GW - 71-0

GENERAL CORRESPONDENCE

YEAR(S): 1997-1996

EL PASO FIELD SERVICES

Roger Anderson

June 13, 1997

Mr. Denny Foust
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

RE: Application for Exception to Division Order R-8952

Dear Denny:

Please find attached four copies of an Application for Exception to Division Order R-8952 for the lined Chaco Plant contact wastewater ponds (Discharge Plan GW-071). These ponds have an oil separation system up stream of the point of discharge, and are also equipped with an oil recovery system in case of an inadvertent release.

If you have any questions about the facility, or need additional information, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays

cc: G. Hoover
M. D. Hansen
S. D. Miller/R. D. Cosby/Chaco Plant Regulatory file

RECEIVED
JUN 17 1997
OIL CON. DIV.
DIST. 3

El Paso Field Services Company P.O. Box 4990 Farmington, New Mexico 87499 Phone (505) 325-2841 Fax (505) 599-2119

Submit 4 Copies to Appropriate District Office

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

DISTRICT II
P.O. 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

Form C-134
Aug. 1, 1989

Permit No. _____
(For Division Use Only)

APPLICATION FOR EXCEPTION TO DIVISION ORDER R-8952
FOR PROTECTION OF MIGRATORY BIRDS Rule 8(b), Rule 105(b), Rule 312(h), Rule 313, or Rule711(I)

Operator Name: El Paso Field Services Co.

Operator Address: 614 Reilly Farmington, NM 87401

Lease or Facility Name Chaco Plant Location K 16 26N 12W
(Ut. Ltr. Sec. Twp. Rge)

Size of pit or tank: 2 ponds - each is 210 feet by 210 feet

Operator requests exception from the requirement to screen, net or cover the pit or tank at the above-described facility.

X The pit or tank is not hazardous to migratory waterfowl. Describe completely the reason pit is non-hazardous.

These ponds are down stream from an oil water separation system and are equiped with a 3 GPM skimmer to collect any oil which escapes from the separators.

1) If any oil or hydrocarbons should reach this facility give method and time required for removal:

The rotating drum skimmers feed into a hydraulic recovery pump, collect approx. 3 GPM of floating oil. The ponds are also equipped with booms to trap any oil near the inlet. The estimated recovery time for a relase is 8 hours.

2) If any oil or hydrocarbons reach the above-described facility the operator is required to notify the appropriate District Office of the OCD with 24 hours.

_____ Operator proposes the following alternate protective measures: _____

CERTIFICATION BY OPERATOR: I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature David Bays Title Sr. Environmental Scientist Date 6/10/97

Printed Name David Bays Telephone No. (505) 599-2256

FOR OIL CONSERVATION DIVISION USE

Date Facility Inspected 7/2/97

Inspected by DBS

Approved by _____

Title _____ JUL 02 1997

Date _____

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178 Fax (505)334-6170

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

June 26, 1997

San Juan County Public Works Director
305 South Oliver Drive
Aztec NM 87410-2436

RE: Use of Non-contact Wastewater for Use in County Road Construction and Maintenance

Dear Mr. Keck:

Mr. David Bays of El Paso Field Services has requested that we re-authorize you to use non-contact wastewater generated and discharged at the El Paso Field Services (Chaco Plant), for San Juan County road construction and maintenance.

You may use this water as proposed with the following conditions:

1. The water will be applied so that no excess water runs off into roadside ditches or into any watercourse.

2. At the end of each day's activity, unused water will be stored in trucks or tanks so the water does not drip or drain onto the ground overnight. Alternatively, the water may be returned to the Chaco Plant, if no other material has been added to the water intentionally or accidentally mixed with liquids that were previously contained in any truck or tank.

This approval is for one year, starting on this letter date and any further requests beyond that time must be approved by this office. This approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters, or the environment that may be actionable under other laws and/or regulations. In addition, OCD approval does not relieve San Juan County of responsibility for compliance with any other county, state, federal, or other local laws and/or regulations.

Sincerely,

Frank T. Chavez
District Supervisor

FTC\sh

cc: Roger Anderson
David Bays, El Paso Field Services (Chaco Plant)

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

June 13, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P - 326-936-610

Mr. David Bays
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Wastewater Ponds - May 15, 1997
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Bays:

The New Mexico Oil Conservation Division (OCD) received on May 21, 1997 a letter from EPFS dated May 15, 1997 regarding the "Wastewater" ponds at Chaco Plant. **The OCD approves of the proposed plan of action from EPFS at the Chaco Plant (GW-071) with the following conditions:**

1. Mr. Denny Foust with the Aztec OCD office will be notified at least 72 hours in advance of any field activity involving this approved project. (505-334-6178)

2. The new wells upon construction need to be sampled for the WQCC parameters listed in 20 NMAC 6.2.Subpart III, 3103 constituents in order to establish base line water quality for the new monitor wells. Upon completion of this sampling EPFS may use the existing parameters used at the other monitor wells.

2. A "Field Report" to include the construction diagrams, geologic logs, a map showing the location of the monitor wells, and the sample results outlined in (2) above will be submitted to the OCD Santa Fe Division and Aztec District Offices 60 days after completion of the activity in point (2) above..

Note, that OCD approval does not relieve EPFS of liability should EPFS operation's result in contamination of surface water, ground water, or the environment. OCD approval does not relieve EPFS from compliance with other federal, state, and local regulations/rules that may apply.

Sincerely,

Patricio W. Sanchez,
Petroleum Engineering Specialist
Environmental Bureau

c: Mr. Denny Foust - Aztec District Office, OCD.

P 326 936 610

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

Sent to EPFS - Mr. Bays	
Street & Number Chaco - GW-071	
Post Office, State, & ZIP Code "Waste water Ponds"	
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

EL PASO
FIELD SERVICES

May 15, 1997

Mr. Bill Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe. NM 87505

RE: El Paso Field Services Co. Chaco Plant
Discharge Plan GW-071
Wastewater Ponds

Dear Bill:

As you are aware from conversations and correspondence over the past several months, the primary liners of the contact wastewater ponds at El Paso Field Services Co. (EPFS) Chaco Plant were tested during November of 1995. The liners in both the north and south ponds were found to be leaking. A temporary lined pond was installed to contain the contact wastewater while repairs were made, and once the ponds were drained and cleaned thoroughly, the liners were repaired during August 1996.

Once the repairs to liners, the water circulation pumps, and enhanced evaporation sprayers were made, the liners were again tested using a red colored fluorescent dye. The results thus far are as follows.

South Contact Pond

As of May 14, 1997 no dye has been found in the leak detection wells of the south pond. It appears that the liner repairs to the south pond were successful. EPFS will continue to monitor the south pond leak detection system on our normal monthly schedule.

North Contact Pond

Both leak detection wells on the north pond contain water. One of the wells also contains red dye, clearly indicating that the primary liner is still leaking. Both wells are now equipped with automatic pumps to keep the liquids pumped out. Since the repairs last summer were the second attempt to repair the liner since it was installed in 1993, EPFS believes that a more effective alternative would be to take the following actions.

1. Install two additional groundwater monitoring wells, numbered 9 and 10, near the north contact pond. The attached plot plan shows the relative locations of the ponds, along with the existing and proposed monitoring wells. Due to the high volumes of water discharged into the two unlined, non-contact wastewater ponds EPFS believes that the two proposed wells should be down gradient from the north contact water pond.

2. Through waste minimization reduce, and ultimately eliminate discharge to the north contact water pond. The pond will be left in place in case of emergencies.

3. Collect samples from the new monitoring wells quarterly for one year. The samples will be tested for pH, total dissolved solids, benzene, ethyl benzene, xylenes, toluene, and total petroleum hydrocarbons. If no groundwater impact has been found, then collect additional samples annually for two more years, or until the north pond is empty. If the annual samples still show no impact on the groundwater, then discontinue sampling of wells number 9 and 10. If any groundwater contamination is identified, then a new action plan will be developed for remediation and long term monitoring.

Temporary Lined Pond

The temporary lined pond is now dry, and the solids which had accumulated along the east end have been removed. After the required waste characterization was completed, these solids were transported to the Envirotech landfill for disposal. EPFS proposes to close the temporary pond by folding the liner down away from the berm, and then leveling the pond area.

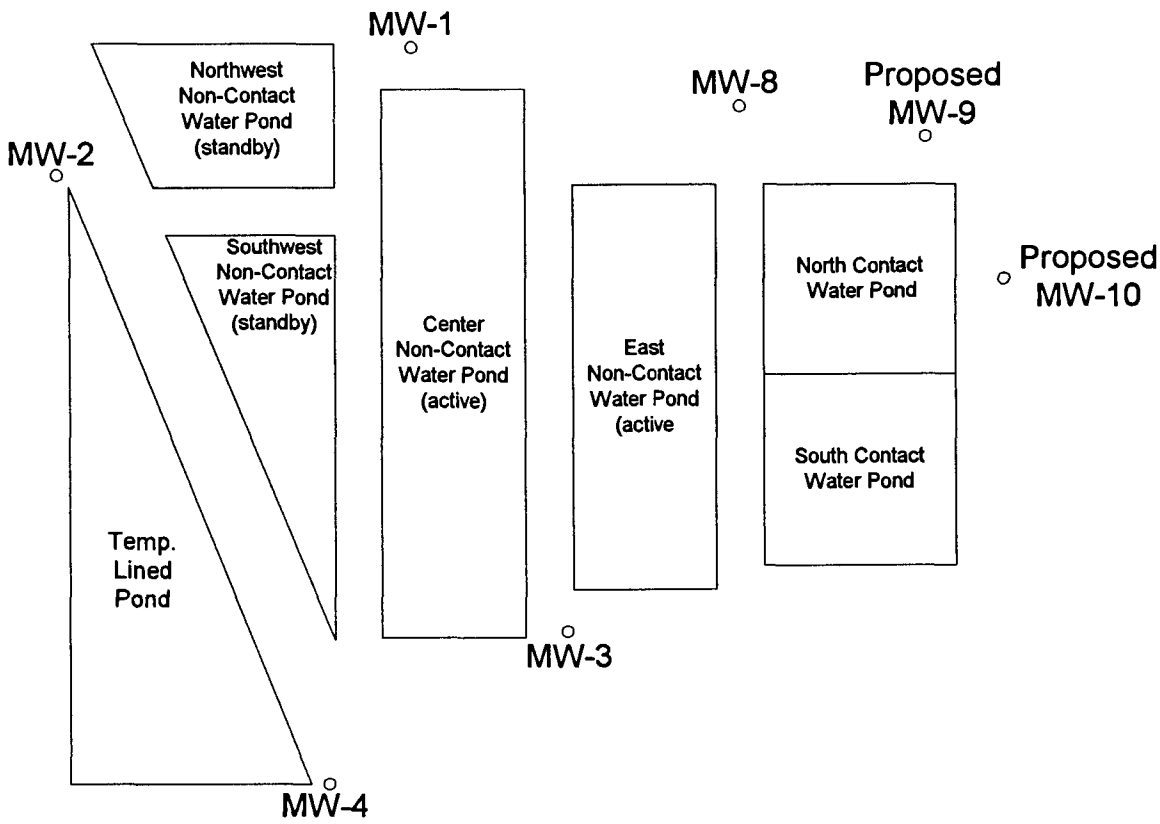
If you need any additional information, or have any questions about this proposed work plan, please call me at (505) 599-2256.

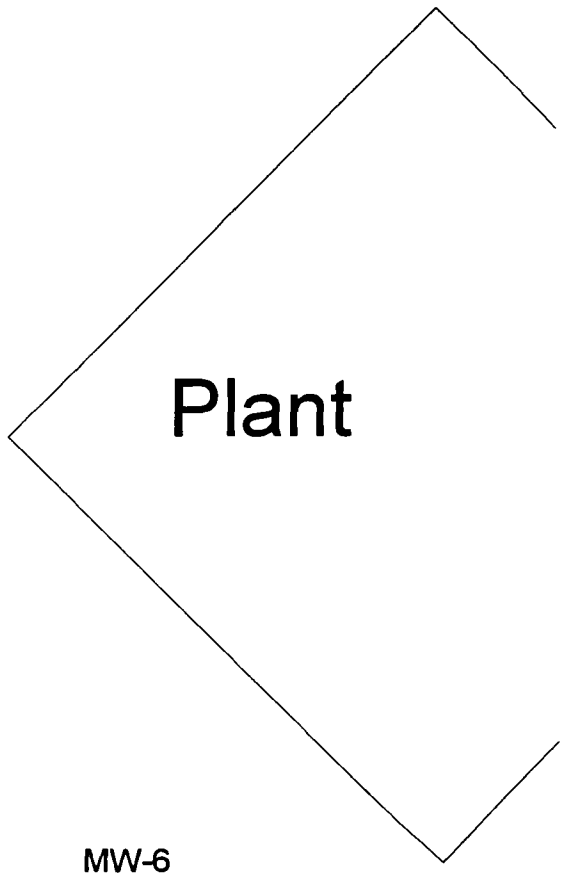
Sincerely yours,

David Bays

David Bays
Sr. Environmental Scientist

cc: Mr. Denny Foust - NMOCD - Aztec, NM
Mr. Pat Sanchez - NMOCD - Santa Fe, NM





MW-5

MW-7

MW-6

El Paso Field Services Co.
Chaco Plant
Proposed Monitoring Well Locations -
North Contact Waste Water Pond

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

June 10, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P - 410-431-403

Mr. David Bays
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Molecular Sieve-April 4, 1997
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Bays:

The New Mexico Oil Conservation Division (OCD) received on May 28, 1997 a letter from EPFS dated April 4, 1997 requesting that the RCRA Subtitle C Exempt Molecular Sieve be spread on the facility as road base. **The OCD approves of the spreading of 10 cubic yards of this molecular sieve for the beneficial use as road base at the EPFS Chaco plant within the facility area with the following condition:**

- The molecular sieve will be liquid free prior to spreading.

Note, that OCD approval does not relieve EPFS of liability should EPFS operation's result in contamination of surface water, ground water, or the environment. OCD approval does not relieve EPFS from compliance with other federal, state, and local regulations/rules that may apply.

Sincerely,

Patricio W. Sanchez,
Petroleum Engineering Specialist
Environmental Bureau

c: Mr. Denny Foust - Aztec District Office, OCD.

P 410 431 403

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

Sent to EPFS - Mr. Bays.	
Street & Number GW-071, Chaco	
Post Office, State, & ZIP Code Male Sine.	
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

EL PASO FIELD SERVICES

April 4, 1997

Mr. Patricio Sanchez
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RE: Disposal of Molecular Sieve at Chaco Plant

Dear Pat:

During the annual plant shutdown at the El Paso Field Services Co. (EPFS) Chaco Plant, we plan to replace the molecular sieve in one dehydration unit. The shut down is currently scheduled to be in July. The dehydrator contains approximately 10 cubic yards of molecular sieve. EPFS would like to dispose of the used material by spreading it on a graveled road within the plant yard.

EPFS Furnished a Material Safety Data Sheet for the molecular sieve to you on April 4, 1997. The material is an activated alumina compound contained in a calcium carbonate matrix, and is virtually inert when removed from service. If you need any additional information or have any questions about the proposed on-site disposal, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays
Sr. Environmental Scientist

cc: Denny Foust - NMOCD - Aztec
Mike Hansen
Gerry Hoover
S. D. Miller/R. D. Cosby/Chaco Regulatory file

EL PASO
FIELD SERVICES

May 22, 1997

RECEIVED

MAY 3 0 1997

Environmental Bureau
Oil Conservation Division

Mr. Ernie Busch
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87510

RE: Use of El Paso Field Services Co. Chaco Plant Non-Contact Wastewater for Dust Suppression on County Roads

Dear Mr. Busch:

Last year you authorized the use of non-contact waste water from the El Paso Field Services Co. (EPFS) Chaco Plant to control dust on county roads. The authorization was sent to Mr. David Keck, San Juan County Publis Works Director, with copies to Mr. Roger Anderson and to EPFS.

EPFS would like to request authorization to continue furnishing this waste water to San Juan County under the same conditions as agreed last year.

1. The water will be applied so that no excess runs off into roadside ditches or into any watercourse.

2. At the end of each day all unused water will be stored in trucks or tanks, or returned to the Chaco Plant.

If you need any additional information, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays

cc: Mr. Roger Anderson
Mr. Mike Hansen
Mr. Gerry Hoover
Mr. David Keck - San Juan County
S. D. Miller/R. D. Cosby/J. S. Sterrett/Chaco Regulatory File

El Paso Field Services Company P.O. Box 4990 Farmington, New Mexico 87499 Phone (505) 325-2841 Fax (505) 599-2119

EL PASO
FIELD SERVICES

May 15, 1997

Mr. Bill Olson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe. NM 87505

RE: El Paso Field Services Co. Chaco Plant
Discharge Plan GW-071
Wastewater Ponds

Dear Bill:

As you are aware from conversations and correspondence over the past several months, the primary liners of the contact wastewater ponds at El Paso Field Services Co. (EPFS) Chaco Plant were tested during November of 1995. The liners in both the north and south ponds were found to be leaking. A temporary lined pond was installed to contain the contact wastewater while repairs were made, and once the ponds were drained and cleaned thoroughly, the liners were repaired during August 1996.

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1. Install two additional groundwater monitoring wells, numbered 9 and 10, near the north contact pond. The attached plot plan shows the relative locations of the ponds, along with the existing and proposed monitoring wells. Due to the high volumes of water discharged into the two unlined, non-contact wastewater ponds EPFS believes that the two proposed wells should be down gradient from the north contact water pond.

2. Through waste minimization reduce, and ultimately eliminate discharge to the north contact water pond. The pond will be left in place in case of emergencies.

3. Collect samples from the new monitoring wells quarterly for one year. The samples will be tested for pH, total dissolved solids, benzene, ethyl benzene, xylenes, toluene, and total petroleum hydrocarbons. If no groundwater impact has been found, then collect additional samples annually for two more years, or until the north pond is empty. If the annual samples still show no impact on the groundwater, then discontinue sampling of wells number 9 and 10. If any groundwater contamination is identified, then a new action plan will be developed for remediation and long term monitoring.

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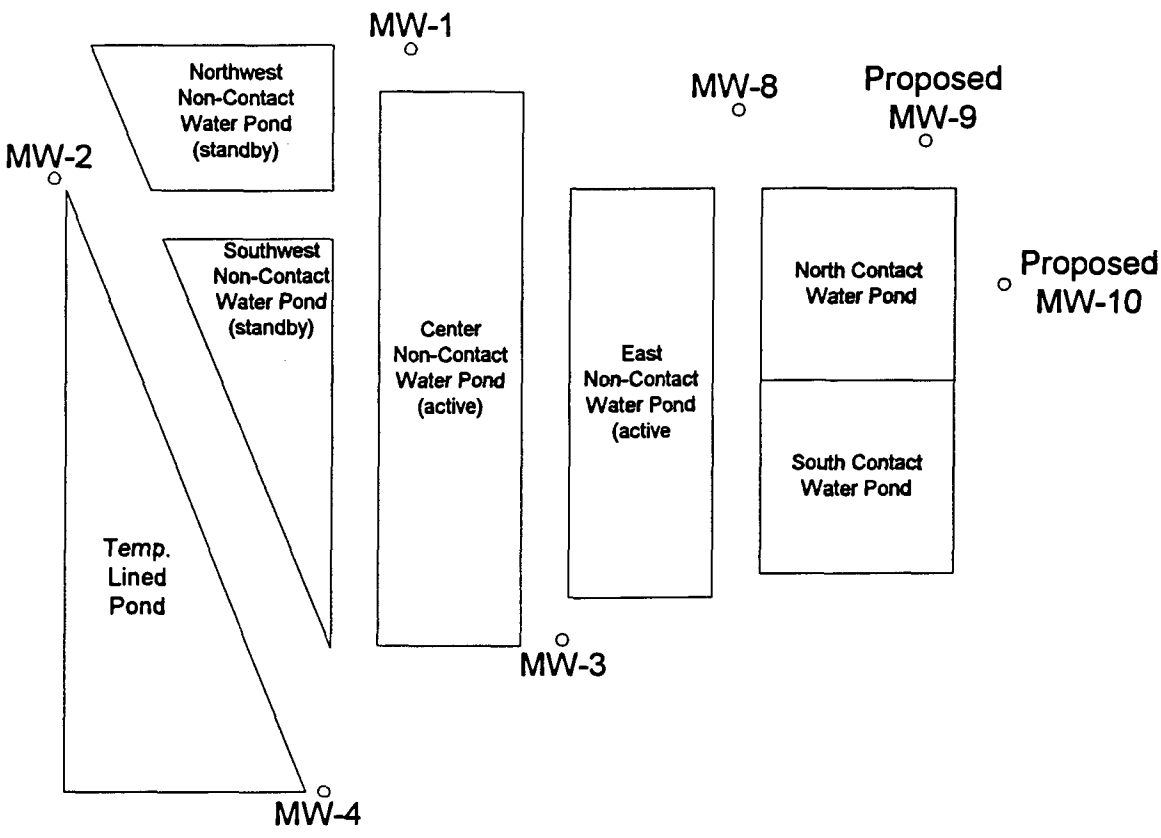
If you need any additional information, or have any questions about this proposed work plan, please call me at (505) 599-2256.

