge or Spill occurs	Containment Procedures	Material Used for Containment
A. Oil Pipeline (as defined in C.1.4)	<ol style="list-style-type: none"> <li>1. Closes appropriate block valves.</li> <li>2. Contains discharge or spill by: ditching covering, applying sorbents, constructing an earthen dam, or burning.</li> <li>3. If burning is required, obtains approval from the appropriate state air quality control government agencies before burning.</li> </ol>	<ol style="list-style-type: none"> <li>1. Straw</li> <li>2. Loose Earth</li> <li>3. Oil Sorbent - 3M Brand</li> <li>4. Plain Wood Chips</li> <li>5. Sorb - Oil Chips Banta Co.</li> <li>6. Sorb - Oil Swabs - Banta Co.</li> <li>7. Sorb - Oil Mats - Banta Co.</li> <li>8. Or Equivalent Materials.</li> </ol>
B. Vehicle	<ol style="list-style-type: none"> <li>1. Contains discharge or spill by: ditching, covering surface with dirt, constructing earthen dams, applying sorbents, or burning.</li> <li>2. Notifies immediately the Compliance and Safety Department and if there is any imminent danger to local residents; notifies immediately the highway patrol or local police officials.</li> <li>3. If burning is required, obtains approval from the appropriate state air quality control government agencies before burning.</li> </ol> <p>NOTE: Any vehicle carrying any hazardous or toxic substance will carry a shovel or other ditching device to contain a spill. If the vehicle has sufficient room, sorbent materials should also be carried.</p>	
C. Bulk Storage Tanks or any other Facilities	<ol style="list-style-type: none"> <li>1. Contains discharge or spill by: ditching, covering, applying sorbents, constructing an earthen dam, or burning.</li> <li>2. If burning is required, obtains approval from the appropriate state air quality control government agencies before burning.</li> </ol>	

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
J. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

SUBMIT 2 COPIES TO  
APPROPRIATE DISTRICT  
OFFICE IN ACCORDANCE  
WITH RULE 116 PRINTED  
ON BACK SIDE OF FORM

NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

OPERATOR					ADDRESS			TELEPHONE #	
REPORT OF	FIRE	BREAK	SPILL	LEAK	BLOWOUT	OTHER*			
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTRY	PIPE LINE	GASO PLNT	OIL RFY	OTHER*		
FACILITY NAME:									
LOCATION OF FACILITY					SEC.	TWP.	RGE.	COUNTY	
Qtr/Qtr Sec. or Footage									
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK									
DATE AND HOUR OF OCCURRENCE					DATE AND HOUR OF DISCOVERY				
WAS IMMEDIATE NOTICE GIVEN?		YES	NO	NOT RE-QUIRED	IF YES, TO WHOM				
BY WHOM					DATE AND HOUR				
TYPE OF FLUID LOST					QUANTITY OF LOSS		VOLUME RE-COVERED		
DID ANY FLUIDS REACH WATERCOURSE?		YES	NO	QUANTITY					
IF YES, DESCRIBE FULLY**									
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN**									
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN**									
DESCRIPTION OF AREA	FARMING	GRAZING		URBAN		OTHER*			
SURFACE CONDITIONS	SANDY	SANDY LOAM	CLAY	ROCKY	WET	DRY	SNOW		
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)**									

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

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B. Plans, specifications and reports required by this Section, if related to facilities for the production, refinement and pipeline transmission of oil and gas, or products thereof, shall be filed instead with the Oil Conservation Division. [1-4-68, 12-1-95]

C. Plans and specifications required to be filed under this Section must be filed prior to the commencement of construction. [9-3-72]

1203. NOTIFICATION OF DISCHARGE--REMOVAL.

A. With respect to any discharge from any facility of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, the following notifications and corrective actions are required: [2-17-74, 12-24-87]

1. As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, any person in charge of the facility shall orally notify the Chief of the Ground Water Protection and Remediation Bureau of the department, or his counterpart in any constituent agency delegated responsibility for enforcement of these rules as to any facility subject to such delegation. To the best of that person's knowledge, the following items of information shall be provided:

a. the name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;

b. the name and address of the facility;

c. the date, time, location, and duration of the discharge;

d. the source and cause of discharge;

e. a description of the discharge, including its chemical composition;

f. the estimated volume of the discharge; and

g. any actions taken to mitigate immediate damage from the discharge.