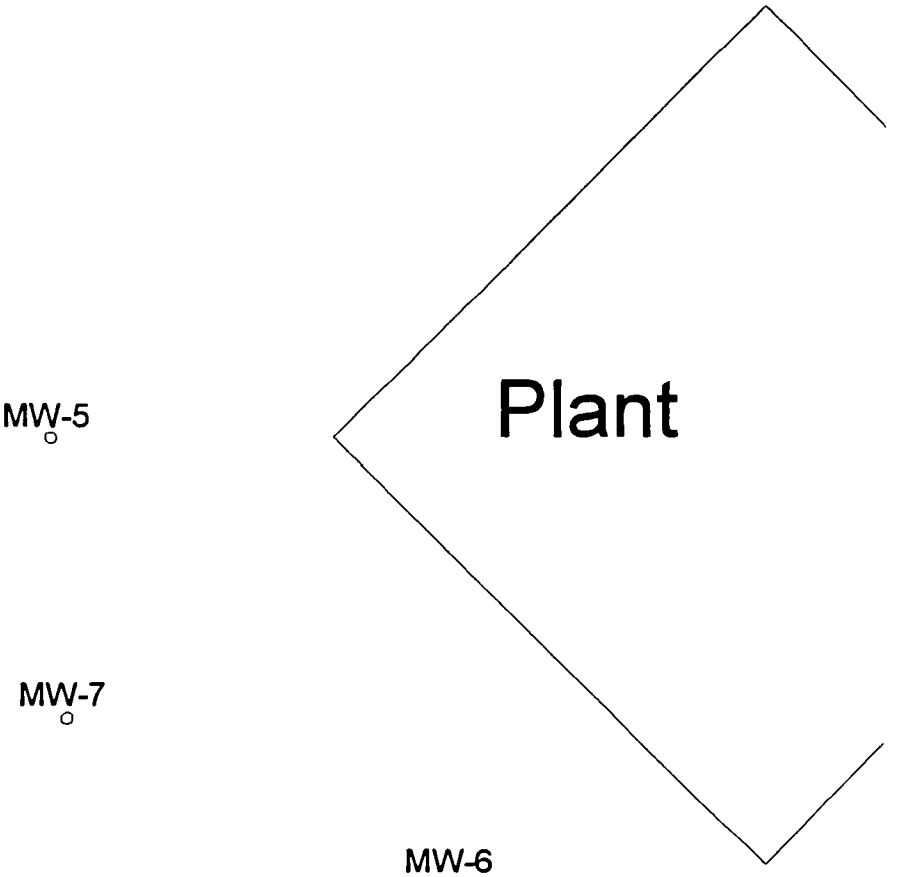
Sincerely yours,

David Bays

David Bays
Sr. Environmental Scientist

cc: Mr. Denny Foust - NMOCD - Aztec, NM
Mr. Pat Sanchez - NMOCD - Santa Fe, NM





MW-5

MW-7

MW-6

El Paso Field Services Co.
Chaco Plant
Proposed Monitoring Well Locations -
North Contact Waste Water Pond

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

May 1, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-807

Ms. Sandra Miller
Superintendent, Environmental Compliance
El Paso Energy Company
P.O. Box 4990
Farmington, NM 87499

RE: Discharge Plan Renewal GW-071
Chaco Gas Plant
San Juan County, New Mexico

Dear Ms. Miller:

The **discharge plan renewal GW-071 for the El Paso Energy Company Chaco Gas Plant** located in the SW/4, Section 16, Township 26 North, Range 12 West, NMPM, San Juan County, New Mexico, **is hereby approved** under the conditions contained in the enclosed attachment. The discharge plan renewal consists of the application from El Paso Energy Company dated March 4, 1997, and this approval letter with conditions of approval from OCD dated May 1, 1997. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within ten working days of receipt of this letter.**

The discharge plan renewal 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 **El Paso Energy Company** 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.

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 El Paso Energy Company is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.G.4, this plan is for a period of five (5) years. This approval will expire May 18, 2002, 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 El Paso Energy Company Chaco Gas Plant GW-071 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 one thousand six-hundred and sixty-seven dollars and fifty cents ($1,667.50) for Natural Gas Plants renewing discharge plans.

The $50 filing fee and the $1,667.50 flat fee have 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

c: Mr. Denny Foust - Aztec OCD Environmental Geologist

P 288 258 807

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

Sent to EPNG - Ms Miller	
Street & Number GW-071 . Renewal .	
Post Office, State, & ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

ATTACHMENT TO DISCHARGE PLAN GW-071
El Paso Energy Company - Chaco Gas Plant
DISCHARGE PLAN REQUIREMENTS
(May 1, 1997)

1. **El Paso Energy Company Commitments:** El Paso Energy Company will abide by all commitments submitted in the application from El Paso Energy Company dated March 4, 1997, and this approval letter with conditions of approval from OCD dated May 1, 1997.

2. **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.

3. **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.

4. **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.

5. **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.

6. **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.

7. **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.

8. **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.

9. **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.

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

Accepted:

El Paso Energy Company

by_____
Title

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, New Mexico 87113
Phone: (505) 761-4525 Fax: (505) 761-4542

April 17, 1997

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

Dear Mr. Lemay:

This responds to your agency's public notice dated March 13, 1997, regarding the discharge plan renewal application for the applicant described below:

> **(GW-071) - El Paso Energy Company.** Ms. Sandra Miller has submitted an application for renewal of the company's approved discharge plan for the Chaco Gas Plant located in Section 16, Township 26 North, Range 12 West, San Juan County, New Mexico. Contact process waste water will be discharged into synthetically double lined evaporation ponds equipped with leak detection capability.

The U.S. Fish and Wildlife Service (Service) typically recommends the use of excluding technology (nets, fences, enclosed tanks, etc.) to prevent migratory bird and other wildlife access to any brine or produced water storage ponds, evaporative ponds, open tanks, or lagoons that contain toxic chemicals, or that may harbor a surface oil sheen. During flight, migratory birds may not distinguish between an evaporation or storage pond and a natural waterbody: the artificial waterbody may serve as an "attractive nuisance" if measures are not taken to exclude migratory birds from access.

Our intent is to inform and intercede before any migratory bird deaths occur, since these birds constitute a legally protected resource. Under the Migratory Bird Treaty Act (MBTA), the courts have held that an operator of process waste water storage facilities may be held liable for an "illegal take" of migratory birds. An "illegal take" has been interpreted to include accidental poisoning or accumulation of harmful concentrations of contaminants by migratory birds, which might occur as a result of access to the stored water. Hydrocarbon pollutants, for instance, can be carried to the nest on breast feathers, feet, or in nesting materials, where the eggs can subsequently become contaminated, leading to embryo death and reduced hatchability.

We therefore recommend to the Oil Conservation Division that these evaporative ponds be constructed in a manner that prevents bird access (e.g., netted), or that the applicant demonstrate that the retained waters are "bird-safe" (e.g., can meet New Mexico general water quality standards 1102.B, 1102.F, and 3101.K or 3101.L). If the construction and operation of such structures results in migratory bird deaths and the problem is not addressed, the operator may be held liable under the enforcement provisions of the MBTA.

The Service would rather prevent a problem resulting from migratory bird access to contaminated ponds than take enforcement actions, which are expensive and disruptive to legitimate mineral extraction and energy production activities.

On April 20, 1994, portions of the San Juan River in San Juan County, New Mexico, were designated as critical habitat for the federally-listed endangered Colorado squawfish and razorback sucker. The critical habitat for the Colorado squawfish is the reach of the San Juan River from the Highway 371 Bridge (in Farmington) to Neskahai Canyon on the San Juan Arm of Lake Powell in Utah. Critical habitat for the razorback sucker includes the reach of the San Juan River from the Hogback Diversion (west of Waterflow, New Mexico) to Neskahai Canyon.

Due to considerations for protection of critical habitat for the Colorado squawfish and the razorback sucker, as well as to individuals or populations of squawfish that may be located upstream from the critical habitat boundary, we urge you to also ensure that discharge plan GW-071 contains adequate provisions (such as spill containment berms) to ensure the protection of these endangered fish. In the event of a release of pollutants into the San Juan River, or of pollutants that eventually reach the San Juan River, the Service and/or the New Mexico Department of Game and Fish should be notified immediately.

We request that you provide applicants receiving discharge plan approvals for facilities near the San Juan River in San Juan County with the following emergency notification information:

U.S. Fish and Wildlife Service
New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, NM 87113
Telephone (505) 761-4525
Fax (505) 761-4542

New Mexico Dept. of Game & Fish
Villagra Building
P.O. Box 25112
Santa Fe, NM 87504
Telephone (505) 827-7882
Fax (505) 827-7801

Thank you for the opportunity to review and comment on this discharge plan application. If you have any questions about these comments, please contact Dennis Byrnes at (505) 761-4525.

Sincerely,

Jennifer Fowler-Propst
Field Supervisor

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

EL PASO
FIELD SERVICES

April 4, 1997

Mr. Patricio Sanchez
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RE: Disposal of Molecular Sieve at Chaco Plant

Dear Pat:

Based on your letter of March 11, El Paso Field Services has disposed of a total of approximately 5 drums of used molecular sieve at the Chaco Plant by spreading on an in-plant road. The Material Safety Data Sheet for molecular sieve is attached. If you need any additional information regarding the disposal, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays
Sr. Environmental Scientist

cc: Denny Foust - NMOCD - Aztec
Mike Hansen
Gerry Hoover
S. D. Miller/R. D. Cosby/Chaco Regulatory file

El Paso Field Services Company P.O. Box 4990 Farmington, New Mexico 87499 Phone (505) 325-2841 Fax (505) 599-2119

GRACE

Davison Chemical Division
W. R. Grace & Co.
P.O. Box 2117
Baltimore, Maryland 21203
(301) 659-9000

MATERIAL SAFETY DATA SHEET

SAFETY DATA

PRODUCT: Formed Molecular Sieve

DATE: June 1, 1989

Emergency Contact:

J.H. Convey, Manager, Environmental Control **Telephone No.** (Home) 301-874-2009 (Office) 301-659-9058

The following information includes safety data required by OSHA. The recipient of this safety data is responsible for passing the safety information on so that it reaches the ultimate user who may come in contact with the material.

TRADE NAME:	Formed Molecular Sieves GRADES: 512, 513, 514, 516, 518, 519, 522, 542, 544, 548, 562, 564, 568, 572, 574, 576, 612, 614,625,626, SZ-5, SZ-9, PSE, IGE, WZ-10
CHEMICAL NAME & FAMILY:	Synthetic Zeolite, A-TYPE Sieves, X-TYPE Sieves, Y-TYPE Sieves
SYNONYMS:	Sodium, Calcium or Potassium Aluminosilicate
CHEMICAL NOTATION OR STRUCTURE:	A-TYPE: Na_2O,CaO or $K_2O(Al_2O_3:2.0SiO_2:xH_2O)$ X-TYPE: Na_2O,CaO or $K_2O(Al_2O_3:2.8SiO_2:xH_2O)$ Y-TYPE: Na_2O,CaO or $K_2O(Al_2O_3:5.0SiO_2:xH_2O)$ Clay: $3\ MgO.1.5Al_2O3.8SiO_2.9H_2O$
INGREDIENTS:	Synthetic aluminosilicate (Zeolite)

Crystalline, nonfibrous zeolite of hydrated synthetic silica alumina, clay.

CAS REGISTRY NO:	1344-00-9 (Sodium Aluminosilicate) 1344-01-0 (Calcium Sodium Aluminosilicate) 55465-40-2 (Potassium Sodium Aluminosilicate) 1332-58-7 (Clay)
RTECS NO:	Molecular Sieve: VY2600000 Clay: No Listing

PRECAUTIONS IN USE:

Avoid prolonged breathing of the dust or contact of dust with the skin. The drying action of this material can cause irritation of the mucous membranes of the nose and throat and irritation of the skin. If its use requires manual handling, wear long sleeves and close-weave cotton gloves with tight-fitting wristlets. If dusty conditions prevail, use of an approved NIOSH/MSHA dust mask is recommended.

When pouring into a container of flammable liquid, ground both containers electrically to prevent a static electric spark.

Will release heat when adsorbing water. If a large quantity of sieve quickly adsorbs the equilibrium amount of water, the sieves can become hot enough to cause thermal burns of the skin. Avoid contact under these conditions. See SPECIAL INFORMATION, p. 4.

FIRST AID:

EYES: Immediately wash from eyes with large amounts of water, occasionally lifting upper & lower eye lids. If irritation occurs and persists, seek medical attention
SKIN: Wash with soap & water.
INGESTION: Material will pass through body normally.
INHALATION: Remove to fresh air.

TOXICOLOGY

ANIMAL TOXICOLOGY

TESTS FOR DOT HAZARD CLASSIFICATION:

Tests on Na_2O X-TYPE sieves gave the following results:

1-hour LC_{50} (rat) > 2.8 mg/l
48-hour oral LD_{50} (rat) est. > 31,600 mg/kg
48-hour dermal LD_{50} (rabbit) est. > 2,000 mg/kg
Not considered an ocular irritant.

TESTS FOR FDA APPROVAL FOR USE IN FOODS: Not a food-grade product.

Molecular Sieves are non-fibrous, synthetic aluminosilicates (zeolites) not to be confused with natural zeolites. All studies to date indicate that they do not cause significant health problems. When activated, molecular sieves act as a desiccant and can cause a drying irritation of the mucous membranes and skin in cases of severe exposure. The average concentration of quartz in this material is less 2.0% (maximum - 3.0%). Quartz has been classified by IARC as a Class 2A Carcinogen. Quartz can cause cancer, silicosis or other fibrotic lung disease with prolonged exposure. Davison knows of no medical conditions abnormally aggravated by exposure to this product. The primary route of entry is inhalation.

HUMAN TOXICOLOGY:

ENVIRONMENTAL DATA

Not known to have any adverse effect on the aquatic environment when properly disposed. Insoluble and nontoxic.

TYPICAL CHEMICAL & PHYSICAL INFORMATION

APPEARANCE: White, gray, or tan, beads.

pH IN 5% SLURRY: 10.3 - 10.5

ODOR: Odorless

SPECIFIC GRAVITY: 2.1

BULK DENSITY: Powder Grades 5-15 lbs/ft.^{3}
Beaded Grades 40-50 lbs/ft.^{3}

LUBILITY WATER: Insoluble

APPROXIMATE ANALYSIS:

Mol ratios:	A-TYPE:	$1Na_2O:1Al_2O_3:2SiO_2:XH_2O$
	A-TYPE:	$0.8CaO:0.2Na_0:1.0Al_2O_3:2.0SiO_2.xH_2O$
	A-TYPE:	$0.6K_2O:0.4N_2O:1.0Al_2O_3:2.0SiO_2.xH_2O$
	X-TYPE:	$1Na_2O:1Al_2O_3:2.8SiO_2:xH_2O$
	Y-TYPE:	$1Na_2O:1Al_2O_3:5.0SiO_2:xH_2O$
	CLAY:	$3\ MgO.1.Al_2O_3.8SiO_2.9H_2O$
Weight %:	Quartz:	< 2 (typical) Maximum = 3.0

STABILITY: Stable

REACTIVITY: Reacts with HF and strong acids or alkali

FIRE & EXPLOSION DATA: Non-flammable

REGULATORY STATUS

OSHA— PEL: Quartz, respirable = 0.1 mg/M^3 divided by (% quartz + 2)
Quartz, total = 30 mg/M^3 divided by (% quartz + 2)
Molecular Sieve = not listed, recommend 10 mg/M^3

NIOSH— Not included on the list of substances requiring toxicity studies.

EPA— This product contains no toxic chemicals in excess of the applicable de minimis concentration as specified under § 313 of Title III SARA.

ACGIH— TLV: Quartz, respirable = 0.1 mg/M^3
Quartz, total = not listed
Molecular Sieve = not listed, recommend 10 mg/M^3

USDA— Not applicable.

FDA— Not applicable.

DOT— Not classified as a hazardous material.

HANDLING INFORMATION

STORAGE AND TRANSPORTATION: Keep containers tightly sealed to protect product quality.

DISPOSAL: Landfill in accordance with local, state and federal regulations. Cover to avoid blowing of dust. See Special Information, below.

SPILLAGE AND CLEANUP: Vacuum or sweep up or flush to sewer treated for suspended solids removal.

CONTAINERS: Bags and drum containers. Also available in other packaging as required, including bulk shipments by truck.

SPECIAL INFORMATION

When transferring beaded molecular sieves with high pressure air, wear goggles. Malfunction of equipment can propel beads with enough velocity to penetrate the skin. Make sure that the transfer system and receiving vessels are properly grounded. Follow standard operating instructions.

Following contact with typical petrochemicals or gases, molecular sieves must be handled with special precautions. The combination of molecular sieves and retained material can be flammable and toxic. Care should be taken to avoid sources of ignition and to avoid personal contact. Use approved disposal methods suitable for toxic wastes.

AFFIDAVIT OF PUBLICATION

No. 37680

STATE OF NEW MEXICO
County of San Juan:

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

Wednesday, March 26, 1997;

and the cost of publication is: $66.11.

Denise H. Henson

On 3-27-97 DENISE H. HENSON appeared before me, whom I know personally to be the person who signed the above document.

Rosa Nelson

My Commission Expires November 1, 2000

COPY OF PUBLICATION

Legals

NOTICE OF PUBLICATION

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

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

(GW-071) - El Paso Energy Company, Ms. Sandra Miller, (505)-599-2141, P.O. Box 4990, Farmington, NM, 87499, has submitted a Discharge Plan Renewal Application for their Chaco Gas Plant located in the SW/4, Section 16, Township 26 North, Range 12 West, NMPM, San Juan County, New Mexico. Contact process waste water is discharged into synthetically double lined surface evaporation ponds with leak detection. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 220 feet with a total dissolved solids concentration ranging from 560 to 1,000 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 form the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan renewal application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

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

GIVEN under the Seal of New Mexico Oil Conservation Commission at Sante Fe, New Mexico, on this 13th day of March, 1997.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

/s/ William J. Lemay
WILLIAM J. LEMAY, Director

SEAL

WJL/pws

Legal No. 37680 published in The Daily Times, Farmington, New Mexico on Wednesday, March 26, 1997.

okay DRB 4-3-97

The Santa Fe New Mexican

Since 1849. We Read You.

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

AD NUMBER: 618651 ACCOUNT: 56689

LEGAL NO: 61398 P.O. #: 96-199-002997

168 LINES ONCE at $ 67.20

Affidavits: 5.25

Tax: 4.53

Total: $ 76.98

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 61398 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 21 day of MARCH 1997 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/ Betsy Perner
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 21 day of MARCH A.D. 1997

Notary Candace C. Ruiz

Commission Expires

3-27-97
Okay to Pay
DWG

OFFICIAL SEAL
Candace C. Ruiz
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 4-2-99

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 13th day of March 1997.

STATE OF NEW MEXICO
OIL CONSERVATION
DIVISION
WILLIAM J. LEMAY,
Director
Legal #61398
Pub. March 21, 1997

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 3/6/97,

or cash received on _____ in the amount of $ 1717.50

from El Paso Field Services

for Chaco G.P (Facility Name) GW-071 (DP No.)

Submitted by: _____ Date: _____

Submitted to ASD by: R Anderson Date: 3/19/97

Received in ASD by: _____ Date: _____

Filing Fee X New Facility ___ Renewal X

Modification ___ Other _____ (specify)

Organization Code 521.07 Applicable FY 97

To be deposited in the Water Quality Management Fund.

Full Payment X or Annual Increment ___

THIS MULTI-TONE AREA OF THE DOCUMENT CHANGES COLOR GRADUALLY AND EVENLY FROM DARK TO LIGHT WITH DARKER AREAS BOTTOM [redacted]

EPFS
EL PASO FIELD SERVICES

2500 CITYWEST B
HOUSTON, TX 77042

Payable At
CITIBANK DELAWARE
ONE PENN'S WAY
NEW CASTLE, DE 19720

62-20
311

Date 03/06/97

Pay ****One Thousand Seven Hundred Seventeen and 50/100 US Dollars****

To The Order Of

Pay Amount $1,717.50****

NEW MEXICO OIL CONSERVATION DIVISON
NMED WATER QUALITY MANAGEMENT
2040 SOUTH PACHECO STREET
SANTA FE, NM 87505

Void After 1 Year

H. Grant Austin

Authorized Signature

COPYBAN® ANTI-FRAUD PROTECTION - PATENTS 4,210,346; 4,227,720; 4,310,180; 5,197,765

[redacted]

Check Date: 03/06/97 EL PASO FIELD SERVICES COMPANY Phone: 713/510-2936 **Check No:** [redacted]

Voucher	Comment	Invoice	Invoice Date	Amount	Discount	Paid Amount
00024621	DISCHARGE PLAN GW-071 RENEWAL	CKREQ970304	03/04/97	$1,717.50	$0.00	$1,717.50

Blanco GP

Vendor Number	Vendor Name			Total Discounts	
0000000858	NEW MEXICO OIL CONSERVATION			$0.00	
Check Number	**Date**	**Account No.**	**Total Amount**	**Discount Taken**	**Total Paid Amount**
01009783	03/06/97		$1,717.50	$0.00	$1,717.50

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 13th day of March, 1997.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

S E A L

WILLIAM J. LEMAY, Director

WJL/pws

EL PASO
FIELD SERVICES

P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499
PHONE: (505) 599-2175

March 6, 1997

CERTIFIED MAIL
P 358 645 400
RETURN/RECEIPT/REQUESTED

(See file Hard copy)

Mr. Roger C. Anderson
Environmental Bureau Chief
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, NM 87505

Re: Discharge Plan GW-071 Renewal
Chaco Gas Plant
San Juan County, New Mexico

Dear Mr. Anderson:

Transmitted herein is the Groundwater Discharge Plan Renewal Application pursuant to the Water Quality Control Commission (WQCC) regulations for the Chaco Gas Plant located in Section 16, Township 26 North, Range 12 West, San Juan County, New Mexico. The Renewal Application was formatted per the written NMOCD Discharge Plan Guidelines.

In conjunction with this Application, El Paso Field Services (EPFS) would like to bring several items to your attention. The secondary containment acid berms at the "A" and "B" Cooling Towers have developed some irreparable cracks and are currently being replaced. Also, EPFS is requesting a modification to the drain leak testing schedule.

One of the conditions in the December 21, 1995 approval for the Discharge Plan (GW-071) Major Modification for installing the Cryogenic Plant states that all discharge plan facilities are required to pressure test all underground (drain) piping at the time of discharge plan renewal. However, since all of the operating drain systems at Chaco are relatively new (either replaced or newly installed in 1994 and 1996) and were pressure tested before being placed in service, EPFS requests that all of the drains not be retested at this time but be retested together prior to the next discharge plan renewal, during a scheduled maintenance shutdown of the total plant. All of the wastewater drains at Chaco are tied to common drain systems to minimize underground drain piping. Pressure testing any portion of these drain lines would require shutting down both the 400 MMSCFD and the 200 MMSCFD plant trains and disrupting gas service throughout El Paso's system.

Enclosed is the original discharge plan renewal application and one copy, along with a check for $1,717.50 (filing fee of $50.00 plus a flat fee of $1,667.50 for Gas Plants). An additional copy of the renewal application is being sent to the OCD Aztec District Office.

If you have questions concerning this renewal application, please contact me at the above address, or at (505) 599-2175.

Sincerely yours,

John S. Sterrett,
Consulting Engineer

cc: w/o attachments
Mr. W. D. Hall
Ms. S. D. Miller

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

Revise
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1 Copy to a
Dis

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 applicati

RECEIVE
MAR 1 2 1997
Environmental Bure
Oil Conservation Divis

☐ New ☒ Renewal ☐ Modification

1. Type: Gas Processing Plant
2. Operator: El Paso Field Services

   Address: P O Box 4990 Farmington New Mexico 87499-99

   Contact Person: Ms. Sandra D. Miller Phone: 505-599-2141
3. Location: SW /4 _____/4 Section 16 Township 26N Range 12W

   Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the
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 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 incl
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any othe rules, regulations and/or orders.
14. CERTIFICATION

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

NAME: John S Sterrett Title: Consulting Engineer

Signature: John S Sterrett Date: 3/4/97

File Copy

EL PASO ENERGY

EL PASO ENERGY COMPANY

Chaco Gas Processing Plant

Discharge Plan Renewal. GW-71

EL PASO
FIELD SERVICES

P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499
PHONE: (505) 599-2175

March 6, 1997

CERTIFIED MAIL
P 358 645 400
RETURN/RECEIPT/REQUESTED

Mr. Roger C. Anderson
Environmental Bureau Chief
New Mexico Oil Conservation Division
2040 S. Pacheco St.
Santa Fe, NM 87505

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Chaco Gas Plant
San Juan County, New Mexico

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John S. Sterrett,
Consulting Engineer

cc: w/o attachments
Mr. W. D. Hall
Ms. S. D. Miller

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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 .
Submit C
Plus 1
to S
1 Copy to appr
Distric

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 applicati

RECEIVED
MAR 1 2 1997
Environmental Bureau
Oil Conservation Division

☐ New ☒ Renewal ☐ Modification

1. Type: Gas Processing Plant
2. Operator: El Paso Field Services

   Address: P O Box 4990 Farmington New Mexico 87499-99

   Contact Person: Ms. Sandra D. Miller Phone: 505-599-2141
3. Location: SW /4 _____/4 Section 16 Township 26N Range 12W
   Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the fac
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 w 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 incluc
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other C rules, regulations and/or orders.
14. CERTIFICATION

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

NAME: John S Sterrett Title: Consulting Engineer

Signature: John S Sterrett Date: 3/4/97

EL PASO ENERGY COMPANY

Chaco Gas Processing Plant

Discharge Plan Renewal, GW-71

I. TYPE OF OPERATION

The Chaco Gas Processing Plant has a design capacity of 600 MMSCFD. Major plant processes include inlet, residue, refrigeration, compression, dehydration, and cryogenic recovery. Both residue gas and NGL's are sold via pipeline from the plant.

II. OPERATOR

Legally Responsible Party:

Mr. Hugh A. Shaffer
Vice President, Operations and Engineering
El Paso Field Services
Destec Tower
2500 Citywest Blvd.
Houston, TX 77042
(713) 529-2933

Local Representative:

Ms. Sandra D. Miller
Superintendent, Compliance
El Paso Field Services
P. O. Box 4990
Farmington, NM 87499
(505) 599-2141

III. LOCATION OF DISCHARGE/FACILITY

SW/4 Section 16, Township 26 North, Range 12 West, San Juan County, New Mexico, approximately 20 miles south of Farmington, New Mexico. (Figure 1).

IV. LANDOWNERS

El Paso Energy Company
P. O. Box 4990
Farmington, New Mexico 87499

Industrial Ponds #4, #5, #6 and #7 and monitoring wells MW-1, MW-2, and MW-4 (see Figure 2) are located on Navajo Land, west of the Chaco Plant.

Bureau of Indian Affairs
Navajo Area Office
Branch of Real Estate Services
Post Office Box 1060
Gallup, New Mexico, 87305-1060

V. FACILITY DESCRIPTION

The Original Discharge Plan (GW-71) includes a detailed description of the facility. This Discharge Plan was submitted in November 1991 and approved in May 1992.

A modification to the Original Discharge Plan was submitted in July 1993 to retain use of unlined industrial ponds 3, 4, 5, 6, 7, and 8 for non-contact wastewater and pond # 7 for surface runoff and to construct two lined ponds for contact waste water. This Modified Discharge Plan was approved by NMOCD in September 1994, and has been fully implemented.

A separate major modification to the Discharge Plan (GW-71) was also requested October 23, 1995 and approved December 21, 1995. This major modification was to build a Cryogenic Plant in two Phases to replace lean oil absorption plants, the "A" Gasoline Plant and the "B" Gasoline Plant. Both Phases of the Cryogenic Plant were completed and placed in service in 1996. The "A" Gasoline Plant was retired, and the "B" Gasoline Plant is being retained as a back up facility should the Cryogenic Plant incur a prolonged outage. Figures 2 and 3 have been included to show the updated site plan.

A minor modification to the Discharge Plan (GW-71) was approved August 14, 1996 to install an above ground 100 Bbl steel lubricating oil storage tank to serve the "Bisti 8" compressor. The tank was placed on an impermeable pad and was bermed to contain more than 133 Bbls.

Also, the following pits and ponds, which are shown on Figure 2, have been closed:

- Solid waste pits (Domestic Ponds #1, #2 and #3), as approved November 22, 1994.
- Flare Pit and Industrial Ponds #1 and #2, as approved November 17, 1995.

VI. SOURCES, QUANTITIES & QUALITY OF EFFLUENT & WASTE SOLIDS

A.

SOURCE	TYPE EFFLUENT	QUANTITY
Plant inlet water filter	Filter backwash (non-contact water)	2,100 Bbls/Mo.
A,B, and C Cooling Towers	Non-contact blowdown water (including filter & exchanger backwash)	63,000 Bbls/Mo.
	Sulfuric acid treatment	700 gallons/Mo.
	Chorine dioxide	Small intermittent quantities
Cryo Plant Open Drain System		
Floor drains in comp. bldgs. From refrig. comp. From expander skids From starting air volume tk.	Lubricating oil Wash water Detergents Rain water	Small intermittent quantities
Cryo Plant Closed Drain System		
From regen. gas scrubber	Contact water from gas dehydration	2,600 Bbls/Mo
From inlet filter sep.	Contact water	400 Bbls/Mo.

From expander pkg. From oil sep. filter From drain sump pump From refrig. reclaimer From flash tank From flare sep. pump From porous media filters	Hydrocarbon liquids Other contact water Liquids from open drain system	All other closed drain effluents are small intermittent quantities
Cryo Plant Low Temp. Drain System		
From H.P. cold sep.'s From gas/gas exchangers From demethanizers From prod. pumps From cold side reboilers From refrig economizer From prod amine contactor From refrig surge tk. From deethanizer From exp/compr. pkg. From refrig suction scrubber From amine coalescer From product treater From product booster pumps From non-condensable trap	Low temp. hydrocarbon liquids Low temp. amine solution	Small intermittent quantities
Cryo Plant MDEA Drain System		
From amine relief valves From amine charcoal filter From lean/rich amine exchanger From amine filter From amine still reboiler From amine booster pumps From amine still From product amine contactor From amine still reflux pumps From flash tank From amine still reflux accumulator	Plant amine streams (closed loop system with make up for minor losses)	Small intermittent quantities
Utility Boiler	Boiler blowdown (non-contact water)	8,500 Bbls/Mo.
Demineralizer	Filter backwash (non-contact water) & regeneration brine	
Turbine inlet air washers	Blowdown (non-contact water)	
Pipeline drip tanks	Contact water	4,200 Bbls/Mo.
Engine Cooling Water	Closed loop through cooling fin fans	
Domestic sewage systems (septic tank systems)	Domestic sewage with no commingling with other effluent streams	Solids removed once / year
Engine O & M	Waste lubrication and motor oil	As needed

Other plant hydrocarbon sources	Waste and slop oil	Variable with operations
Used filters and filter media		
	Plant inlet water filter media Amine filters Solids from gas inlet filter sep. Gas inlet porous media filters Mole sieve dust filter solids Air dryer coalescing filters Power gas coalescing filters Fuel gas coalescing filters Product filters Air filters Glycol filters	As needed
Solids and sludges from tanks		
Cooling tower basins Waste heat boiler	Solids sediment Sludge from cleaning	Clean out 1/yr
Cleaning operations	Solvents Degreasers	As needed
Wash Rack (only drums are washed on site)	Condensate and effluent from from cleaning drums	As needed
Additional misc. Chaco Plant lube oil and process drains (for detailed list see Dwg. CH-1-P115 through P119 under Tab B)	Hydrocarbon liquids Contact water	Small intermittent quantities (All drain sources from the "A" Gasoline Plant have been retired and all drain sources from the "B" Gasoline Plant are inactive.)

B. QUALITY CHARACTERISTICS

The most recent analyses on the following effluents is attached under Tab A. Material Safety Data Sheets are also included under Tab A for the major chemicals used at the plant.

EFFLUENT	SAMPLE METHOD & LOCATION	SAMPLING FREQUENCY
Self-contained commingled contact water from above drain systems	Inlet line to the lined evaporation ponds	None subsequent to 10/13/95 letter
Self-contained, commingled non-contact water streams	20" discharge line to unlined ponds	Annually (See Tab A)
Ground water monitoring wells		
MW-1 & MW-8	Grab sample from well	Semi-annually (See Tab A)
MW-2, MW-3, MW-4 MW-5, MW-6, MW-7	Grab sample from well	Annually (See Tab A)
Used porous media filters		
Amine treater coalescer filter		Characterized 1996
Sludge		
Cooling tower sludge	Cooling tower basin on shutdown	Characterized 1995 having no RCRA regulated components
Waste heat boiler sludge	Mud drum on shutdown	

A further description of the commingling of some of the above streams is provided in the following section.

Variations in production rates impact water treatment and contact wastewater streams, as well as boiler steam generation. Additionally, seasonal variations impact cooling water, and oil cooling and jacket waters and wastewater production. Given that production rates can vary from 80 to 600 MMSCFD, or by as much as 7.5 times, wastewater flow can be expected to vary similarly. This variation in flow does not, however, correlate directly with a variation in wastewater quality. Production rates can vary significantly without significant quality variations.

Wastewater quality is dependent more upon the liquids contained in the produced gases coming into the plant than on production rate. Field liquids contained in the inlet gas can contain slugs of produced water high in TDS or hydrocarbons, or both. These waters can and do impact inlet separator and pipeline drip tank effluent rates and quality that commingle with the plant drain effluents.

Occasional plant process upsets can cause elevated levels of some constituents in various effluent streams within the plant, which can impact wastewater quality in the classifiers and plant disposal streams for short periods of time. Drains from individual plant sources, however, are commingled with many different effluent streams in the plant drain systems, and the total commingled drain flow can often significantly mitigate the quality variations that can occur at individual plant sources.

VII. TRANSFER & STORAGE OF PROCESS FLUIDS & EFFLUENTS

A., B., & C.

COMMINGLED CONTACT WATER AND HYDROCARBON LIQUID DRAINS

All of the liquids from the *Cryogenic (Cryo) Plant Open Drain System* flow by gravity through buried 2"-3" carbon steel lines into an atmospheric pressure, below grade, 20 bbl, double walled carbon steel tank. The liquids are then pumped from this tank into the *Cryo Plant Closed Drain System*. A schematic of the below grade open drain tank and the equipment it services is provided under Tab B on Dwg. 2CH-8-P423 Rev 7.

The liquids from the Cryo Plant Open Drain System are commingled with the effluents from the Cryo Plant Closed Drain System. All lines in the Cryo Plant Closed Drain System are above ground 1"-4" carbon steel lines, and appropriate lines are electrically heat traced. This system flows to a knock out (K.O.) drum, and the liquids from the K.O. Drum flow by level control into the Chaco Plant Lube Oil Drain System which was replaced in 1993. A schematic of the K.O. Drum and the streams that it serves is provided under Tab B on Dwg. 2CH-8-P434 Rev 8.

A schematic of the Chaco Plant Lube Oil Drain System, including the Cryo Plant Drain connection and the pipeline drip tank drain connection, is shown under Tab B on Dwg. CH-1-P96 Rev 2. The same drawing also shows a separate Chaco Plant Process Area Drain System, which was also replaced in 1993. The replaced Chaco Plant Lube Oil & Process Area Drain Systems are both underground pipeline systems constructed of 2.375" OD 0.218" wt Grade B seamless pipe with fusion bond coating and 4.5-8.625" 0.188" wt X42 ERW pipe with fusion bond coating. Short segments of chemical drain lines, however, are 3" and 4" PVC. All of the drain services for the Chaco Plant Lube Oil & Process Area Drain Systems are provided under Tab B on:

Dwg. CH-1-P115 Rev 2
Dwg. CH-1-P116 Rev 2
Dwg. CH-1-P117 Rev 1
Dwg. CH-1-P118 Rev 1
Dwg. CH-1-P119 Rev 2

All of the commingled effluent streams from the Chaco Plant Lube Oil Drain System flow through a below grade, double walled heavy oil / water classifier, and all of the commingled effluent streams from the Chaco Plant Process Area Drain System flow through a below grade, double walled light oil / water classifier. The separated oil is piped to an above ground slop oil tank where it is sold and trucked off site for refining. The separated water from both classifiers is piped to a third below grade, double walled tank and then to an above ground skimmer

tank. The oil fraction from the skimmer tank is piped to the above ground slop oil tank, and the contact water is piped to two double lined evaporating ponds with leak detection wells, which are monitored periodically. The top liner is a 60 mil HDPE (see Dwgs 2CH-1-P108 and 2CH-1-P109 under Tab B for more details on the lined ponds). Both lined ponds are equipped with pumps and an air compressor for above surface sprinkling and underwater aeration, respectively.

CRYOGENIC PLANT SEGREGATED LOW TEMPERATURE DRAIN SYSTEM

All of the fluids from the *Cryo Plant Low Temperature Drain System* flow through 1"-3" stainless steel lines to a low temperature drain separator vessel where the fluids are electrically heated with a closed bayonet style heater that is filled with a glycol/water mixture. The heated liquid and vapor process phases are piped from this separator to the plant flare. The separator vessel is designed for a maximum allowable working pressure of 75 PSIG. A schematic of the low temperature drain system is provided under Tab B on Dwg. 2CH-8-P433 Rev 8.

CRYOGENIC PLANT SEGREGATED MDEA DRAIN SYSTEM

The Cryo Plant also has a separate isolated MDEA Drain System that serves the MDEA product treating system. MDEA is collected in a below grade, 20 bbl, double walled carbon steel tank that has a maximum allowable working pressure of 10 PSIG. The MDEA drain lines are 1"-3" underground carbon steel lines sloped toward the tank. The MDEA is pumped back to the process from the double walled tank through electrically heat traced aboveground lines. The tank, however, also has a truck pump out connection for possible removal of liquids from the drain system. A schematic of this system is provided under Tab B on Dwg. 2CH-8-P427 Rev 8.

WASH RACK

Drums are steam-cleaned on a small bermed pad within the fenced oil / water classifier yard west of the product tank battery (see Dwg. CH-1-P96 Rev 2 under Tab B). Wastewater from this operation is piped to the heavy oil / water classifier.

OIL DRUM STORAGE & CHEMICAL STORAGE

Oil drums and chemical drums are stored on separate small bermed pads west of the oil / water classifier yard (see Dwg. CH-1-P96 Rev 2 under Tab B). The drain for the oil drum storage pad is piped to the light oil / water classifier and the drain for the chemical storage pad is piped to the heavy oil / water classifier.

GROUND FLARE SYSTEM

The Chaco Plant has a ground flare system on the north side of the plant that services all of the flare lines outside of the Cryo Plant. This flare system is shown on Dwg. 2CH-1-P70 under Tab B. Sour water from this system is pumped from a flare K. O. drum to the lined evaporating ponds (see Dwg. 2CH-1-P109 under Tab B) through HDPE and PVC lines.

NON-CONTACT PLANT WASTE WATER STREAMS

All of the non-contact plant waste water streams are piped underground directly to unlined evaporating ponds in the northwest area of the plant. The non-contact water is first piped to pond #3, which is connected to ponds #4-8 (all unlined). Pond #3 is equipped with a submersible pump to enhance evaporation by surface sprinkling. Pond #8 is to be used only for emergency overflow during winter conditions when pond water evaporation is at a minimum and other ponds are reaching capacity. Pond #8 is also to be drained as soon as feasible, based on evaporation of the other ponds.

The non-contact waste water sources that discharge to Pond #3 are:

- Cooling tower blowdown and backwash water
- Plant inlet water filter backwash water
- Utility boiler blowdown water
- Demineralizer regeneration and backwash water
- Turbine inlet air washer blowdown water

Cooling tower blowdown is the largest non-contact water effluent stream. Cooling tower water is batch treated with chlorine dioxide approximately once per week from a chemical truck. The cooling tower water is also treated with sulfuric acid on a continual basis on pH control. Sulfuric acid is stored in 500 gallon bermed saddle tanks.

D. DESIGN REQUIREMENTS

Above ground storage tanks, chemical and drum storage areas, below grade storage tanks, and lined surface impoundment's at the Chaco Plant meet OCD design requirements.

E. UNDERGROUND PIPELINES

Diameter and pipe specifications on all underground process and wastewater pipelines are indicated on plant piping drawings. The Chaco Plant underground lube oil drain piping and process area drain piping were replaced and pressure tested in the fourth quarter of 1993 and the first quarter of 1994. All underground wastewater pipelines in the Cryogenic Plant were completed and pressure tests were completed in 1996.

One of the conditions in the December 21, 1995 approval for the Discharge Plan (GW-71) Major Modification for installing the Cryogenic Plant states that all discharge plan facilities are required to pressure test all underground (drain) piping at the time of discharge plan renewal. Since all of the operating drain systems at Chaco are relatively new (installed in 1994 and 1996) and were pressure tested before being placed in service, EPFS requests that all of the drains not be retested at this time but be retested together prior to the next discharge plan renewal and during a scheduled maintenance shutdown. All of the wastewater drain lines at Chaco are tied together. Pressure testing these systems would disrupt plant operations unless the testing is scheduled with a planned maintenance shutdown.

F. PROPOSED MODIFICATIONS FOR TRANSFER AND STORAGE SYSTEMS

A written notification to OCD (dated February 27, 1996) concerning a kerosene spill in the "B" Gasoline Plant addressed plans to floor and berm the affected area. However, since the B Gasoline Plant has been taken out of service and may never be put back into service, this flooring and berming has been postponed until a decision is made to recommission the B Gasoline Plant.

VIII. EFFLUENT DISPOSAL

A. ON-SITE OPERATIONS

Effluent	Location	Type of Disposal	Description
Non-contact water		Unlined evaporation ponds	Interconnected Ponds, #3-8 Total pond area = 750,000 sq ft
Contact water		Two lined ponds Installed 1994	Each pond is approximately 1 acre Refer to Dwgs 2CH-1-P108&P109

Domestic sewage (not commingled with other effluents)	1957 systems NW of A Cooling Tower, other is E of Cryo Office	4 leach fields on separate septic systems	3- 1,000 gal systems built in 1957; 1,000 gal for Cryo Plant in 1996 Solids removed to Garcia's Septic Service of Farmington, NM
Cooling tower basin sludge		Spread on ground	Non hazardous waste
Storm water	Wastewater Plan Piping Layout Plate 3-2	Channeled to unlined pond #7 and an earthen berm area SW of plant	Rainwater averages < 10" / yr Most rainwater seeps into the soil
Asbestos	SW corner of plant	Fenced burial site	Burial site is now inactive.
Water filtration media		Spread on ground	Non-exempt / non-hazardous filter media (sand, gravel, carbon)

The lined ponds have leak detection wells to monitor that the contact water in the ponds is not leaking undetected into the ground.

Historically, analyses of grab samples of the perched aquifer from shallow on-site monitoring wells show that the non-contact water that percolates into the ground through the unlined ponds and other minor sources such as rainwater and moisture from cooling tower basin sludge does not contaminate the perched aquifer. Six monitoring wells (MW-2, MW-3, MW-4, MW-5, MW-6 and MW-7) are analyzed annually. Also, the non-contact waste water line that charges the unlined ponds is analyzed annually. Two monitoring wells (MW-1 and MW-8) are sampled twice each year to monitor the perched aquifer down gradient from a capped soil remediation site. All 8 monitoring wells are located in the western portion of the Plant near the ponds (See Figure 2). The line to the unlined ponds and the six monitoring wells that are sampled annually are analyzed for WQCC metals, major cations/anions, and TDS, and MW-1 and MW-8 are analyzed for BTEX, PAH, Cd, Cr, and Hg.

B. OFF-SITE DISPOSAL

All liquids from this site will be handled in accordance with OCD and NMED regulations.

All effluents will be recycled if possible. Effluents which cannot be recycled, such as contaminated soil, will be disposed in accordance with OCD and NMED regulations.

Conditional approval has been granted to provide non-contact waste water from the Chaco Plant to 1) local entities wanting to use the water for drilling oil and / or natural gas wells, and 2) the San Juan County Road Department for using water on dirt roads for dust suppression.

The contents of the waste oil tank are removed and refined by Hay Hot Oil Company, P.O. Box 11, Cortez, Co, 81321. Other options for disposal would be to truck the oil to company operated heater treater facilities or to pay D&D or Mesa Oil to pick up the oil.

Non-exempt hydrocarbon contaminated soils, which may occur from maintenance activities and/or plant upsets, are temporarily stockpiled on plastic near the oil / water classifiers until the soils are properly manifested and trucked to an approved landfarm, such as the Envirotech Soil Remediation Facility at Hilltop, New Mexico. Address: Envirotech Inc., 5796 US Hwy 64, Farmington, NM

All non-hazardous solid waste from the Chaco Plant is drained completely of free liquids in two special waste dumpsters prior to disposal. The waste is then trucked to Crouch Mesa Landfill, which is operated by Waste Management, Inc. at #78, Co. Road 3140, Aztec, NM. Examples of such wastes are:

Oil filters, oily rags, and oil absorbents
Neoprene "Pigs" and Foam Rubber "Pigs"
Non-friable asbestos
Glycol and amine filters
Fuel gas filters and natural gas liquids (product) filters
Instrument air dryer and powergas coalescing filters
Engine inlet air filters
Incidental wastes (e.g., empty paint cans, paint brushes, wax applicators, plastic boots, plastic gloves, plastic drop cloth, oily hoses, oily mops, empty non-hazardous aerosol spray cans, and fluorescent light bulbs)

Empty drums that are not returnable to vendors are steam-cleaned at the Plant drum rack and sold for scrap to Valley Scrap Metal, Kirtland, NM.