[2-17-74, 2-20-81, 12-24-87, 12-1-95]

2. When in doubt as to which agency to notify, the

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person in charge of the facility shall notify the Chief of the Ground Water Protection and Remediation Bureau of the department. If that department does not have authority pursuant to commission delegation, the department shall notify the appropriate constituent agency. [12-24-87, 12-1-95]

3. Within one week after the discharger has learned of the discharge, the facility owner and/or operator shall send written notification to the same department official, verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification. [12-24-87]

4. The oral and written notification and reporting requirements contained in this Subsection A are not intended to be duplicative of discharge notification and reporting requirements promulgated by the Oil Conservation Commission (OCC) or by the Oil Conservation Division (OCD); therefore, any facility which is subject to OCC or OCD discharge notification and reporting requirements need not additionally comply with the notification and reporting requirements herein. [2-17-74, 12-24-87]

5. As soon as possible after learning of such a discharge, the owner/operator of the facility shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge. [2-17-74, 12-24-87]

6. If it is possible to do so without unduly delaying needed corrective actions, the facility owner/operator shall endeavor to contact and consult with the Chief of the Ground Water Protection and Remediation Bureau of the department or appropriate counterpart in a delegated agency, in an effort to determine the department's views as to what further corrective actions may be necessary or appropriate to the discharge in question. In any event, no later than fifteen (15) days after the discharger learns of the discharge, the facility owner/operator shall send to said Bureau Chief a written report describing any corrective actions taken and/or to be taken relative to the discharge. Upon a written request and for good cause shown, the Bureau Chief may extend the time limit beyond fifteen (15) days. [12-24-87, 12-1-95]

7. The Bureau Chief shall approve or disapprove in writing the foregoing corrective action report within thirty (30) days of its receipt by the department. In the event that the report is not satisfactory to the department, the Bureau Chief shall specify in writing to the facility owner/operator any shortcomings in the report or in the corrective actions already taken or proposed to be taken relative to the discharge, and shall give the facility owner/operator a reasonable and clearly specified

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time within which to submit a modified corrective action report. The Bureau Chief shall approve or disapprove in writing the modified corrective action report within fifteen (15) days of its receipt by the department. [12-24-87]

8. In the event that the modified corrective action report also is unsatisfactory to the department, the facility owner/operator has five (5) days from the notification by the Bureau Chief that it is unsatisfactory to appeal to the department secretary. The department secretary shall approve or disapprove the modified corrective action report within five (5) days of receipt of the appeal from the Bureau Chief's decision. In the absence of either corrective action consistent with the approved corrective action report or with the decision of the secretary concerning the shortcomings of the modified corrective action report, the department may take whatever enforcement or legal action it deems necessary or appropriate. [12-24-87, 12-1-95]

9. If the secretary determines that the discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 4103 of this Part, and the water pollution will not be abated within one hundred and eighty (180) days after notice is required to be given pursuant to Section 1203.A.1 of this Part, the secretary may notify the facility owner/operator that he is a responsible person and that an abatement plan may be required pursuant to Sections 4104 and 4106.A of this Part. [12-1-95]

B. Exempt from the requirements of this Section are continuous or periodic discharges which are made: [2-17-74]

1. in conformance with regulations of the commission and rules, regulations or orders of other state or federal agencies; or [2-17-74]

2. in violation of regulations of the commission, but pursuant to an assurance of discontinuance or schedule of compliance approved by the commission or one of its duly authorized constituent agencies. [2-17-74]

C. As used in this Section and in Sections 4100 through 4115, but not in other Sections of this Part: [2-17-74, 12-1-95]

1. "discharge" means spilling, leaking, pumping, pouring, emitting, emptying, or dumping into water or in a location and manner where there is a reasonable probability that the discharged substance will reach surface or subsurface water; [2-17-74]

2. "facility" means any structure, installation, operation, storage tank, transmission line, motor vehicle, rolling

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stock, or activity of any kind, whether stationary or mobile;  
[2-17-74]

3. "oil" means oil of any kind or in any form including petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes; [2-17-74]

4. "operator" means the person or persons responsible for the overall operations of a facility; and  
[12-24-87]

5. "owner" means the person or persons who own a facility, or part of a facility. [12-24-87]

D. Notification of discharge received pursuant to this Part or information obtained by the exploitation of such notification shall not be used against any such person in any criminal case, except for perjury or for giving a false statement.  
[2-17-74]

E. Any person who has any information relating to any discharge from any facility of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, is urged to notify the Chief of the Ground Water Protection and Remediation Bureau of the department. Upon such notification, the secretary may require an owner/operator or a responsible person to perform corrective actions pursuant to Sections 1203.A.5 or 1203.A.9 of this Part. [12-1-95]

[1204-1209] Reserved

1210. VARIANCE PETITIONS.

A. Any person seeking a variance pursuant to Section 74-6-4 (G) NMSA 1978, shall do so by filing a written petition with the commission. The petitioner may submit with his petition any relevant documents or material which the petitioner believes would support his petition. Petitions shall: [7-19-68, 11-27-70, 9-3-72]

1. state the petitioner's name and address;  
[7-19-68, 11-27-70]

2. state the date of the petition; [7-19-68]

3. describe the facility or activity for which the variance is sought; [7-19-68, 11-27-70]

4. state the address or description of the property upon which the facility is located; [11-27-70]

RULE 113. - SHOOTING AND CHEMICAL TREATMENT OF WELLS

(as of 3-1-91)

If injury results to the producing formation, injection interval, casing or casing seat from shooting, fracturing, or treating a well and which injury may create underground waste or contamination of fresh water, the operator shall give written notice to the Division within five (5) working days and proceed with diligence to use the appropriate method and means for rectifying such damage. If shooting, fracturing, or chemical treating results in irreparable injury to the well the Division may require the operator to properly plug and abandon the well.

RULE 114. - SAFETY REGULATIONS

(as of 3-1-91)

A. All oil wells shall be cleaned into a pit or tank, not less than 40 feet from the derrick floor and 150 feet from any fire hazard. All flowing oil wells must be produced through an oil and gas separator of ample capacity and in good working order. No boiler or portable electric lighting generator shall be placed or remain nearer than 150 feet to any producing well or oil tank. Any rubbish or debris that might constitute a fire hazard shall be removed to a distance of at least 150 feet from the vicinity of wells and tanks. All waste shall be burned or disposed of in such manner as to avoid creating a fire hazard.

B. When coming out of the hole with drill pipe, drilling fluid shall be circulated until equalized and subsequently drilling fluid level shall be maintained at a height sufficient to control subsurface pressures. During course of drilling blowout preventers shall be tested at least once each 24-hour period.

RULE 115. - WELL AND LEASE EQUIPMENT

(as of 3-1-91)

A. Christmas tree fittings or wellhead connections shall be installed and maintained in first class condition so that all necessary pressure tests may easily be made on flowing wells. On oil wells the Christmas tree fittings shall have a test pressure rating at least equivalent to the calculated or known pressure in the reservoir from which production is expected. On gas wells the Christmas tree fittings shall have a test pressure equivalent to at least 150 percent of the calculated or known pressure in the reservoir from which production is expected.

B. Valves shall be installed and maintained in good working order to permit pressures to be obtained on both casing and tubing. Each flowing well shall be equipped to control properly the flowing of each well, and in case of an oil well, shall be produced into an oil and gas separator of a type generally used in the industry.