Used batteries are exchanged for new batteries. When an exchange is not possible, the batteries are sent to the Farmington warehouse for recycling.

A few electronic circuit boards are generated each year at Chaco. These boards are sent to EPNG's main office. The boards are then sold to a recycler.

Oily rags and mops are picked up and cleaned by American Linen Supply Company, P O Box 36, Albuquerque New Mexico 87103 and reused until no longer reusable.

Friable asbestos is abated by certified Contractor's, such as Insulated Contractors Unlimited, 2505 E. Main St., Farmington, NM or Envirotech Inc., 5796 US Hwy 64, Farmington, NM. The Contractors dispose of the asbestos at the Keers Landfill in Mountainair, NM or other certified asbestos landfill. There is also a fenced inactive asbestos burial site in the southwest corner of the Plant.

Septic tank solids are pumped out as needed and disposed by Garcia's Septic Service, 115 Quince St., Farmington, NM.

C. PROPOSED MODIFICATIONS

Since direct monitoring of the perched aquifer from monitoring wells has demonstrated that the ground water meets the WQCC Standards of Section 3-103 and contains no toxic pollutants as defined in Section 1-101.ZZ, no further modifications are proposed at this time to protect the ground water.

Any oily waste towels at the facility?

How about grease?

IX. INSPECTION, MAINTENANCE AND REPORTING

A. ROUTINE INSPECTIONS

The following sumps are inspected for leaks annually during the Plant maintenance shutdown.

• A Gas Compressor Sump #1	Cylindrical metal sump with leak detection
• A Gas Compressor Sump #2	Cylindrical metal sump with leak detection
• B Gas Compressor Sump	Cylindrical metal sump
• Process Area Oil Classifier	Below grade double wall with leak detection
• Lube Oil Drain Oil Classifier	Below grade double wall with leak detection
• Water Skimmer	Below grade double wall with leak detection

A written sump inspection report is sent to OCD annually on all of the above sumps. This report documents whether each sump passes or fails the leak test. If a sump fails the leak test, verbal and written notification of the leak will be made to OCD in accordance with Rule 116, and action will be taken to repair the leak.

The concrete basins under the A, B, and C Cooling Towers are emptied, cleaned and inspected when the plant is down for extended maintenance. Records of this inspection are maintained by EPFS along with the maintenance shutdown file.

B. CONTAINMENT OF STORM WATER

Storm water is collected by a series of swales and concrete lined channels which direct discharge in two directions. One channel directs sheet flow southwest to swales that flank the plant site and are contained by an earthen berm that prevents flow off-site. The second concrete channel is located west of the gasoline processing area and directs storm water discharge toward Pond #7, which was originally used for industrial wastewater overflow from Ponds #1-4. Pond #7 has sufficient capacity to contain the storm water inflow. The rain fall in this area averages less than 10 inches per year, and most of the rainwater seeps into the soil.

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

The Chaco Plant is operated in a manner to prevent and mitigate any unplanned releases to the environment. Plant process and storage units are regularly observed by a number of personnel during normal operations, and any evidence or sign of spills/leaks are routinely reported to supervisory personnel so that repairs or clean up can be promptly initiated. Regularly scheduled maintenance procedures conducted at the Chaco Plant also help to assure that equipment remains functional and that the possibility of spills or leaks is minimized.

The majority of process and storage units at the Chaco Plant are bermed or curbed and have underdrains or natural diversions which will direct any unplanned spills or releases to existing waste management areas.

Non-process chemicals are used in relatively small quantities at the plant and are managed in a manner to prevent discharges to the environment. Any chemical spills which might occur would be immediately contained and disposed of according to proper guidelines.

Chemicals such as cleaning solvents are collected and recycled. EPNG currently uses a non-halogenated, non-hazardous solvent, Varsol, for degreasing operations. The spent solvent which contains various aromatic compounds is combined with other hydrocarbon fractions and is recycled.

Leaks, spills, and drips will be handled in accordance with OCD Rule 116 as follows:

- Small spills will be absorbed with soil and shoveled into drums for off-site disposal. If the soil is an "exempt" waste, the soil will be disposed at Envirotech, Tierra or another OCD approved landfarm facility. If the soil is an ""nonexempt" waste, the soil will be characterized and disposed according to the analytical profile.

- Large spills will be contained with temporary berms. Free liquids will pumped out by a vacuum truck. Any hydrocarbon liquids will be recycled. Any contaminated soil will be disposed as discussed in the paragraph above.

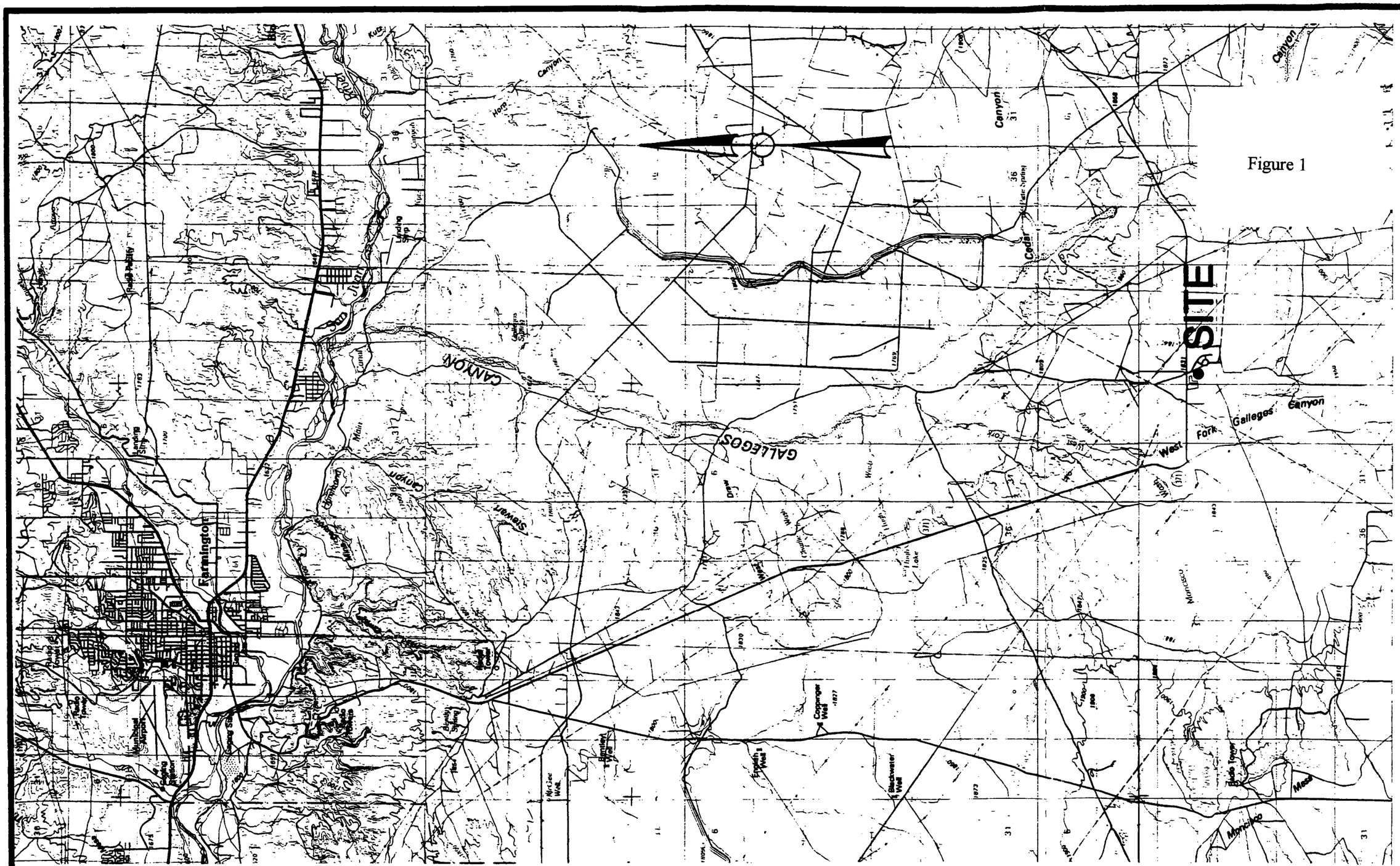
- Verbal and written notification of leaks or spills will be made to OCD in accordance with Rule 116.

- All areas identified during operation as susceptible to leaks or spills will be bermed or otherwise contained to prevent the discharge of effluents.

XI. SITE CHARACTERISTICS

A complete discussion of the hydrogeological characteristics at and near the site was provided in the discharge plan approved in May 1992. Since that information is unchanged, it is incorporated into this plan by reference.

Figure 1



VICINITY MAP	CDM	EL PASO NATURAL GAS CHACO PLANT	Figure No. 2-1

locatmap.dwg 10-24-91 rsp 2247-110

PLANT NORTH
RESTRICTED AREA
BATTERY LIMITS S.21+30'-0"
BATTERY LIMITS S.25+85'-0"
BATTERY LIMITS W.7+45'-0"
BATTERY LIMITS W.3+75'-0"
2CH-8-P444
2CH-8-P486
2CH-8-P472
2CH-8-P471
2CH-8-P496
FL-8101 FLARE STACK S.21+25'-0"
FH-8101 FIRED HEATER THERMAL OXIDIZER
S.23+23'-0"
S.23+55'-6"
S.25+16'-6"
RELOCATED PIPELINE DRIP TANKS
MAPCO AREA
PROPERTY LINE
EXISTING ROAD
EXISTING CHAIN LINK FENCE
EXISTING FIRE WATER LOOP
EXISTING COOLING TOWER
"C" PLANT COMPRESSOR BUILDING
EXISTING PIPERACK
EXISTING METER BUILDING
EXISTING METERING
EXISTING SCRUBBERS
V-9103 LUBE OIL STORAGE
V-9102 LUBE OIL STORAGE
LUBE OIL PUMPS
EXISTING U.G. 12" STA. VENT
EXISTING U.G. 24" DRAW LINE
EXISTING U.G. 8" BLANCO SERVICE
EXISTING FIRE MONITOR
EXISTING INLET LIQUID SEPARATORS
EXISTING U.G. 12" STARTING GAS VENT S.0+50'-6"
EXISTING U.G. 12" STARTING VENT
GALVANIZED FENCE SIDING
RECEIVED
MAR 1 2 1997
Environmental Bureau
Oil Conservation Division
GRAPHIC SCALE IN FEET
06/10/96 at 09.24 by JOHNSON

ABB Randall Corporation

AN ABB LUMMUS CREST COMPANY
Houston, Texas
ABBR JOB # 80152

El Paso NATURAL GAS COMPANY

CHACO CRYOGENIC PLANT
PIPING DRAWING INDEX
OUTSIDE BATTERY LIMITS

NO.	DATE	BY	DESCRIPTION
5	7/8/96	LS	AS-BUILT
4	9/14/95	LS	REVISED AS NOTED
3	8/24/95	LS	REVISED AS NOTED
2	8/9/95	LS	REVISED PER CLIENT REQUEST
1	7/6/95	LS	REVISED AS NOTED
0	2/22/95	D.H.	ISSUED FOR CONSTRUCTION
A	1/30/95	D.H.	ISSUED FOR APPROVAL

REVISIONS

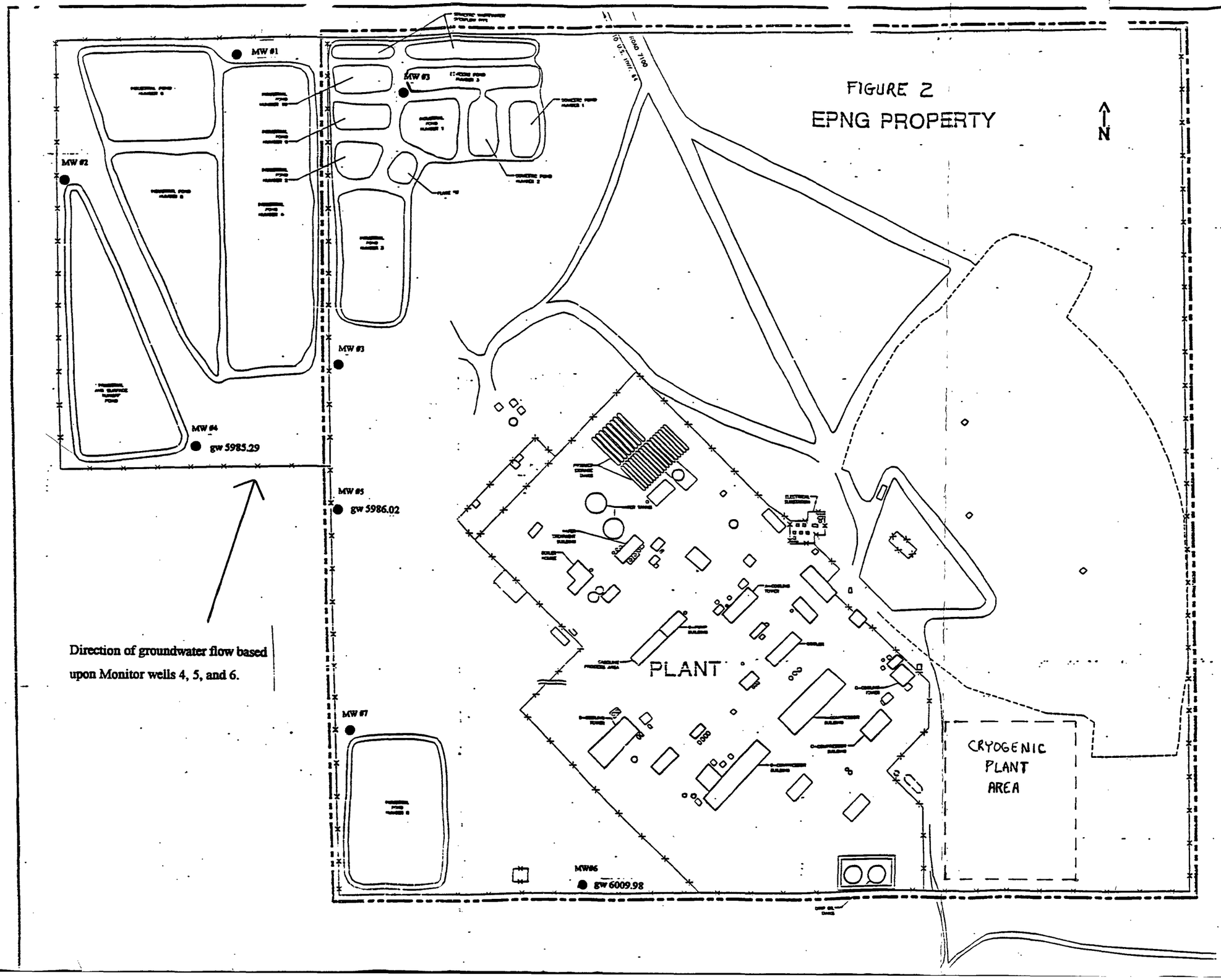
ENG. RECORD		DATE
DRAFTING DESIGN	R.D.J.	1/4/1995
CAD DRAFTING	R.D.J.	1/4/1995
CHECKED		
PROJECT APPROVAL	L.S.	2/22/1995
SURVEY DATE		
R/W NUMBER		
COMPUTER SAVE NAME	2CH8P445	

SCALE: 1"=50'
W.O.
DWG. NO. 2CH-8-P445
REV 5

DWG. NO. | TITLE — REFERENCE DRAWINGS
W.O. | APP. | PRT. | SEP. | DATE | TO | W.O. — PRINT RECORD
LEGEND
F49 (Rev. 11/93)

FIGURE 2

EPNG PROPERTY



Chaco Plant Groundwater Monitoring Well Results 1996

All Results Expressed as Micrograms/Liter (ppb)

Monitoring Well 1	No Liquids

Monitoring Well 8	**3/12/96**	**5/29/96**	**7/2/96**	**9/9/96**	**11/1/96**
Benzene	10.0	6.62	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes	<3.0	<3.0	<3.0	<3.0	<3.0
Cadmium	<0.0005	NA_1	NA	<0.0002	NA
Chromium	0.022	NA	NA	<.0057	NA
Mercury	<0.0001	NA	NA	<0.002	NA
Total Naphthalenes	75	NA	NA	ND_2	NA
Total Benzopyrenes	<0.3	NA	NA	ND	NA

1 - Not Analyzed

2 - None Detected

Chaco Plant Groundwater Monitoring Well Results 1996

All Chemical Results Expressed as Milligrams/Liter (ppm)
pH Expressed in Standard Units (0 - 14 Scale)
Conductivity Expressed as Micromhos/Centimeter

All samples listed on this table were collected on June 24, 1996

Test	Well 2	Well 3	Well 4	Well 5	Well 6	Well 7	Non-Contact Wastewater
pH	7.7	7.7	7.2	7.5	8.2	7.4	8.2
Alkalinity - CO_3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alkalinity - HCO_3	426	670	559	374	399	329	118
Calcium	112	85	458	216	37	302	211
Magnesium	22.5	20.2	79.7	33.2	10.4	42.9	40.8
Total Hardness	372	296	1,472	676	135	931	695
Chloride	162	41.6	464	18.9	139	295	60
Sulfate	714	532	2,654	670	1,216	1,336	740
Fluoride	1.8	1.0	1.7	0.7	2.3	2.0	2.1
Nitrate	<0.1	<0.5	<1.6	<0.1	<1.0	<0.6	0.5
Phosphate	<0.1	<0.5	<1.6	<0.1	<1.0	<0.6	4.0
Potassium	1.1	0.9	8.3	1.1	0.7	3.6	25.9
Sodium	493	443	1,249	173	850	547	128
TDS	1,772	1,464	5,430	1,332	2,440	2,860	1,454
Conductivity	2,500	2,170	6,610	1,709	3,550	3,550	1,744
Cadmium	0.0008	<0.0005	0.0011	<0.0005	0.0009	0.0007	<0.0005
Chromium	0.008	).002	0.003	0.004	0.007	0.002	0.132
Mercury	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.0024

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

International Dioxcide, Inc., 136 Central Ave., Clark, NJ 07066
Manufacturer Phone: Day 908-499-9660 Night 401-738-6972
Chemtrec Emergency Phone: 800-424-9300
Effective Date: 12/27/91 MSDS #1004

WATER SOLUTION OF CHLORINE DIOXIDE

2. COMPOSITION/INFORMATION ON INGREDIENTS

(% CHEMICAL INGREDIENTS BY WT.)

Chlorine Dioxide CAS#10049-04-4 0.35%

(See Section 8 for exposure guidelines)

3. HAZARDS IDENTIFICATION

********** EMERGENCY OVERVIEW **********

Liquid has a chlorine-like odor. Water based system with boiling and freezing points near water. Free chlorine dioxide gas can cause death with long exposures or explosions above 10% concentration in air. A Wilson Type 2200 GF-3 gas mask or a self contained breathing apparatus can be used in areas contaminated with ClO_2 gas. Solution is not a fire hazard. Contain large spills and keep liquid out of water sources. Solution which is saturated will contain about 0.29 wt.% ClO_2 gas dissolved in water at room temperature.

POTENTIAL HEALTH EFFECTS:

HUMAN THRESHOLD RESPONSE DATA:

ODOR THRESHOLD: The odor threshold for chlorine dioxide is approximately 1 ppm in air.

IRRITATION THRESHOLD: The irritation threshold is considered to be around 1 ppm in air.

IMMEDIATELY DANGEROUS TO LIFE OR HEALTH: The IDLH level is 10 ppm in air.

INHALATION:

ACUTE: Inhalation of the liquid may produce a slight transient irritation with no permanent effect expected.

CHRONIC: Inhalation is not reported or expected to cause any effect based on the dilute nature of the product.

SKIN:

ACUTE: Exposure is not reported or known to cause any effects at this dilute concentration.

CHRONIC: Exposure is not reported or known to cause any effects at this dilute concentration.

EYE: Exposure may cause a slight transient irritation to the eye with no permanent effect.

INGESTION:

ACUTE: Ingestions of high concentrations may result in hematologic (blood) effects, most likely in red blood cells.

CHRONIC: Ingestion is not reported or known to cause effects in the general population. Concentrations greater than 100 ppm in water should be avoided by those individuals with anemia or G-6 PD deficiency. Levels of 5 ppm or less have been considered safe, although the EPA advises no greater than 1 ppm total.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Ingestion by individuals with anemia or G-6 PD deficiency should be avoided.

INTERACTIONS WITH OTHER CHEMICALS WHICH ENHANCE TOXICITY:

None known or reported.

ACUTE TOXICITY:

None available at this concentration. As a gas for the concentrated solution the following acute toxicology data is available.

Oral LD 50: 292 mg/kg (rat)

ACUTE TARGET ORGAN EFFECTS:

The acute effects of chlorine dioxide are related to its oxidizi and corrosive potential. These effects cannot be observed at th dilution concentration.

CHRONIC TARGET ORGAN EFFECTS:

Repeated ingestion of solutions of chlorine dioxide in laborator animals at concentrations of chlorine dioxide greater than 100 p in water have caused minor effects on the hematologic (blood) system, primarily affecting red blood cells. At concentrations lower than 100 ppm these effects have not been observed in laboratory animals. In addition human clinical studies have not found significant health effects from repeated exposures to up t 5 ppm chlorine dioxide in water.

DEVELOPMENTAL AND REPRODUCTIVE TOXICITY:

Several studies evaluating the potential for chlorine dioxide tc cause reproductive or developmental toxicity in laboratory anim have demonstrated that chlorine dioxide is not a developmental is it a reproductive toxin.

CARCINOGENICITY:

This product is not known or reported to be carcinogenic by any reference source including, IARC, OSHA, NTP or EPA.

MUTAGENICITY:

The weight of evidence of a battery of mutagenicity studies performed on sodium chlorite would indicate chlorine dioxide is not mutagenic.

4. FIRST AID MEASURES

EYES: Irrigate with water for at least 15 minutes; call a physician if irritation persists.

SKIN: Wash off in flowing water or shower.

INHALATION: Remove the worker to fresh air. If not breathing, give mouth to mouth resuscitation. If breathing is difficult, give oxygen. Call a physician.

INGESTION BY MOUTH: Give large amounts of water and contact a physician.

5. FIRE-FIGHTING MEASURES

HMIS RATINGS:	HEALTH 1.0	FLAMMABILITY 0	REACTIVITY 0
NFPA RATINGS:	None		
FLASH POINT:	Not applicable.		

EXPLOSION LIMITS: Liquid is not explosive unless gas is evolved above 10% conc. of ClO_2 gas in air.

AUTO IGNITION TEMPERATURE: Not applicable.

LIBERATION OF ClO_2 GAS: Flush area with large amounts of air to keep the concentration below 10%, the explosive limit in air. Raising the solution above room temperature tends to lead to gas evolution.

EXTINGUISHING MEDIA: Water solution is not flammable. Water or water fog for surrounding materials.

EMERGENCY HANDLING: Isolate in an open, well ventilated area. Flood with large volumes of water. Can be stabilized by addition of hydrogen peroxide and sodium carbonate.

FIRE FIGHTING EQUIPMENT: If any free ClO_2 is present, wear full gear including self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

LARGE SPILLS: Evacuate area, contain liquid, transfer to closed polyethylene drums. Keep out of water supply. Flush area with water after liquid is removed.

SMALL SPILLS: Flush with water to dilute and sewer. Do not allow contact with rags, paper or other oxidizable materials.

REPORTABLE QUANTITY: Not applicable.

7. HANDLING & STORAGE

Usually used as made. Gas tends to leave the solution on standing. Store in a cool area in a closed container. Avoid temperatures

above 77°F and freezing conditions and exposure to sunlight. Store away from any metals or reducing agents.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

SKIN PROTECTION: Clean body covering protection plus rubber or neoprene work gloves. If the solution is spilled on clothing, then rinse the contaminated area fully to remove any solution. Contamination of cloth with ClO_2 requires washing to remove solution.

EYE PROTECTION: Use safety glasses. Where contact with appreciable quantities of this material is possible, use safety goggles.

EXPOSURE GUIDELINES:

	OSHA		ACGIH		
	TWA	STEL	TLV	STEL	UNITS
CHLORINE DIOXIDE	0.1	0.3	0.1	0.3	PPM

ENGINEERING CONTROLS: If any free ClO_2 is present in the system, control airborne concentrations below 0.1 ppm. Local exhaust ventilation may be required for some operations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Yellow-green solution.
ODOR: Chlorine-like odor. BOILING POINT: About 212°F
VAPOR PRESSURE: Similar to water.
SOLUBILITY IN WATER: Completely soluble in all proportions.
SPECIFIC GRAVITY: 1.0
pH: 2.7
% VOLATILES: 100

10. STABILITY AND REACTIVITY

STABILITY: Weak oxidizing agent. Contamination with other materials such as acids, chlorine, organic chemicals, etc., may cause a chemical reaction, resulting in evolution of chlorine dioxide gases and heat. Explosion and/or fire could result. Chlorine dioxide is a poisonous explosive gas. Keep all chemical and foreign materials away from this solution. Avoid temperatures above ambient and ultraviolet light.

INCOMPATIBILITY: Chlorine dioxide is a strong oxidizing agent and should be kept away from organic materials and reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine dioxide - ClO_2

HAZARDOUS POLYMERIZATION: Will not occur.

EXPLOSION HAZARDS: A concentration of chlorine dioxide above 10% air is explosive, especially at elevated temperatures. Under room temperature conditions, this dilute water solution is not hazardo

11. DISPOSAL CONSIDERATIONS

ENVIRONMENTAL HAZARD: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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

WASTE DISPOSAL: If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D001, D002.

AQUATIC TOXICOLOGY:
LC 50 (96 hours) juvenile fathead minnows: 0.02 mg/l
LC 50 (96 hours) adult fathead minnows: 0.17 mg/l
LC 50 (96 hours) young of the year bluegills: 0.15 mg/l

2. TRANSPORT INFORMATION

ClO_2 in water solution is usually generated on-site and no transportation is involved. DOT forbids shipment of this material, except under special conditions.

13. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT: This substance is listed on the Toxic Substances Control Act inventory.

SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45: None established at these concentrations.

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200: Chlorine Dioxide is considered a hazardous ingredient.

CERCLA/SUPERFUND, 40 CFR 117,302: Chlorine dioxide is not listed under CERCLA.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered under applicable definitions, to meet the following categories:

HEALTH: None
PHYSICAL: None

SARA 313 INFORMATION:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CASE NUMBER	CONCENTRATION
Chlorine Dioxide	10049-04-4	0.02 - 0.35 wt %

CALIFORNIA PROPOSITION 65: This product does not contain a chemica known to the State of California to cause cancer or reproductive effects.

DISCLAIMER - This information herein is given in good faith but no warranty, expressed or implied, is made.

MATERIAL SAFETY DATA SHEET

CORPORATE RESEARCH & DEVELOPMENT

SCHENECTADY, N. Y.

MATERIALS INFORMATION SERVICES

NO. 3

SODIUM HYDROXIDE

Revision A

Date September 1

SECTION I. MATERIAL IDENTIFICATION

MATERIAL NAME: SODIUM HYDROXIDE
OTHER DESIGNATIONS: Caustic Soda, Soda Lye, NaOH, GE Material D4B4, ASTM D456,
DESCRIPTION: This material is an anhydrous solid (flake, pellet, etc.) CAS# 001 310
MANUFACTURER: Available from many suppliers.

SECTION II. INGREDIENTS AND HAZARDS	%	HAZARD DAT
Typical content:		Ceiling Limit
Sodium Hydroxide (NaOH)	96	2 mg/m³
Impurities:		
Sodium Carbonate (Na_2CO_3)	0.5-2.5	
Sodium Chloride (NaCl)	0.01-2.1	
Sodium Sulfate (Na_2SO_4)	0.02-0.1	
Potassium, Calcium and Magnesium	0.1	
Silicon Dioxide (SiO_2)	0.03	
Other metals (total)	0.01	

SECTION III. PHYSICAL DATA

Boiling point, 1 atm, deg C — 1388
Specific gravity (20/4 C) — 2.13
Volatiles — non-volatile at room temperature
Melting point, deg C — 318

Vapor pressure, mm Hg @ 1000 C —
@ 1200 C —
Viscosity at 350 C, cps —
Water solubility, %, @ 0 C —
@ 100 C —

Appearance & odor: White or off-white, hygroscopic solid; no odor.

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point and Method	Autoignition Temp.	Flammability Limits In Air	LOWER	U
None - not combustible	N/A	N/A	N/A	

Although it is not combustible, it can be hazardous if present in a fire area. The following should be known for fire fighting: (1) It can melt and flow when heated (m.p. 318 C). (2) Hot or molten material can react violently with water (splatter (3) Can react with certain metals, such as aluminum, to generate flammable hydroge (See also Reactivity Data, Section V)

SECTION V. REACTIVITY DATA

It is a stable material under normal conditions of storage. No self-polymerization. hazardous decomposition products. Slowly it can pick up moisture from the air and with carbon dioxide from the air to form sodium carbonate.

Sodium hydroxide can react violently with strong acids and with many organic chemica expecially with nitrocarbons and chlorocarbons. (Will react with trichloroethyler form spontaneously flammable dichloroacetylene.) It generates much heat when it d solves in water.

Avoid contact with leather and wool and with aluminum, tin, zinc, and alloys which c these metals.

SECTION VI. HEALTH HAZARD INFORMATION

TLV (Ceiling Value) 2 mg/m³

Sodium hydroxide is a strong alkali and is dangerous when improperly handled. It can be destructive to all human tissue it contacts, producing severe burns. Eye contact can produce severe or permanent injury. Dust or mist inhalation can injure the entire respiratory tract.

FIRST AID

Eye contact - Wash eyes immediately with plenty of running water for no less than 15 minutes, including under the eyelids and all surfaces. Speed in rinsing out the eyes with water after contact is extremely important if permanent injury is to be avoided. Contact physician as soon as possible.

Ingestion - Immediately dilute chemical by drinking large amounts of water or milk, then neutralize with dilute vinegar or fruit juice. Vomiting may occur spontaneously, but do not induce it. Contact a physician promptly.

Inhalation - Remove from exposure to mist or dust and get prompt medical help.

Skin contact - Wash contact area promptly with large quantities of water. (Dilute acetic acid, vinegar, can be used to neutralize.) Remove contaminated clothing under the shower. Prolong washing in serious cases until medical help arrives - even for an hour or longer. Physician should see all cases other than minor exposures to small area of skin.

SECTION VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

When solid sodium hydroxide is spilled in a dry condition, it can be promptly shoveled up for recovery or disposal. (CAUTION! Avoid dusting. Avoid contact with the skin.) Control the disposal of the waste solid. (Delay in clean up may allow absorption of moisture from the atmosphere and may increase the difficulties of clean up.) Flush contaminated surfaces with water and neutralize with dilute acid, preferably acetic acid, to remove final traces. (Sodium bicarbonate may also be used to partially neutralize.) Finally, rinse with water.

Disposal of waste is greatly dependent on local conditions and requirements. Pre-emergency plans should be made to meet legal and technical requirements. Waste caustic should never be deliberately discharged directly into sewers or surface waters. (First, convert to neutral salts and dilute well with water.)

SECTION VIII. SPECIAL PROTECTION INFORMATION

Provide adequate ventilation to meet TLV requirements, especially where dusting or misting conditions can exist. Use filter-type respirator for mist and dust protection where needed.

Use chemical safety goggles! A plastic face shield can also be used.

Use rubber gloves, rubber apron or protective clothing, rubber boots where needed to prevent contact with sodium hydroxide, especially when solutions are prepared.

Eye wash fountains and safety showers must be immediately available!

SECTION IX. SPECIAL PRECAUTIONS AND COMMENTS

Workers should not be permitted to handle this material without proper training or to work with it without protective equipment.

Store in well-sealed containers. Avoid handling conditions that may lead to spills and leaks, or to formation of mist or dust.

Wherever this material is stored, unloaded, handled or used abundant water (preferably running water) should be available for emergency use.

Drains for storage or use areas for this material should have retention basins for pH adjustment and dilution of spills and flushings before discharge.

This material is classified as a CORROSIVE by the Department of Transportation.

The pellet form is probably the safest solid form for handling and dispensing.

APPROVALS: MIS, CRD J. M. Vitale

Industrial Hygiene and Safety

MEDICAL REVIEW:

UNICHEM 1705

PRODUCT BULLETIN

UNICHEM INTERNATIONAL

DESCRIPTION

UNICHEM 1705 is a scale and corrosion inhibitor for use in open recirculating cooling wa systems. UNICHEM 1705 is a highly effective antiprecipitant for calcium phosphate, calci and magnesium carbonate and calcium sulfate. In addition, UNICHEM 1705 is an excell dispersant for particulates, such as mud, silt and biomass. UNICHEM 1705 is stable e under conditions of high temperature and pH. UNICHEM 1705 contains specific corros inhibitors for copper alloys.

UNICHEM 1705 is designed to be used in alkaline cooling water systems. UNICHEM 1 contains a small amount of ortho phosphate. This primarily provides a convenient way monitor the level of UNICHEM 1705 in the recirculating water.

APPLICATION

UNICHEM 1705 should be injected continuously into the cooling water system at a r sufficient to maintain 80 to 120 ppm in the recirculating water. The rate of addition can controlled by maintaining an ortho phosphate residual of 3 to 4 ppm in the recirculating wat

TYPICAL PROPERTIES

Appearance	Amber Clear Liquid
Density	10.5 lbs/gal
Freeze Point	25°F
Flash Point (TCC)	None

HANDLING

UNICHEM 1705 is an alkaline compound. Avoid contact with eyes, skin, and clothing wearing the proper safety equipment including eye protection, rubber gloves, and protec clothing. In case of eye contact, flush thoroughly with water for at least fifteen minu Consult a physician. For skin contact, rinse with copious quantities of water and wash v soap. Remove contaminated clothing and wash thoroughly. Seek medical attention if irritat persists. Avoid breathing vapors or fumes.

Refer to the material safety data sheet for more information regarding the safe use a handling of this product.

PACKAGING

UNICHEM 1705 is available in 55 gallon drums or in bulk quantities.

P.O. Box 1499 - Hobbs, N.M. 88240 - Pho. (505)

MATERIAL SAFETY DATA SHEET DUBACH GAS COMPANY CLASOL 70	Pg 1 of 6 Rev. Date 01/28/93

Lean Oil

Company Name: Dubach Gas Company
P.O. Box 170
Lisbon, LA 71048

Company Contact: Stanley H. "Fritz" Howes II
Manager, Environmental Services

Phone Number: (318) 353-2283

Emergency Contact: INFOTRAC
Emergency Phone Number: (800) 535-5053

SECTION #1 - IDENTIFICATION

Product: CLASOL 70

Chemical Family: Petroleum hydrocarbons
Synonyms: CS 70

NFPA Hazard Rating	- Health:	0	Negligible
	- Fire:	2	Moderate
	- Reactivity:	0	Negligible
HMIS Hazard Rating	- Health:	1	Slight
	- Fire:	2	Moderate
	- Reactivity:	0	Negligible

Refer to DOT "1990 Emergency Response Guidebook", Guide No. 27 for emergency response information regarding this product.

SECTION #1B - SHIPPING INFORMATION

Proper DOT Shipping Name: PETROLEUM OIL, n.o.s. (Clasol 70, kerosene)
Hazard Class: 3
DOT Identification Number: UN1270
DOT Shipping Label: FLAMMABLE LIQUID

Precautionary Label (OSHA)

FLAMMABLE LIQUID

Prolonged exposure to high vapor concentrations or contact with product may irritate eyes and/or skin. prolonged exposure of high concentrations or ingestion may cause nausea or CNS depression.

Target Organs: Skin, Central Nervous System, Eyes, Lungs

SECTION #2 - HAZARDOUS CONSTITUENTS

CAS #	Chemical Name	Percent of Mixture (Wt.)
N/A		

SECTION #3 - PHYSICAL DATA

Boiling Point:	393 °F	201 °C
Vapor Pressure:	11.89 mm Hg	
Vapor Density (Air=1):	6.30	
Specific Gravity:	0.78350	
Solubility (H2O):	Negligible	

Appearance	Odor
Water-white liquid	Mild petroleum odor

SECTION #4 - FIRE FIGHTING & EXPLOSION DATA

Flash Point: 166 °F 74 °C TCC

Lower Explosive Limit (%): 0.9

Fire and Explosion Hazards

Closed containers may explode if exposed to extreme heat.

Extinguishing Media

Use NFPA Class B extinguisher (CO_2 or foam).

Special Fire Fighting Instructions

Move container from fire area, if safely feasible.

Apply cooling water to sides of containers that are exposed to flames until fire is well out. Stay away from ends of tanks.

If water is used, fog nozzles are preferred. Water spray may be ineffective on fire, but can protect fire fighters and cool closed containers.

Do not enter confined fire-space without full bunker gear (helmet w/face shield, bunker coats, gloves and rubber boots) and NIOSH approved positive-pressure, self-contained breathing apparatus (SCBA) when fighting this product fire.

SECTION #5 - EXPOSURE EFFECTS and FIRST AID

Route of Exposure - Inhalation

Prolonged exposure to high vapor concentrations or product mist can cause irritation to the nose, throat and lungs. High vapor concentrations exhibit anesthetic characteristics and can cause headache, nausea, CNS depression and stupor.

First Aid - Inhalation

Remove victim to fresh air. If victim exhibits difficulty breathing administer oxygen. If breathing stops administer CPR and get immediate medical attention.

Route of Exposure - Skin

Prolonged product contact can cause primary irritation, defatting and/or dermatitis.

First Aid - Skin

Remove product-wetted, non-impervious clothing and shoes. Thoroughly wash exposed skin with soap and warm water.

Route of Exposure - Eyes

Exposure to high vapor concentrations or product mist can cause irritation, redness, tearing and/or blurred vision.

First Aid - Eyes

Flush eyes with large quantities of water for at least 15 minutes. Get immediate medical attention.

Route of Exposure - Ingestion

Swallowing can cause irritation of the stomach and intestines, nausea, vomiting, and diarrhea.

First Aid - Ingestion

GET IMMEDIATE MEDICAL ATTENTION

Do NOT induce vomiting. Aspiration of vomitus can cause serious chemical and/or lipoidal pneumonitis, particularly in young children. Keep victim quiet and warm until aid arrives.

Miscellaneous Toxicological Information

A poison by intravenous route.

SECTION #6 - REACTIVITY AND POLYMERIZATION

Stability: STABLE

Conditions to Avoid (Stability)

Isolate from oxidizers, extreme heat and open flame.

Incompatible Materials

Isolate from strong oxidizers such as permanganates, chromates, and peroxides.

Hazardous Decomposition Products

Carbon dioxide and carbon monoxide from combustion.

Conditions to Avoid (Polymerization)

N/A

Hazardous Polymerization: WILL NOT OCCUR

SECTION #7 - SPILL, LEAK, & DISPOSAL PROCEDURES

Steps to be Taken in The Event of Spills, Leaks, or Releases

Shut off ignition sources; no flares, smoking or flames in spill area. Stop leak if safely feasible.

Small quantities: Collect product using absorbent materials and place in proper containers as outlined below.

Large quantities: Dike area to contain product and to prevent migration offsite. Recover spilled liquid for reuse, if possible. Non-recoverable or reusable liquids, used absorbent materials, and contaminated soils should be collected and placed in a RCRA/DOT approved storage container for ignitable wastes.

Waste Disposal Methods

Waste materials should be treated as "D001" hazardous waste (ignitable) until a waste characterization is completed. Follow all local, state, and federal regulations for storage and disposal of this waste. Questions regarding regulations concerning waste characterization and proper disposal should be directed to the appropriate government agency.

(cont.)

SECTION #7 - SPILL, LEAK, & DISPOSAL PROCEDURES (continued)

Other Environmental Information

Spilled/leaked product which reaches a ditch or other waterbody should be reported to the appropriate local, state, and federal agencies.

SARA Title III Notifications and Information

SARA Title III - Hazard Classes:

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

SARA Title III - Section 313 Supplier Notification:

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

CAS #	Chemical Name	Percent of Mixture (Vol.)

NONE

This information must be included on all MSDS's that are copied and distributed for this material.

SECTION #8 - SPECIAL PROTECTIVE MEASURES

Skin Protection

Wear gloves, sleeves, apron and footwear impervious to this product. Consult safety equipment supplier for available materials. Wash contaminated protective clothing before reuse.

Respiratory Protection

Use NIOSH approved organic vapor respirators for concentrations above 50 ppm. Emergency entry to confined space requires self-contained, positive pressure breathing apparatus (SCBA).

SECTION #9 - SPECIAL PRECAUTIONS - STORAGE & HANDLING

Storage & Handling Conditions

Keep containers tightly closed.

Ground containers/vehicles when transferring product. Avoid free fall of liquid.

Empty containers are very hazardous! Do NOT flame cut, braze or weld. Continue all label precautions.

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Although reasonable care has been taken in the preparation of this document, Dubach Gas Company extends no warranties and makes no representations as to the accuracy or completeness of the information contained therein, and assumes no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

ClaSol 70

Certificate of Analysis

	Specifications Min.	Max.	Analysis
API Gravity @ 60°F	47.0	51.0	48.1
Specific Gravity @ 60 F	.7949	.7796	.7879
Pounds/Gallon			6.562
Color (Saybolt)	+25	+30	+26
Flash Point (TCC) F	145		167°F
Viscosity @ 104°F			
CS	Report		1.56
CP	Report		1.23
Distillation			
IBP	Report		400
10%	Report		409
50%	Report		421
90%	Report		449
DP	Report	480	470
Recovery			100.0
Aniline Point	Report		166.6
KB Value	Report		26.1
Pour Pt, D-97, F	Report		-40
Aromatic Content Vol%	Report		8.2

Date _____ P.O. _____

Signature _____ Revised 02/15/93

DUBACH
GAS COMPANY

Claiborne Plant

P.O. Box 170

Ilsbon, LA 71048

(318) 353-2283

Fax: (318) 353-2213

SOLVENT

KERR-McGEE REFINING CORPORATION AND SUBSIDIARIES
POST OFFICE BOX 3387 • HOUSTON, TEXAS 77253 • TELEPHONE (713) 838-4700

MATERIAL SAFETY DATA SHEET — October 16, 1993 — MSDS NUMBER CV - 1473

EMERGENCY TELEPHONE NUMBERS	COMPANY	CHEMTREC
	713/838-4700	800/424-9300

I. PRODUCT IDENTIFICATION

PRODUCT	CHEMICAL NAME AND SYNONYMS
KERMAC 142 Flash Naphtha, Rule 66	Medium Aliphatic Solvent Naphtha
CHEMICAL FAMILY	**FORMULA**
Petroleum Hydrocarbon Naphtha	C10 - C14

National Fire Protection Association Hazard Rating Codes: Least - 0, Slight - 1, Moderate - 2, High - 3, Extreme - 4

HEALTH CODE	FIRE CODE	REACTIVITY CODE
0	2	0

II. SUMMARY OF HAZARDS

CAUTION! COMBUSTIBLE LIQUID AND VAPOR. HARMFUL IF INHALED AND MAY CAUSE DELAYEDLUNG INJURY. CAN CAUSE NERVOUS SYSTEM DEPRESSION. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Keep away from heat and flame. Avoid breathing vapor. Use ventilation adequate to keep vapor below recommended exposure limits. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

DOT Hazardous Material	DOT SHIPPING NAME AND NUMBER	DOT HAZARD CLASS
YES	Naphtha, combustible liquid, UN1256, III	(Combustible Liquid)

III. HAZARDOUS COMPONENTS

INGREDIENT	% RANGE	PEL/TLV	HAZARD
Medium Aliphatic Solvent Naphtha (CAS # 64742-88-7)	100	Stoddard Solvent TWA - 100 ppm	Combustible Acute Health Chronic Health

IV. HEALTH INFORMATION

EXPOSURE BY ROUTE OF ENTRY	EXPOSURE CHARACTERISTICS AND FIRST AID	
INHALATION	EFFECTS	Acute: Headache, nasal and respiratory irritation, nausea, drowsiness, breathlessness, fatigue, central nervous system depression, convulsions, and loss of consciousness.
	FIRST AID	Move exposed person to fresh air. If breathing has stopped, perform artificial respiration. Get medical attention as soon as possible.
SKIN	EFFECTS	Acute: Irritation Chronic: dermatitis
	FIRST AID	If clothing soaked, immediately remove clothing and wash skin with soap and water. Launder clothing before wearing. Get medical attention promptly.
EYES	EFFECTS	Acute: Irritation
	FIRST AID	Immediately flush eyes with water for a minimum of 15 minutes, occasionally lifting the lower and upper lids. Get medical attention promptly.
SWALLOWING INGESTION	EFFECTS	Acute: aspiration hazard, headache, nausea, drowsiness, fatigue, pneumonitis, pulmonary edema, central nervous system depression, convulsions and loss of consciousness.
	FIRST AID	Call a physician immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person

Medical conditions Generally Aggravated by Exposure	N/AV

LISTED AS POTENTIAL CARCINOGEN OR CARCINOGEN	NOT LISTED X INTERNATIONAL Agency for Research on Cancer ____	NATIONAL TOXICOLOGY PROGRAM ____ OSHA ____

V. EMPLOYEE PROTECTION

RESPIRATORY PROTECTION (NIOSH APPROVED RESPIRATORS SEE OSHA STD. 1910.134)

Up to 1000 ppm, half-mask organic vapor respirator. Up to 5000 ppm, full-face organic vapor respirator or full-face supplied air respirator. Greater than 5000 ppm, fire fighting, or unknown concentration, self-contained breathing apparatus with positive pressure.