*DUE TO BE REVISED, still current as of 10/3/96*

RULE 116. - NOTIFICATION OF FIRE, BREAKS, LEAKS, SPILLS  
AND BLOWOUTS

(as of 3-1-91)

A. The Division shall be notified of any fire, break, leak, spill, or blowout occurring at any injection or disposal facility or at any oil or gas drilling, producing, transporting, or processing facility in the State of New Mexico by the person operating or controlling such facility.

B. "Facility," for the purpose of this rule, shall include any oil or gas well, any injection or disposal well, and any drilling or workover well; any pipe line through which crude oil, condensate, casinghead or natural gas, or injection or disposal fluid (gaseous or liquid) is gathered, piped, or transported (including field flow-lines and lead-lines but not including natural gas distribution systems); any receiving tank, holding tank, or storage tank, or receiving and storing receptacle into which crude oil, condensate, injection or disposal fluid, or casinghead or natural gas is produced, received, or stored; any injection or disposal pumping or compression station including related equipment; any processing or refining plant in which crude oil, condensate, or casinghead or natural gas is processed or refined; and any other facility used in the production, transportation, or processing of oil or gas.

oil or gas well or injection or disposal well drilling operations or any tank, storage pit, or pond associated with oil or gas production or processing operations or with injection or disposal operations and containing hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, or other deleterious chemicals or harmful contaminants.

C. Notification of such fire, break, leak, spill, or blowout shall be in accordance with the provisions set forth below:

(1) Well Blowouts. Notification of well blowouts and/or fires shall be "immediate notification" described below. ("Well blowout" is defined as being loss of control over and subsequent eruption of any drilling or workover well, or the rupture of the casing, casinghead, or wellhead or any oil or gas well or injection or disposal well, whether active or inactive, accompanied by the sudden emission of fluids, gaseous or liquid, from the well.)

(2) "Major" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 25 or more barrels of crude oil or condensate, or 100 barrels or more of salt water, none of which reaches a watercourse or enters a stream or lake; breaks, spills, or leaks in which one or more barrels of crude oil or condensate or 25 barrels or more of salt water does reach a watercourse or enters a stream or lake; and breaks, spills, or leaks of hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, gases, or other deleterious chemicals or harmful contaminants of any magnitude which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" described below.

(3) "Minor" Breaks, Spills, or Leaks. Notification of breaks, spills, or leaks of 5 barrels or more but less than 25 barrels of crude oil or condensate, or 25 barrels or more but less than 100 barrels of salt water, none of which reaches a watercourse or enters a stream or lake, shall be "subsequent notification" described below.

(4) "Gas Leaks and Gas Line Breaks. Notification of gas leaks from any source or of gas pipe line breaks in which natural or casinghead gas of any quantity has escaped or is escaping which may with reasonable probability endanger human health or result in substantial damage to property shall be "immediate notification" described below. Notification of gas pipe line breaks or leaks in which the loss is estimated to be 1000 or more MCF of natural or casinghead gas but in which there is no danger to human health nor of substantial damage to property shall be "subsequent notification" described below.

(5) Tank Fires. Notification of fires in tanks or other receptacles caused by lightning or any other cause, if the loss is, or it appears that the loss will be, 25 or more barrels of crude oil or condensate, or fires which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" as described below. If the loss is, or it appears that the loss will be at least 5 barrels but less than 25 barrels, notification shall be "subsequent notification" described below.

(6) Drilling Pits, Slush Pits, and Storage Pits and Ponds. Notification of breaks and spills from any drilling pit, slush pit, or storage pit or pond in which any hydrocarbon or hydrocarbon waste or residue, strong caustic or strong acid, or other deleterious chemical or harmful contaminant endangers human health or does substantial surface damage, or reaches a watercourse or enters a stream or lake in such quantity as may with reasonable probability endanger human health or result in substantial damage to such watercourse, stream, or lake, or the contents thereof, shall be "immediate notification" as described below. Notification of breaks or spills of such magnitude as to not endanger human health, cause substantial surface damage, or result in substantial damage to any watercourse, stream, or lake, or the contents thereof, shall be "subsequent notification" described below, provided however, no notification shall be required where there is no threat of any damage resulting from the break or spill.