EYE	Safety glasses, chemical goggles or face shield as appropriate.
SKIN	Gloves: Nitrile, neoprene or other material resistant to naphtha.

VENTILATION

Maintain local or dilution ventilation to keep air concentration below 100 ppm. Loading, unloading, tank gauging, etc., remain upwind. Request assistance of safety and industrial hygiene personnel to determine air concentrations.

VI. FIRE PROTECTION INFORMATION

FLASH POINT AND METHOD	AUTOIGNITION TEMPERATURE ESTIMATED	FLAMMABLE LIMITS % VOLUME IN AIR ESTIMATED	LOWER	UPPER
Tag Closed Cup 142 °F	450 °F		0.7	6

EXTINGUISHING MEDIA

Carbon dioxide, dry chemical, or foam. Water stream may spread fire, use water spray only to cool containers exposed to fire. If leak or spill has not ignited, use water spray to disperse the vapors.

HAZARDOUS DECOMPOSITION PRODUCTS

Incomplete combustion can yield carbon monoxide and various hydrocarbons.

FIRE AND EXPLOSION HAZARDS

Can form combustible mixtures with air when heated.

STORAGE

Do not store with strong oxidizers. Store as OSHA Class IIIA combustible liquid.

HAZARDOUS POLYMERIZATION			STABILITY		
WILL NOT OCCUR	X	MAY OCCUR	STABLE	X	UNSTABLE

VII. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT 350 - 416 °F	Reid VAPOR PRESSURE (RVP) at 100 °F ESTIMATED 0.1 pounds	EVAPORATION (ETHYL ETHER = 1) ESTIMATED 8 times slower
PERCENT VOLATILE BY VOLUME (%) 100	AVG. MOLECULAR WEIGHT 170	APPEARANCE Clear Liquid
ODOR Petroleum Naphtha	DROP POINT N/A	ESTIMATED VAPOR DENSITY (AIR = 1) 6
SPECIFIC GRAVITY 0.78	VISCOSITY 1.3 cs at 100 °F	SOLUBILITY (G/100g WATER AT 20° C) Negligible

VIII. ENVIRONMENTAL PROTECTION

SPILLS	Notify emergency response personnel. Evacuate area and remove ignition sources. Build dike to contain flow. Remove free liquid, do not flush to sewer or open water. Pick up with inert absorbant and place in closed container for disposal.
WASTE DISPOSAL	Utilize licensed waste disposal company. Consider recycling or incineration. Utilize permitted hazardous waste disposal site or industrial waste disposal site as appropriate.

ADDITIONAL INFORMATION

PREPARED BY	DATE PREPARED
KEITH W. BUNSELMEYER	October 16,1993

DISCLAIMER

The information and recommendations contained in this publication have been compiled from sources believed to be reliable and to represent the best current opinion on the subject at the time of publication. Since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no gurentee that the recommendations will be adequate for all individuals or situations. Each user of the product described herein should determine the suitability of the described product for his particular purpose and should comply with all federal and state rules and regulations concerning the described product.

ABBREVIATIONS

CAS #	Chemical Abstracts Service Number
N/A	Not Applicable
N/AV	Not Available
ppm	Parts per million
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value Both the OSHA PEL and the American Conference of Governmental Industrial Hygienists TLV were reviewed. Where a difference existed, the more restrictive of the two was selected.
STEL	Short Term Exposure Limit
TWA	Time-Weighted Average

KERR-McGEE REFINING CORPORATION

BRAND NAME: KERMAC 142 Flash Naphtha - Rule 66

PRODUCT CODE: 1426

EFFECTIVE DATE: September 1, 1993

SUPERSEDES CODE:

CURRENT DATE:

REFINED PRODUCT SPECIFICATION —SOLVENTS

PROPERTY		TEST METHOD	SHIPPING CONTROLS	TYPICAL TESTS	MARKETING SPECIFICATIONS
GRAVITY:	API @ 60°F	D-287		51	49-52
	SPECIFIC 60/60 °F	D-1250		.775	
	lbs/gal @ 60°F	D-1250		6.5	
FLASH POINT:	CLOSED CUP (TCC) °F (°C)	D-56		144	142 Min
	CLOSED CUP (PM) °F (°C)	D-93			
	OPEN CUP (COC) °F (°C)	D-92			
FIRE POINT:	OPEN CUP (COC) °F	D-92			
DISTILLATION:	IBP (Initial boiling point °F (°C)	D-86		364	356 Min
	5				
	10				
	20				
	30				
	40				
	50			383	
	60				
	70				
	80				
	90				
	95				
	DP ((Dry Point °F (°C))			408	412 Max
	EP ((End Point °F (°C))				
ACIDITY OF DISTILLATION RESIDUE.		D-1093			
CORROSION:	3 Hours @ 212 °F (100°C)	D-130		1a	1 Max
	½ Hour @ Boiling Point	D-235			
COLOR:	Saybolt	D-156		30	28 Min
	Acid Wash	D-848			
POUR POINT: °F		D-97			
VISCOSITY:	Saybolt (SUS) @ 100°F, Seconds	D-2161			
	@ Seconds				
	@ 0°F Seconds	D-2161			
	Kinematic @ 100°F Centistokes	D-445		1.3	
	@ Centistokes				
	@ 0°F Centistokes	D-445			
SOLVENCY:	Kauri-Butanol Value	D-1133		30	
	Aniline Point °F	D-611		162	
	Mixed Aniline Point °F	D-611			
	Dilution Ratio	D-1720			
CHEMICAL PROPERTIES:	Sulfur Wt. %	D-4045		Below 50	
	Doctor Test	D-484		Neg	Neg
	Saturates Vol. %	D-1319			
	Paraffins Vol. %	D-2159			
	Naphthenes Vol. %	D-2159			
	Olefins Vol. %	D-1319			
	Aromatics Vol. %	D-1319		7.4	Below 8

CONTINUED

KERR-McGEE

BRAND NAME: KERMAC 142 Flash Naphtha - Rule 66

PRODUCT CODE: 1426 | REFINERY CODE:

EFFECTIVE DATE: September 1, 1993 | CURRENT DATE:

REFINED PRODUCT SPECIFICATION — SOLVENTS (CONTINUED)

PROPERTY		TEST METHOD	SHIPPING CONTROLS	TYPICAL TESTS	MARKETING SPECIFICATIONS
CHEMICAL PROPERTIES (Cont'd):					
BENZENE	VOL. %	Gas Chrom.		Nil	Less Than 0.01
ETHYL BENZENE	VOL. %	Gas Chrom.			
TOLUENE	VOL. %	Gas Chrom.			
O XYLENE	VOL. %	Gas Chrom.			
M XYLENE	VOL. %	Gas Chrom.			
P XYLENE	VOL. %	Gas Chrom.			
SULFURIC ACID ABSORPTION	VOL. %	D-484			
BROMINE NUMBER, mg/gram		D-1159			
UNSULFONATED RESIDUE.	VOL. %	D-483			
ODOR: BULK					
RESIDUAL					
PHENOL NUMBER mg/100 ml					
APPEARANCE: CLEAR AND BRIGHT					
HAZE					
OTHER PROPERTIES:					
VAPOR PRESSURE					
VAPOR DENSITY					
FLAMMABLE LIMITS					
Lower					
Upper					
REFRACTIVE INDEX @ 20 °C		D-1218		1.43	
INTERFACIAL TENSION °/cm		D-971			
DIELECTRIC BREAKDOWN VOLTAGE		D-877			
AUTO IGNITION TEMPO °F		D-2155			
U O P CHARACTERIZATION FACTOR					
BUREAU OF MINES CORRELATION INDEX					
EXISTENT GUM					
NON-VOLATILE RESIDUE		D-1353			
Average Molecular Weight				150	

REMARKS & NOTES

Meets ASTM D-235 Standard Specifications for Mineral Spirits, Type II, High Flash Point Mineral Spirits.

Meets Federal Specification PD680A, Type II, Dry Cleaning & Degreasing Solvent.

THE VALUES SHOWN ARE A BRIEF DESCRIPTION OF THE PRODUCT IN PRODUCTION ON THE EFFECTIVE DATE OF THE SPECIFICATIONS AND SERVE TO ASSIST IN DETERMINING PRODUCT SUITABILITY. NO CHANGE IN MATERIAL OR METHOD OF MANUFACTURE SHALL BE MADE WITHOUT NEW APPROVALS.

SUPERSEDES SPECIFICATION FOR | PRODUCT CODE | DATE

APPROVAL — INITIAL AND DATE

ORIGINATOR	DATE	REFINERY MGR	DATE	V.P. MARKETING	DATE	EXEC. V.P. PCEN	DATE
	9/28/93		9-17-93		9/21/93		9-17-93
MANAGER, QUALITY CONTROL	DATE		DATE		DATE		
	9-7-93						

December 18, 19

WORLDWIDE

USA and Canada Other Countries

Material Safety Data Shee

SULFURIC ACID

PHILLIPS 66 COMPANY
A Subsidiary of Phillips Petroleum Company
Bartlesville, Oklahoma 74004

PHONE NUMBERS

Emergency:
Business Hours (918) 661-3
After Hours (918) 661-8
General MSDS Information:
(918) 661-8

A. Product Identification

Synonyms: Oil of Vitreol
Chemical Name: Sulfuric Acid
Chemical Family: Acid
Chemical Formula: H2SO4
CAS Reg. No.: 7664-93-9
Product No.: CC5570

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

B. Hazardous Components

Ingredients	CAS Number	% By Wt.	OSHA PEL	ACGIH TLV
Sulfuric Acid	7664-93-9	93 (Min)	1 mg/m3	1 mg/m3

C. Personal Protection Information

Ventilation: Use adequate ventilation to control exposure below recommended exposure limits. See Recommended Exposure Limits in Health Hazard Data (Section F).

Respiratory Protection: Use NIOSH/MSHA approved full-face, air supplied respiratory protective equipment. Use NIOSH/MSHA approved self-contained breathing apparatus (SCBA) for entry to or escape from unknown atmospheres.

Eye Protection: Full-face shield and chemical goggles for splash protection.

Skin Protection: Rubber gloves. Protective clothing, boots and rubber apron.

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

D. Handling and Storage Precautions

Avoid inhalation and skin and eye contact. Wear protective equipment and/or garments described above if exposure conditions warrant.

Store in cool, dry, well-ventilated area. Provide means of controlling leaks and spills. Avoid contact with materials listed below in Reactivity Data. When diluting acid, add acid to water - never add water to acid.

E. Reactivity Data

Stability: Stable
Conditions to Avoid: Not Applicable
Incompatibility (Materials to Avoid): Oxidizing or reducing materials, metals, combustible materials, and moisture. Avoid adding water to product.

Hazardous Polymerization: Will Not Occur
Conditions to Avoid: Not Applicable
Hazardous Decomposition Products: Sulfuric acid mist and sulfur oxides. Hydrogen gas can be generated as a decomposition product and care must be taken not to ignite.

F. Health Hazard Data

Recommended Exposure Limits:

OSHA PEL is 1 mg/m3; ACGIH TLV is 1 mg/m3.

Acute Effects of Overexposure:

Eye: Corrosive, devastating injury resulting in glaucoma, cataracts, extensive damage to cornea and conjunctiva leading to blindness.

Skin: Corrosive; can burn and char the skin which can lead to scarring.

Inhalation: Irritation of the eyes, nose and respiratory system, coughing; severe overexposure can result in laryngeal, tracheobronchial and even pulmonary edema, brocho-constriction, laryngeal spasm leading to asphyxiation.

Ingestion: Corrosive to tissues; immediate pain when taken into the mouth as well as spasm of the larynx, trachea, and bronchi. Epigastric pain, nausea, vomiting, intense thirst, circulatory collapse, perforation of the trachea or stomach, and death. May be aspirated into the lungs if swallowed resulting in pulmonary edema and chemical pneumonitis.

Subchronic and Chronic Effects of Overexposure:

Chronic conjunctivitis, frequent respiratory infections, emphysema, and digestive disturbances, erosion and/or discoloration of teeth have been reported in persons exposed to sulfuric acid over the course of many years.

Other Health Effects:

No known applicable information.

Health Hazard Categories:

	Animal	Human		Animal	Human
Known Carcinogen	___	___	Toxic	___	___
Suspect Carcinogen	___	___	Corrosive	_X_	_X_
Mutagen	___	___	Irritant	___	___
Teratogen	___	___	Target Organ Toxin	_X_	_X_
Allergic Sensitizer	___	___	Specify - Lung-Aspiration Hazard		
Highly Toxic	___	___			

First Aid and Emergency Procedures:

Eye: Hold eyelids apart and irrigate eyes with running water for at least 15 minutes and continue to irrigate until otherwise directed by a physician. Treat for shock as necessary.

Skin: Flood affected area with running water for at least 15 minutes while removing contaminated clothing. Treat for shock as necessary. Seek immediate medical attention.

Inhalation: Immediately remove from exposure. Initiate artificial respiration, cardiopulmonary resuscitation, or treatment for shock as necessary. Administer oxygen as needed. Obtain prompt medical assistance.

Ingestion: If vomitus is bloody, do not attempt to give anything by mouth. Otherwise, immediately rinse the mouth and lips and assist victim in swallowing large amounts of water. Do not induce vomiting or attempt chemical neutralization. Treat for shock as necessary. Obtain prompt medical assistance. May present an aspiration hazard.

G. Physical Data

Appearance:	Colorless, Oily Liquid
Odor:	Pungent
Boiling Point:	626F (330C)
Vapor Pressure:	0.02 psia (1 mm Hg) at 295F
Vapor Density (Air = 1):	>1
Solubility in Water:	Complete, generates large amounts of heat
Specific Gravity (H2O = 1):	1.834 at 60/60F
Percent Volatile by Volume:	Negligible
Evaporation Rate (Butyl Acetate = 1):	<1
Viscosity:	Not Established

H. Fire and Explosion Data

Flash Point (Method Used):	Not Applicable
Flammable Limits (% by Volume in Air):	LEL - Not Applicable UEL - Not Applicable
Fire Extinguishing Media:	Dry chemical, foam or carbon dioxide (CO2)
Special Fire Fighting Procedures:	Product is not flammable, but may cause ignition on contact with combustible liquids and solids. Self-contained breathing apparatus and full protective clothing recommended. Water may be used to extinguish burning combustibles, but do not apply directly to acid.
Fire and Explosion Hazards:	Can cause ignition on contact with combustibles. Exothermic with water. Sulfur oxides and hydrogen gas may be released as decomposition products.

I. Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled:
Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Contain spill. Protect from contact with combustibles. Keep out of water sources and sewers. Neutralize sodium bicarbonate, soda ash, crushed limestone, lime, or other alkaline material. Shovel into disposal drums. Flush area with water.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations):
Burn under controlled conditions or place in other RCRA permitted waste disposal facility.

J. DOT Transportation

Shipping Name:	Sulfuric Acid
Hazard Class:	Corrosive Material
ID Number:	UN 1830
Marking:	Sulfuric Acid/UN 1830
Label:	Corrosive
Placard:	Corrosive/1830
Hazardous Substance/RQ:	RQ - 1000 lbs/454 kg
Shipping Description:	Sulfuric Acid, Corrosive Material, UN 1830
Packaging References:	49 CFR 173.244 and.173.272

K. RCRA Classification - Unadulterated Product as a Waste

Corrosive

L. Protection Required for Work on Contaminated Equipment

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

M. Hazard Classification

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

___ Combustible Liquid	___ Flammable Aerosol	___ Oxidizer
___ Compressed Gas	___ Explosive	___ Pyrophoric
___ Flammable Gas	_X_ Health Hazard (Section F)	___ Unstable
___ Flammable Liquid	___ Organic Peroxide	_X_ Water Reactive
___ Flammable Solid		

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

N. *Additional Comments*

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

Sulfuric Acid

NA - Not Applicable NE - Not Established

C-8105 RECOMPRESSORS
10,470 HP

LUBE OIL COOLERS (F)
7.5 H.P. 1.5MMBTU/HR

C-8106 RECOMPRESSORS
10,470 HP

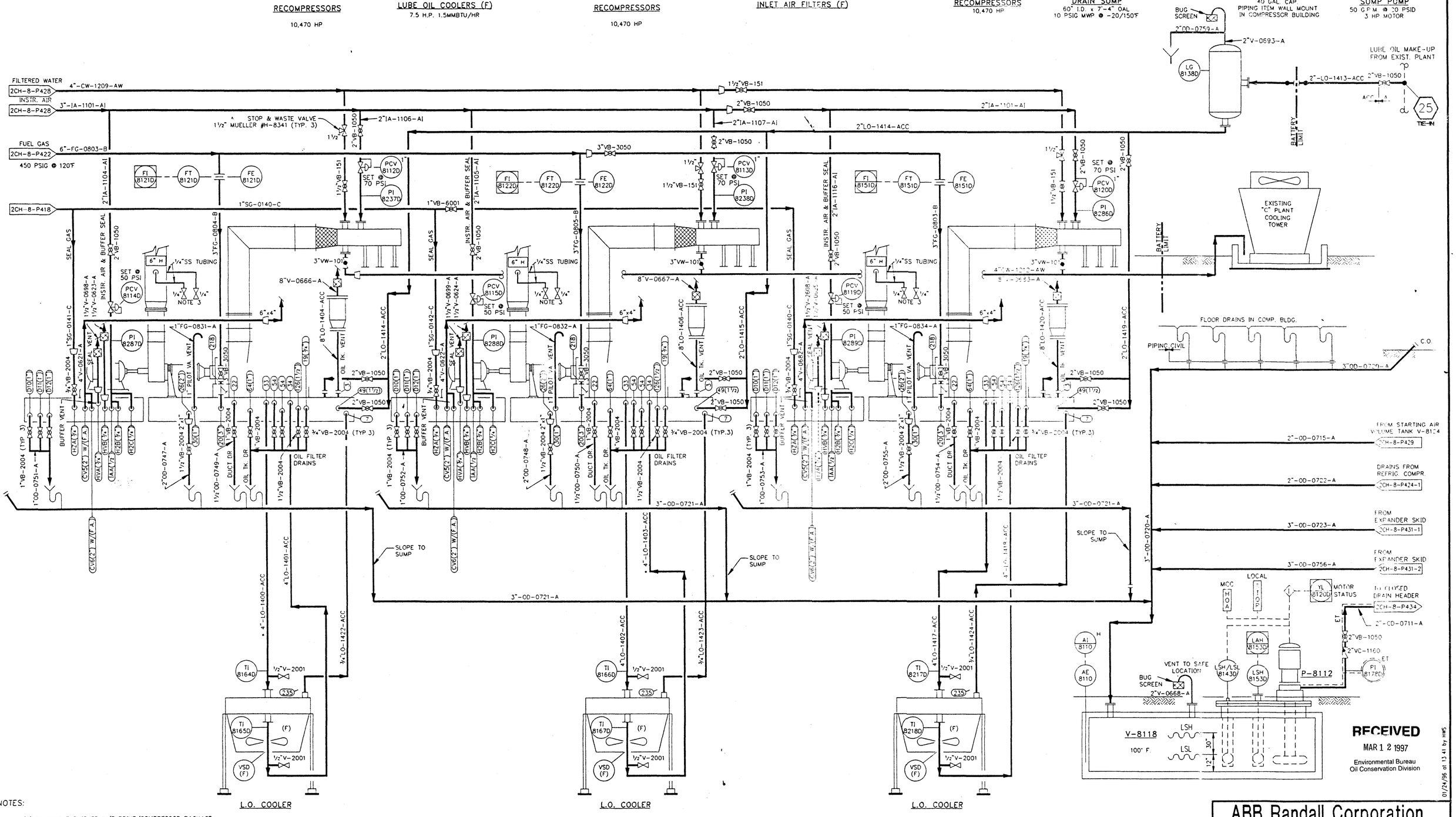
INLET AIR FILTERS (F)

C-8110 RECOMPRESSORS
10,470 HP

V-8118 DRAIN SUMP
60" I.D. x 7'-4" OAL
10 PSIG MWP @ -20/150°F

LUBE OIL DAY TANK
40 GAL. CAP
PIPING ITEM WALL MOUNT
IN COMPRESSOR BUILDING

P-8112 SUMP PUMP
50 G.P.M. @ 70 PSID
3 HP MOTOR



NOTES:

1. (F) DENOTES FURNISHED W/TURBINE/COMPRESSOR PACKAGE.
2. * L.O PIPING TO BE STAINLESS STEEL.
3. VALVES TO BE ACCESSIBLE FROM GRADE.

RECEIVED
MAR 1 2 1997
Environmental Bureau
Oil Conservation Division
01/24/96 at 13:41 by MWS

NO.	DATE	BY	DESCRIPTION	W.O.	APP
5	10/4/95	MA	REVISED AS NOTED		
4	7/17/95	MA	REVISED AS NOTED		
3	6/08/95	MA	REVISED AS NOTED		
2	04/18/95	MA	ISSUED FOR CONSTRUCTION		
1	3/10/95	MA	REVISED PER HAZOP REVIEW		
0	2/2/95	DH	ISSUED FOR DESIGN		
E	12/13/94	DH	REISSUED FOR APPROVAL FOR 60DMM CASE		
D	11/21/94	DH	REISSUED FOR 60DMM ESTIMATE		
C	11/3/94	DH	ISSUED FOR APPROVAL		
7	8/02/96	MA	AS-BUILT ISSUE		
6	6/21/96	MA	ISSUED FOR COMMENT		

PRT	SEP	DATE	TO	W.O

ENG. RECORD		DATE
DRAFTING DESIGN	GHR	6-7-94
CAD DRAFTING	GHR	6-7-94
CHECKED		
PROJECT APPROVAL		
SURVEY DATE		
R/W NUMBER		
COMPUTER SAVE NAME	2CHBP423	

DWG. NO. | TITLE
REFERENCE DRAWINGS

LEGEND

FM9 (Rev 11/93)

ABB Randall Corporation
AN ABB LUMMUS CREST COMPANY
Houston, Texas
ABBR JOB # 80152

El Paso NATURAL GAS COMPANY

CHACO CRYOGENIC PLANT
RECOMPRESSOR UTILITY
PROCESS AND INSTRUMENTATION DIAGRAM

SCALE: NONE	DWG. NO. 2CH-8-P423	REV 7
W.O.:		

P-8118
AMINE MAKE-UP PUMP
50 GPM @ 100 PSID
15 HP - MOTOR

V-8122
AMINE DRAIN SUMP
60" ID x 7'-4" CAL
10 PSIG MAWP @ -20°F/200°F

V-8123
AMINE STORAGE TANK
500 BBL
15'-0" OD x 18'-0" H

FROM PSV-8140 2CH-8-P425 — 1"AD-0774-A
FROM PSV-8150 2CH-8-P425 — 1"AD-0775-A
FROM AMINE CHARCOAL FILTER 2CH-8-P425 — 1"AD-0773-A
FROM AMINE FILTER 2CH-8-P425 — 1"AD-0772-A
FROM AMINE STILL REBOILER 2CH-8-P426 — 2"AD-0778-A
FROM AMINE BOOSTER PUMPS 2CH-8-P425 — ¾"AD-0776-A
FROM AMINE STILL 2CH-8-P426 — 2"AD-0779-A
FROM LEAN/RICH AMINE EXCH. 2CH-8-P425 — 1"AD-0785-A
FROM AMINE STILL REBOILER 2CH-8-P426 — 2"AD-0777-A
FROM PRODUCT AMINE CONTACTOR 2CH-8-P416 — 1½"AD-0783-A
FROM AMINE STILL REFLUX PUMPS 2CH-8-P426 — ¾"AD-0782-A
FROM PRODUCT AMINE CONTACTOR 2CH-8-P416 — 1½"AD-0784-A
FROM FLASH TANK 2CH-8-P425 — 1½"AD-0771-A
FROM AMINE STILL REFLUX ACCUMULATOR 2CH-8-P426 — 1½"AD-0781-A
3"AD-0770-A
AMINE DRAIN HEADER SLOPE

TO AMINE FILTER 2CH-8-P425 — 2"AM-0547-A
1½"VB-2100
1½"VB-2004
1½"VC-2082
PI 81930
LOCAL MCC HOA STOP
YL 81410
AI 8111
AE 8111
LSH/LSL 81380 ON/OFF
LAH 81380
LSH 81380
P-8118
1"H
HLL
LLL
LAH
24"
36"
3"
V-8122

BLANKET GAS 2CH-8-P422 — 2"FG-0811-A
1"VB-2004
1"VC-2082
PI 81940
PCV 81030 SET @ 30 PSIG
1½"VB-2100
1½"VB-2004
SET @ 2 OZ
FA 81010 1"NPT
1½"P#3 SET @ 50 PSIG
PSV 81500
1½"V-0638-A
3"V-0694-A
1½"FG-0830-A
PCV 81040 1½" SET @ 5 OZ.
PCV 81180
PI 81950
PVSV 81510
VACUUM
VENT LINE 2"AM-0549-A
1½"AM-0548-A 1"H ET
2"AM-0546-A 1"H ET
2"V-2001 TRUCK PUMP OUT CONNECTION (LOCATE NEAR ROAD - PROTECT WITH PIPE GUARD)
LG 81290
SET POINT 80°F
TIC 81880
TE 81880
SET @ H 150°F L 50°F
NC
2"VB-1100
2"VB-1050
24" MW
V-8123
CONCRETE WALL
TRUCK UNLOADING CONNECTION
(INSIDE DIKE)
1"HO-0419-A
1"HO-0417-A
FROM HOT OIL SYSTEM 2CH-8-P419
TO HOT OIL SYSTEM 2CH-8-P419
I/P
TV 81880
1"V-2001
FC
½"V-2001

LEGEND

NO.	DATE	BY	DESCRIPTION
5	10/4/95	MA	REVISED AS NOTED
4	7/17/95	MA	REVISED AS NOTED
3	4/28/95	MA	REVISED AS NOTED
	4/5/95	MA	ISSUED FOR CONSTRUCTION
	3/10/95	MA	REVISED PER MAJOR REVIEW
2	2/2/95	DH	ISSUED FOR DESIGN
1	12/13/94	DH	ISSUED FOR APPROVAL FOR 600MM CASE
0	11/21/94	DH	RE-ISSUED FOR 600MM ESTIMATE
8	8/02/93	MA	AS-BUILT ISSUE
7	6/21/93	MA	ISSUED FOR COMMENT
6	1/28/93	MA	REVISED AS NOTED

REVISIONS

PRINT RECORD						
W.O.	APP	CHK	REP	DATE	TO	W.O.

ENG. RECORD	DATE
DRAFTING DESIGN	DATE
CAD DRAFTING: DHR	8-17-94
CHECKED	
PROJECT APPROVAL	
SURVEY DATE	
R/W NUMBER	
COMPUTER SAVE NAME: 2CH8P427	

ABB Randall Corporation
AN ABB LUMMUS CREST COMPANY
Houston, Texas
ABBR JOB # 80152

El Paso NATURAL GAS COMPANY

CHACO CRYOGENIC PLANT
AMINE DRAIN AND STORAGE
PROCESS AND INSTRUMENTATION DIAGRAM

SCALE: NONE | W.O. | DWG. NO. 2CH-8-P427 | REV. 8

EE-8122
LOW TEMP DRAIN ELECTRIC HEATER
25 K.W
75 PSIG MAWP @ -150/150°F

V-8128
LOW TEMPERATURE
DRAIN SEPARATOR
48" I.D. x 16'-0" S/S
75 PSIG MAWP @ -150/150° F.

FROM H.P. COLD SEPARATOR - TRAIN "2"(V-8135) CH-8-P411-2
2"LTD-2705-ACC
FROM GAS/GAS EXCHANGER TRAIN "2" (EE-8127) CH-8-P411-2
1"LTD-2704-ACC
FROM DEMETHANIZER TRAIN "2" (V-8136) CH-8-P412-2
3"LTD-2702-ACC
FROM C-8111 EXP/COMPR. PKGE. DRAIN 1"CD-XXXX-ACC CH-8-P431-2
FROM PRODUCT BOOSTER PUMPS (P-8125 & P-8126) TRAIN "2" CH-8-P413-2
3"LTD-2703-ACC
FROM COLD SIDE REBOILER - TRAIN "2" (EE-8128,29,&30) CH 8-P412-2
1"LTD-2706-ACC
FROM GAS/GAS EXCHANGER (EE-8110) CH-8-P411-1
1"LTD-1501-ACC
FROM H.P. COLD SEPARATOR CH-8-P411-1
2"LTD-1500-ACC
FROM DEMETHANIZER (V-8107) CH-8-P412-1
3"LTD-1503-ACC
FROM PRODUCT BOOSTER PUMPS (P-8101,02,&03) CH-8-P413-1
3"LTD-1504-ACC
FROM COLD SIDE REBOILER (EE-8111,12 & 13) CH-8-P412-1
1"LTD-1509-ACC
FROM COLD SIDE REBOILER (EE-8111,12 & 13) CH-8-P412-1
1"LTD-1509-ACC
FROM NON-CONDENSABLE TRAP CH-8-P43
2"LTD-1520-ACC
3"VB-1600 H.B.O.

PRODUCT PIPELINE PUMPS (P8104,05,06,27) CH-8-P417-2
2"LTD-1514-ACC
FROM V-8112 PRODUCT DRYER CH-8-P417
2"LTD-1515-ACC
FROM V-8110 PRODUCT AMINE CONTRACTOR CH-8-P418
1"LTD-1511-ACC
FROM V-8113 PRODUCT DRYER CH-8-P417
2"LTD-1516-ACC
FROM V-8111 PRODUCT AMINE CONTRACTOR CH-8-P418
1"LTD-1512-ACC
FROM FT-8104 AMINE COALESCER CH-8-P418
1"LTD-1513-ACC
FROM V-8116 REFIG. SURGE TANK CH-8-P421
2"LTD-1508-ACC
3"LTD-1507-ACC
3"LTD-1507-ACC

FROM H.P. COLD SEPARATOR (V-8105) CH-8-P411-1
2"LTD-1500-ACC
FROM C-8102 EXP./COMPR. PKGE. DRAINS 1"CD-XXXX-ACC CH-8-P431-1
FROM PRODUCT TREATER CH-8-P417-1
2"LTD-1516-ACC
FROM DEETHANIZER V-8109 CH-8-P414
2"LTD-1510-ACC

2"V-0687-A
BUG SCREEN
GLYCOL 85% WATER 35% THERMAL FLUID SOLUTION
LG 81270
LAH 81430
LSLL 81450
LSLL
TI 82650
TAHH 82290 SET @ 200°F
TSHH 82290 LOCAL
EE-8122
TE 81880
TSLL 81890 SET @ 140°F
HS 81420
UDA 82120
LOCAL PANEL (F)
1"V-2001
1"GL-1223-A
GLYCOL DRAIN/FILL CONN.
FIRE PROOFING
3"V-1600
6"T-0648-A
6"V-1600
CHAIN & PADLOCK OPEN
CARBON STEEL A
STAINLESS STEEL ACC
TI 81900
PI 82050
1"VB-1600
½"V-2600
½"V-2600
LT 81440
LI 81440
LG 81280
LAH
18" MW
1½"VC-1600
1½"V-1600
1½"CD-0758-A
ACC A
3"LTD-1508-ACC
2"LTD-1517-ACC
FROM V-8131 REFRIG. SUCTION SCRUBBER CH-8-P420
2"LTD-1503-ACC
FROM V-8115 REFIG. ECONOMIZER CH-8-P421
1"VB-2004 CSO ACC A
1"VG-2001
FI 81090
1"VB-2004 CSO
SET @ 25 PSIG PCV 81060-2
PI 82090
SET @ 50 PSIG PCV 81060-1
PI 82040
1"VG-2001
1"VB-2004 CSO
1"VB-2004 CSO
FROM FUEL GAS CH-8-P422
1"FG-0813-A-

NO.	DATE	BY	DESCRIPTION
8	12/27/94	BL	GEN. REVISIONS
7	8/02/94	MA	AS-BUILT ISSUE
6	6/21/94	MA	ISSUED FOR COMMENT
5	10/4/93	MA	REVISED AS NOTED
4	7/27/93	MA	REVISED AS NOTED
3	8/09/93	MA	REVISED AS NOTED
2	4/19/93	MA	ISSUED FOR CONSTRUCTION
1	3/10/93	MA	REVISED PER HAZOP REVIEW
0	2/2/93	DH	ISSUED FOR DESIGN
C	12/13/92	DH	ISSUED FOR APPROVAL FOR 600MM CASE
B	11/21/92	LS	RE-ISSUED FOR 600MM ESTIMATE

REVISIONS — W.O. — APP. — PRT. REF. — DATE — TO — W.O. — PRINT RECORD

CAD RECORD	DATE
DRAFTING DESIGN	P.D.J 10/27/1994
CAD DRAFTING	P.D.J 10/27/1994
CHECKED	
PROJECT APPROVAL	
SURVEY DATE	
R/W NUMBER	
COMPUTER SAVE NAME	CH8P433

ABB Randall Corporation
AN ABB LUMMUS CREST COMPANY
Houston, Texas
ABBR JOB # 80152

El Paso NATURAL GAS COMPANY

CHACO CRYOGENIC PLANT
LOW TEMP DRAIN SYSTEM
PROCESS AND INSTRUMENTATION DIAGRAM

SCALE: NONE | W.O.: | DWG. NO. CH-8-P433 | REV 8

LEGEND — DWG. NO. — TITLE — REFERENCE DRAWINGS

V-8144
CLOSED DRAIN
K.O. DRUM
24" DIA. X 8'-0" S/S
150 PSIG MAWP @ -20/150°F

FH-8101
FIRED HEATER
THERMAL INCINERATOR

EXISTING FACILITY
BATTERY LIMITS
NEW FACILITY

8" FLAME ARRESTER
12"XS
12"CD-1608-A
½"VB-2001
2"CD-0711-A
3"CD-1604-A
LG 8140D
LIC 8161D
LT 8161D
LAH
HLL
LAL
4"CD-1605-A
LY 8161D
LV 8161D
3"VB-1001
½"VB-2004
V-8144
TIE-IN
23
CLOSED DRAIN TO EXIST CLASSIFIER
EXISTING PVC
EXISTING CLASSIFIER

FROM OIL SEP. FILTER 2CH-8-P431 — 1"CD-0708-A
FROM REFRIG. RECLAIMER 2CH-8-P412-1 — 1"CD-0704-A
FROM REFRIG. RECLAIMER 2CH-8-P412-2 — 2"CD-0717-A
2"V-1001
FROM FLASH TANK 2CH-8-P425 — 2"CD-0712-A
FROM FLARE SEP. PUMP 2CH-8-P429 — 2"CD-0709-A
FROM POROUS MEDIA FILTER DRAINS 2CH-8-P408 — 2"CD-0701-A
FROM INLET FILTER SEPARATOR DRAINS 2CH-8-P400 — 1"CD-0700-A
FR. REGEN. GAS SCBR. DR. 2CH-8-P410 — 2"CD-0703-A
FROM DRAIN SUMP PUMP 2CH-8-P423 — 2"CD-0711-A
FROM C-8102 EXPANDER PKG 2CH-8-P431-1 — 1"CD-0710-A
FROM C-8111 EXPANDER PKG 2CH-8-P431-2 — 1"CD-0714-A

FH-8101
TI 82730
UA 82130
ESD
CONTROL PANEL

SET ● PSIG
PCV 82430
2CH-8-P423
FUEL GAS
2"FG-0833-A
2"x1½"
FI
PSL
FCV
PSH
TSL
TIC
FV
HCV
SV
1½"
1"
BS
BE
A/S
FLEX CONN.
FRESH AIR
AIR BLOWER
2 HP
PDSL
TE
TSH
BURNER
EXPANSION JOINT
SP (2)
STACK
22" I.D.x100'-0" TALL
PSL
AE 81590
AT 81590
AI 81590
PACKAGE LIMITS

2CH-8-P423
TO FLARE
12"HH-0556-AA
FROM AMINE STILL REFLUX ACCUMULATOR
12"V-0637-AA
UY 81830
UY 81830
BY OTHER BY ABBR
16"x12"
FC
UY 82370
UY 82370
SLOPE
RAIN CAP
12" ARCHIVE SCALE
14"V-0689-A
PROCESS BLOWER
75 HP
BY OTHER BY ABBR

NO	DATE	BY	DESCRIPTION
7	8/21/96	MA	ISSUED FOR COMMENT
6	9/26/96	MA	REVISED AS NOTED
5	10/4/95	MA	REVISED AS NOTED
4	12/1?/94	MA	REVISED AS NOTED
3	8/18/94	DH	REVISED AS NOTED
2	04/18/89	MA	ISSUED FOR CONSTRUCTION
1	03/10/89	MA	REVISED PER HAZOP REVIEW
0	02/02/89	DH	ISSUED FOR DESIGN
C	12/13/94	DH	ISSUED FOR APPROVAL FOR 800mm CASE
B	11/21/94	L.S.	RE-ISSUED FOR 800mm ESTIMATE
A	8/02/88	M.A.	AS-BUILT ISSUE

ENG. RECORD		DATE
DRAFTING DESIGN	R.D.J.	11/1/1994
CAD DRAFTING	R.D.J.	11/1/1994
CHECKED		
PROJECT APPROVAL		
SURVEY DWG		
R/W NUMBER		
COMPUTER SAVE NAME	2CHSP434	

ABB Randall Corporation
AN ABB LUMMUS CREST COMPANY
Houston, Texas
ABBR JOB # 80152

El Paso NATURAL GAS COMPANY

CHACO CRYOGENIC PLANT
VENT SYSTEM / VENT & CLOSED DRAIN SYSTEMS
PROCESS AND INSTRUMENTATION DIAGRAM

SCALE NONE | DWG. NO. 2CH-8-P434 | REV 8
W O

N

TRUE NORTH

PLANT NORTH

PLANT EVAPORATION POND

PLANT EVAPORATION POND

PLANT OXIDATION POND

PROPERTY LINE

PUBLIC HWY

EXISTING FENCE

NEW FENCE SECTION

3"-AD-HDPE-9118 (SOUR WATER)

BY CONTRACTOR BY PECO

MAN GATE

NEW FENCE

REMOVE EXIST FENCE

FI-8138 GROUND FLARE SYSTEM

CATTLE GUARD

9 185 (ELECTRICAL)

EXIST. P.P.

STILE

RESERVED AREA LIMITS

FLARE FRONT GENERATORS

FI-8138A FLARE TIP

30"-BA-9103 (FLARE LINE)

V-8134 ACID GAS SEPARATOR

FN-8138A/B FLARE STACK BLOWERS

MCC/CONTROL BLDG.

P-8134 "SOUR WATER PUMP

NEW P.P.

MAN GATE (TYP 2)

30"-BA-9102 OUTLET TO FLARE KNOCKOUT DRUM

NEW FENCE ENCLOSURE

V-8133 FLARE K. O. DRUM SUMP

12' WK ROAD (NEW)

V-8132 FLARE K. O. DRUM

EXISTING DIRT ROAD

EXIST. GATE

EXIST FENCE (TO BE RELOCATED)

EXISTING CLASSIFIER

EXISTING WASTE OIL TANK

RELOCATED FENCE

BM #2 N.16+60'-1" E.07+66'-47/16" EL.6011'-7/16

30"-45° ELL N.14+45'-0"

POND

3"-BA-9125 (FLARE LIQUIDS TO STABILIZER)

ROAD CROSSING

20' WD. ROAD (NEW)

3"-D(H)-103-BB (EXISTING) EXIST. LOOP (TO BE REMOVED)

BM #1 N.12+30'-7" E.04+06'-9" EL.6016-6 3/4"

20"-V(G)-514-BA N.12+24'-7"

12'x24' BLDG.

EXISTING PRODUCTS STORAGE

EXISTING HEATER AREA

2"AI-299-BA (EXIST.)

(SEE NOTE 4)

F.H.

EXISTING 6" PRODUCTS LINE FROM MESA PLANT

EXISTING 3" PRODUCTS LINE FROM SAN JUAN RIVER PLANT

EXISTING 12" WATER LINE

EXISTING 24" CO. ROAD

3"-BA-9114 (RICH OIL FROM HEATER DRAINS)

3"-BA-9125 (FLARE LIQUIDS LINE)

30"-BA-9101 (FLARE LINE) N.13+10'-8"

2"-AI-9153 (INSTR AIR) N.13+08'-6"

2"-BA-9131 (FUEL GAS) N.13+07'-10"

3"-BH-9115 (ACID GAS TO FLARE) N.13+07'-2"

EXISTING DIRT ROAD

N.23+00 N.22+00 N.21+00 N.20+00 N.19+00 N.18+00 N.17+00 N.16+00 N.15+00 N.14+00 N.13+00 N.12+00 N.11+00

E.3+00 E.4+00 E.5+00 E.6+00 E.7+00 E.8+00 E.9+00 E.10+00 E.11+00 E.12+00 E.13+00 E.14+00 E.15+00 E.16+00 E.17+00

LEGEND

NEW

EXISTING

NOTES:

1. FIELD TO VERIFY LOCATION OF EXIST. FIRE HYDRANTS, FIRE MONITORS, ALL UNDERGROUND AND ABOVE GROUND PIPING AND UTILITIES.
2. FIELD TO VERIFY LOCATION OF NEW PIPING TIE-INS.
3. FIELD TO LOCATE PIPE STILES.
4. PIPING TIE IN NO. 7 IS TO BE ROUTED AND CONNECTED BY PLANT PERSONNEL AT THE PLANT PIPE RACK.

FISH ENGINEERING & CONSTRUCTION, INC. HOUSTON, TEXAS

JOB NO. 2271.009

El Paso Natural Gas Company

CHACO GASOLINE PLANT

GROUND FLARE SYSTEM

PLOT PLAN

2/16/93

ENG. RECORD		DATE
DRAFTING DESIGN	DJM	6/22/92
COMPUTER GRAPHICS	MAP	7/18/92
CHECKED	MA/CG	9/10/92
PROJECT APPROVAL	CEM	11/13/92
DESIGN APPROVAL	DC	11/13/92
COMPUTER SAVE NAME		009\2CH1P70

SCALE: 1"=80'-0"

W.O.

DWG. NO 2CH-1-P70

REV. 0

REFERENCE DRAWINGS

DWG NO	TITLE
2CH-1-P71	PIPING DRAWING INDEX

REVISIONS

NO.	DATE	BY	DESCRIPTION	W.O.	APP.
0	11/13/93	GS	ISSUED FOR CONSTRUCTION		

PRINT RECORD

PRT	SEP	DATE	TO	W.O.

DJM 01/12/93 14:58

(TRUE) N
(PLANT) N

ELEC. SUB-STATION

CONTROL BUILDING

COOLING TOWERS

COOLING TOWERS

DRAIN ROUTED AROUND SHED

#8A CAT 3616

#11 CAT 3616

BASEMENT SUMP PUMP

COMPRESSOR

C PLANT

COMPRESSOR

A COMPRESSOR BUILDING

GAS COOLERS

H.R./W.O. HEATER

CRYO DRAIN

2CH-R-P434

FROM CLOSED DRAIN P.O. DRUM

ABSORPTION OIL

ABSORPTION OIL RECOVERY TANK

SHIPPING PUMP HOUSE

REFLUX COND. E-8108

SEE SUMP DRAWING & THIS PAGE FOR CONTINUATION

PUMP BLDG.