(7) IMMEDIATE NOTIFICATION. "Immediate Notification" shall be as soon as possible after discovery and shall be either in person or by telephone to the district office of the Division district in which the incident occurs, or if the incident occurs after normal business hours, to the District Supervisor, the Oil

the incident shall also be submitted in DUPLICATE to the appropriate district office of the Division within ten days after discovery of the incident.

(8) SUBSEQUENT NOTIFICATION. "Subsequent Notification" shall be a complete written report of the incident and shall be submitted in duplicate to the district office of the Division district in which the incident occurred within ten days after discovery of the incident.

(9) CONTENT OF NOTIFICATION. All reports of fires, breaks, leaks, spills, or blowouts, whether verbal or written, shall identify the location of the incident by quarter-quarter, section, township, and range, and by distance and direction from the nearest town or prominent landmark so that the exact site of the incident can be readily located on the ground. The report shall specify the nature and quantity of the loss and also the general conditions prevailing in the area, including precipitation, temperature, and soil conditions. The report shall also detail the measures that have been taken and are being taken to remedy the situation reported.

(10) WATERCOURSE, for the purpose of this rule, is defined as any lake-bed or gully, draw, stream bed, wash, arroyo, or natural or man-made channel through which water flows or has flowed.

RULE 117. - WELL LOG, COMPLETION AND WORKOVER REPORTS

(as of 3-1-91)

Within 20 days after the completion of a well drilled for oil or gas, or the recompletion of a well into a different common source of supply, a completion report shall be filed with the Division on form C-105. For the purpose of this rule, any hole drilled or cored below fresh water or which penetrates oil- or gas-bearing formations or which is drilled by an "owner" as defined herein shall be presumed to be a well drilled for oil or gas.

RULE 118. - HYDROGEN SULFIDE GAS - PUBLIC SAFETY

(as of 3-1-91)

A. The intent of this rule is to provide for the protection of the public's safety in areas where hydrogen sulfide ( $H_2S$ ) gas in concentrations greater than 100 parts per million (PPM) may be encountered.

B. Producing operations should be conducted with due consideration and guidance from American Petroleum Institute (API) publication "Conducting Oil and Gas Production Operations Involving Hydrogen Sulfide" (RP-55). The operator of a lease producing, or a gas processing plant handling  $H_2S$  or any other related facility where  $H_2S$  gas is present in concentrations of 100 PPM or more shall take reasonable measures to forewarn and safeguard persons having occasion to be on or near the property. In addition to training operator's employees in  $H_2S$  safety such measures may include, but are not necessarily limited to, posting of warning signs, fencing of surface installations, installation of safety devices and wind direction indicators, and maintaining tanks, thief hatches and gaskets, valves and piping in condition so as to prevent avoidable loss of vapors. Where release of hydrogen sulfide is unavoidable, the operator shall burn or vent the gas stream in such a manner as to avoid endangering human life.

C. Wells drilled in known  $H_2S$  gas producing areas, or where there is substantial probability of encountering  $H_2S$  gas in concentrations of 100 PPM or more, should be planned and drilled with due regard to and guidance from API RP-49 "Recommended Practices for Safe Drilling of Wells Containing Hydrogen Sulfide", latest edition. Wells completed and serviced by well servicing units where there is substantial probability of encountering  $H_2S$  gas in concentrations of 100 PPM or more should be worked on with due regard to the latest industry accepted practices. These practices may include, but are not necessarily limited to, the proper training of personnel in  $H_2S$  safety and the use of  $H_2S$  safety equipment as listed for safe operations by the American Petroleum Institute draft report for "Land, Oil and Gas Well Servicing and Workover Operations Involving Hydrogen Sulfide."\*