R/O RLDG.

WATER TANK

WATER TANK

WATER TREATING

SWITCH HOUSE #2

"A" COOLING TOWER JW & OCW PUMP BUILDING

SWITCHGEAR BUILDING #1

JW & OCW COOLERS

LUBE OIL STORAGE

TRANSMITTER BUILDING

PROCESS PUMP HOUSE

"A" JW & OCW PUMP BLDG.

"B" FIRED HEATERS

"A" FIRED HEATERS

TANK REMOVED DRAINS CAPPED BELOW GRADE

VAPOR TRAP

BOILER ROOM AREA

FIN FANS

CONDENSATE TANKS

BOILERS

BOILER BLDG.

OIL DRUM STORAGE

CHEM. STOR.

FIRE WATER BLDG.

STEAM COND.

GLYCOL CONTACTORS

REFLUX COOLER AREA

A GAS DEHYDRATORS

REFRIGERATION COMPRESSOR BUILDING

SWITCH HOUSE #3

HOSE CART HOUSE

B COMPRESSOR BLDG.

C-01

CONTROL RM

DIESEL AIR COMP. BLDG.

REFLUX COOLERS D06.1

FANS/FANS

BASEMENT SUMP PUMP

SCRUBBERS

PILOT LIQUID SEPARATORS

'A' D2-1

'B' D2-1

'B' D2-2

D1-2

D1-1

SVSTI SCRUBBER #1

SVSTI 6 CATERPILLAR 3606

DRAINS ON OLD SVSTI 9 PLUGGED AT BERM

DRIP TANK REMOVED

SUMP DRAWING

LUBE OIL DRAIN

STEAM RACK OIL FILTER DRAIN

TO LINED PONDS

OLD PITS REMOVED

WASTE OIL

30" FLARE LINE

N 13+00 N 12+00 N 11+00 N 10+00 N 9+00 N 8+00 N 7+00 N 6+00 N 5+00 N 4+00 N 3+00 N 2+00 N 1+00 0+00 S 1+00

E 4+00 E 3+00 E 2+00 E 1+00 E 0+00

NOTE:
DRAIN LINE LOCATIONS ARE APPROXIMATE. FIELD WILL DETERMINE LOCATIONS AND DEPTHS OF EXISTING LINES AND LOCATE NEW LINES TO SUIT EXISTING CONDITIONS.

○ PORT
⊟ FLANGE/SPOOL

ALL 90° CORNERS ARE ACTUALLY TWO 45° ELBOWS WITH A MINIMUM 12" PUP

REFERENCE DRAWINGS								
DWG. NO.	TITLE	NO	DATE	BY	DESCRIPTION	W.O.	APP.	PRT	SEP	DATE	TO	W.O.
CH-1-P118	MECHANICAL FLOW DIAGRAM CHACO DRAIN											
CH-1-P116	MECHANICAL FLOW DIAGRAM CHACO DRAIN											
CH-1-P117	MECHANICAL FLOW DIAGRAM CHACO DRAIN	2	11/28/95	BL	GENERAL REVISIONS FROM FLD. MARKED DWGS.							
CH-1-P116	MECHANICAL FLOW DIAGRAM CHACO DRAIN	1	9/11/95	BL	CHANGE REF. DWG. No.s							
CH-1-P115	MECHANICAL FLOW DIAGRAM CHACO DRAIN	0	2/27/95	BL	AS BUILT DRAWING							

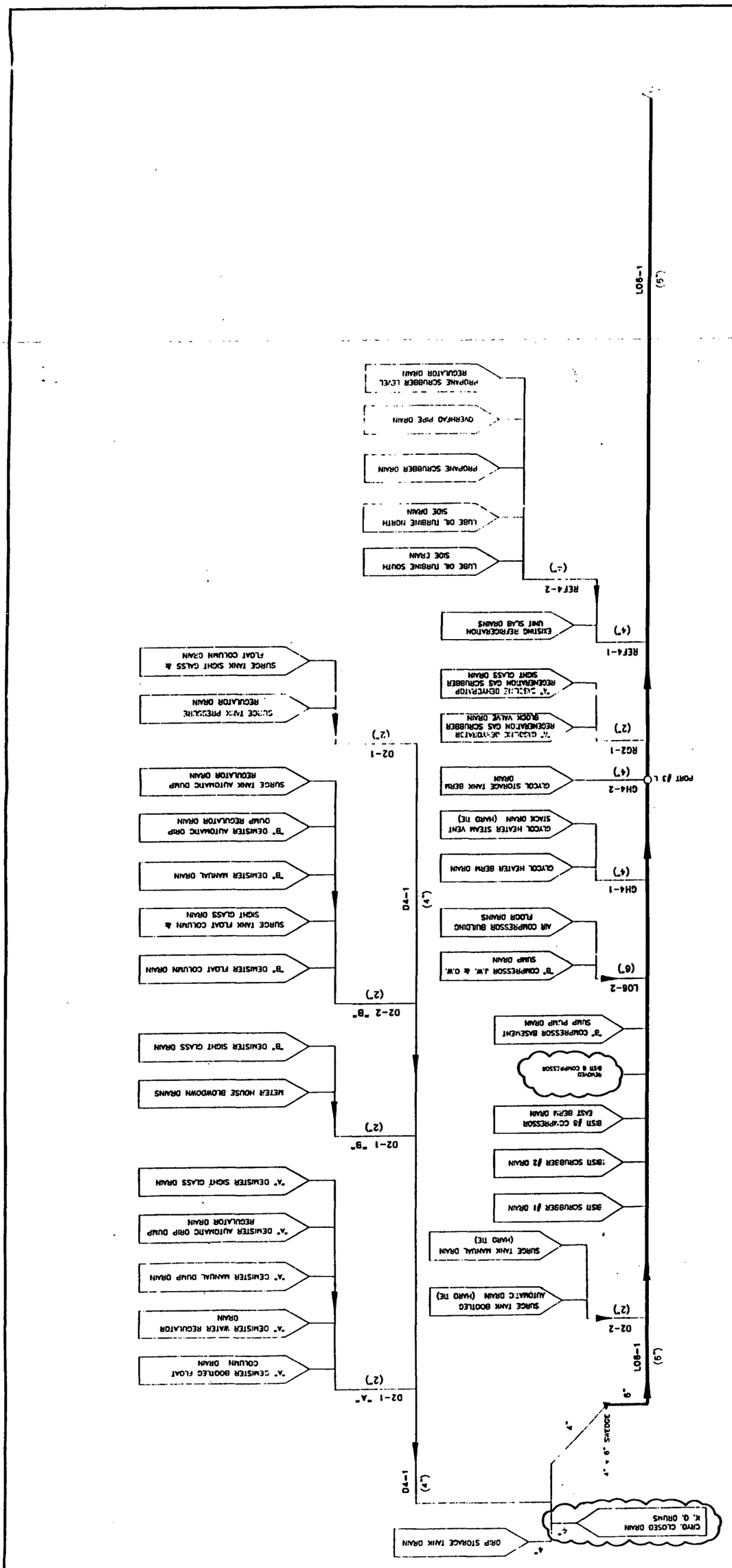
ENG. RECORD		DATE
DRAFTING		
DESIGN	RC	2/10/95
COMPUTER AIDED DRAFTING	BL	02/27/95
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER MAP READY	CH1P96	

El Paso NATURAL GAS COMPANY

CHACO PLANT
DRAINAGE SYSTEM
LUBE OIL DRAIN & PROCESS AREA DRAIN

SCALE: 1"=50' DWG. CH-1-P96

PUB (Rev. 3/19/91) LFDFMD



El Paso NATURAL GAS COMPANY

MECHANICAL FLOW DIAGRAM

CH-1-P115

REVISIONS				
NO.	DATE	DESCRIPTION	APP.	ENGR.
2	11/7/95	GEN. REVISIONS PER FLD. MARKED DWGS.		
1	10/31/95	GEN. REVISIONS PER FLD. MARKED DWGS. (OLD No. CH-1-M47-1)		
0	12/1/95	AS BUILT DRAWING		

El Paso NATURAL GAS Company

MECHANICAL FLOW DIAGRAM
CHACO PLANT DRAINAGE SYSTEM
LUBE OIL DRAIN & PROCESS AREA (NW)
SHEET 2 OF 5

SCALE: NONE | DWG. NO. CH-1-P116 | REV. 2

ENGL RECOR | DATE
DRAFTING | 2/10/83
DESIGN | 02/16/83
CHECKED
PROJECT
DESIGN APPROVAL
COMPUTER SAVE NAME: CH1P116
W.O.

PRINT RECORD | DATE | TO | W.O. | APP. | PROJ. ENG.

NO.	DATE	BY	REVISIONS
2	1/7/83	BL	CORRECT REFERENCE DWG. NUMBER
1	5/11/83	BL	Const. instl. No. (OLD No. CH-1-P83-3) - 3T
0	7/15/83	BL	AS BUILT DRAWING

LEGEND

PA6-1 (6")

LO6-1 (6")

"A" AB4-1 (4")

ESD #69 DRAIN

"A" ABSORBER RICH OIL REGULATOR DRAIN

"A" ABSORBER MANUAL DRAIN

"A" ABSORBER RESIDUE GAS SCRUBBER DRAIN

"A" ABSORBER LEAN OIL TO ABSORBER REGULATOR DRAIN

"B" ABSORBER RICH OIL OUT REGULATOR DRAIN

"B" ABSORBER MANUAL DRAIN

"B" ABSORBER RESIDUE GAS SCRUBBER DRAIN

"B" ABSORBER LEAN OIL TO ABSORBER REGULATOR DRAIN

#1 DRY BTX GAS DEHYDRATOR DRAIN

#2 DRY BTX GAS DEHYDRATOR DRAIN

GC2-1 (2")

"A" GAS CHILLER DRAIN

"B" GAS CHILLER DRAIN

GC2-1 (2")

#1 GLYCOL CONTRACTOR DRAIN

#2 GLYCOL CONTRACTOR DRAIN

#3 GLYCOL CONTRACTOR DRAIN

GC4-1 (4")

"C" ABSORBER RICH OIL REGULATOR DRAIN

"C" ABSORBER MANUAL DRAIN

"C" ABSORBER LEAN OIL TO ABSORBER REGULATOR DRAIN

"C" ABSORBER RESIDUE GAS SCRUBBER DRAIN

"C" ABSORBER RICH OIL OUT REGULATOR DRAIN

"C" ABSORBER MANUAL DRAIN

"C" ABSORBER RESIDUE GAS SCRUBBER LIQUID REGULATOR DRAIN

"C" ABSORBER RESIDUE GAS SCRUBBER MANUAL DRAIN

"A" & "B" ABSORBER INLET BOOTLEG SCRUBBER DRAIN

"A" & "B" ABSORBER INLET BOOTLEG SCRUBBER SIGHT GLASS DRAIN

"A" ABSORBER RICH OIL OUT REGULATOR DRAIN

"A" REGENERATION GAS COMPRESSOR SUCTION LINE DRAIN (2")

PA2-2

"A" ABSORBER MANUAL DRAIN

"A" ABSORBER RESIDUE GAS SCRUBBER LIQUID REGULATOR DRAIN

"A" ABSORBER RESIDUE GAS SCRUBBER MANUAL DUMP

"B" ABSORBER RICH OIL OUT REGULATOR DRAIN

"B" ABSORBER MANUAL DRAIN

"B" ABSORBER RESIDUE GAS SCRUBBER LIQUID REGULATOR DRAIN

"B" ABSORBER RESIDUE GAS SCRUBBER MANUAL DRAIN

ESD VALVE #64 DRAIN

"B" AB4-1 (4")

PA6-1 (6")

PORT #1 L

PORT #2 L

AC4-1 (4")

AC4-2 (4")

"A" COMPRESSOR J.W. & O.W. PUMP BUILDING SOUTH FLOOR DRAINS

"A" COMPRESSOR J.W. & O.W. PUMP BUILDING NORTH FLOOR DRAINS

AIR DRYER DRAINS

STARTING AIR TANK DRAINS (HARD TE)

INSTRUMENT AIR TANK DRAIN (HARD TE)

EAST "A" COMPRESSOR BASEMENT SUMP PUMP DRAIN

AC4-1 (4")

T4-1 (4")

AC4-1 (4")

#1 TURBINE VENT STACK DRAIN T2-1 (2")

#1 TURBINE ACCESSORY GAB DRAINS T2-2 (2")

#1 TURBINE ACCESSORY GAB DRAINS

#1 TURBINE ACCESSORY GAB DRAINS

#1 TURB.NE VENT STACK DRAIN

#2 TURBINE ACCESSORY GAB DRAINS T2-3 (2")

#2 TURB.NE VENT STACK DRAIN

#2 TURBINE VENT STACK DRAIN T2-4 (2")

WASTE HEAT BOILER CONTROL ROOM WATER FOUNTAIN DRAIN T2-5 (2")

CHEMICAL ROOM FLOOR DRAIN

"A" COMPRESSOR BASEMENT SUMP PUMP DRAIN (USE AS CHECK VALVE) (2")

AC2-1 (2")

RECEIVED
MAR 1 2 1997
Environmental Bureau
Oil Conservation Division

DWG. NO.	TITLE
CH-1-P96	CHACO PLANT DRAINAGE SYSTEM

REFERENCE DRAWINGS

NO.	DATE	BY	DESCRIPTION	W.O.	APP.
1	9/11/96	BL	CHNG. DWG. No. (OLD No. CH-1-P97 - 3)		
0	2/16/95	BL	AS BUILT DRAWING		

REVISIONS

PRT.	SEP.	DATE	TO	W.O.

PRINT RECORD

ENG. RECORD		DATE
DRAFTING DESIGN	RC	2/10/95
COMPUTER AIDED DRAFTING	BL	02/16/95
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	CH1P117	

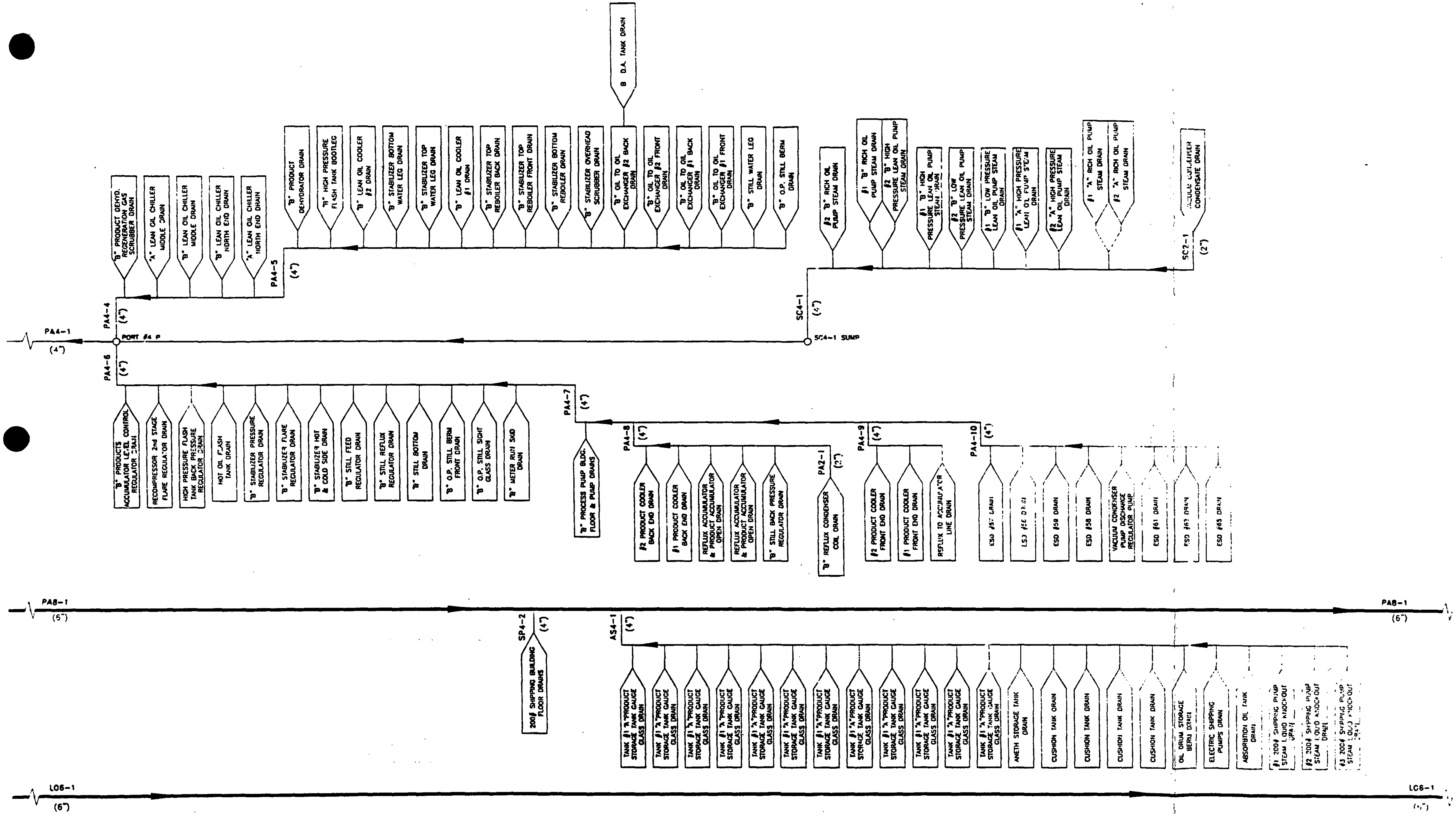
FM9 (Rev. 3/12/91)

LEGEND

El Paso
NATURAL GAS COMPANY

MECHANICAL FLOW DIAGRAM
CHACO PLANT DRAINAGE SYSTEM
LUBE OIL DRAIN & PROCESS AREA DRAIN
SHEET 3 OF 5

SCALE: NONE
W.O.:
DWG. NO. CH-1-P117
REV. 1



CH-1-P96	CHACO PLANT DRAINAGE SYSTEM	1	9/11/96	EL	CHNG. DWG. No. (OLD No. CH-1-P97 - 4)
		0	2/16/95	EL	AS BUILT DRAWING
DWG. NO.	TITLE	NO.	DATE	BY	DESCRIPTION

LEGEND · REFERENCE DRAWINGS · REVISIONS · W.O. · APP. · PRT. SEP · DATE · TO · W.O. · PRINT RECORD

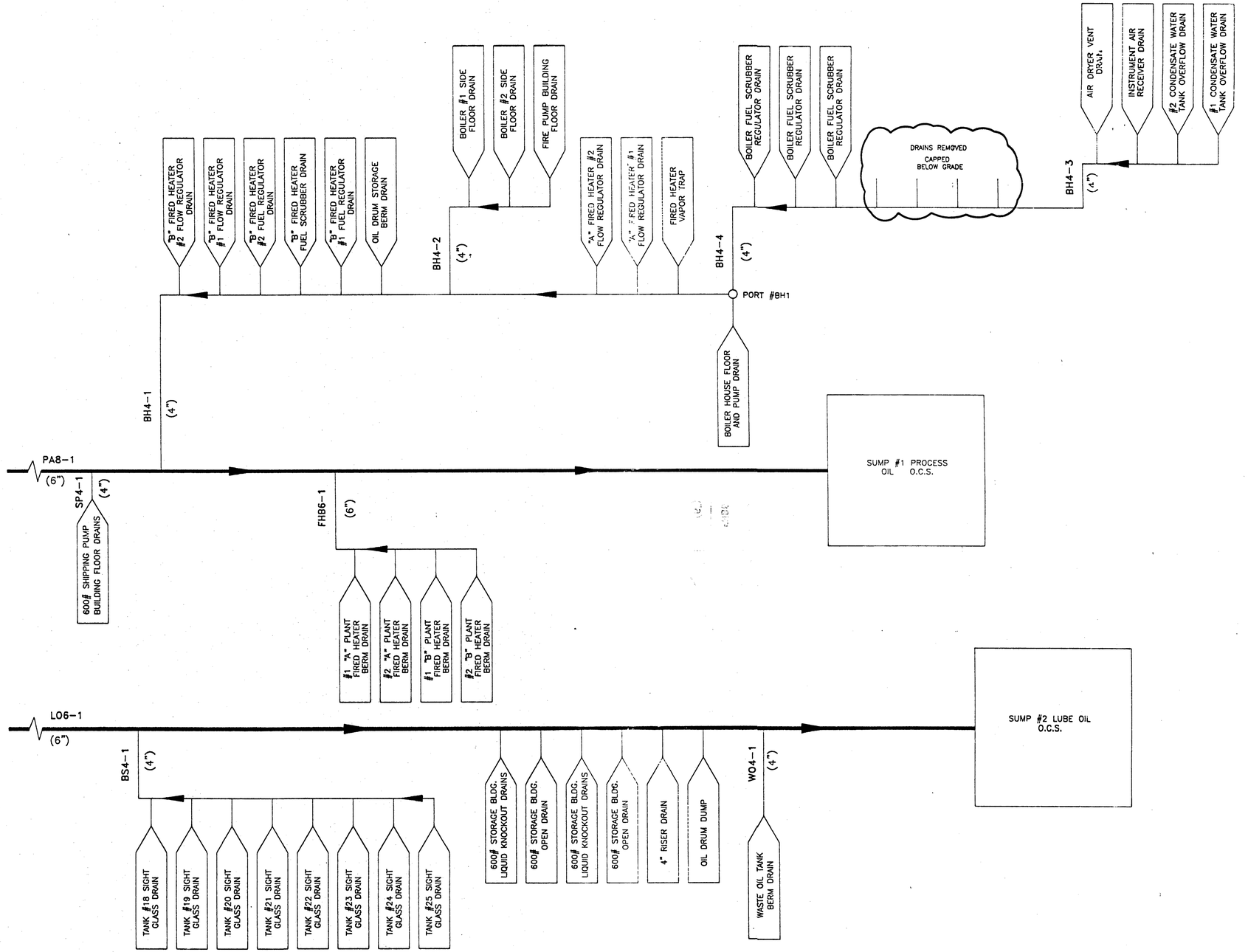
ENG. RECORD		DATE
DRAFTING DESIGN	PC	2/10/95
COMPUTER AIDED DRAFTING	RL	02/16/95
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	CH1P118	

El Paso NATURAL GAS COMPANY

MECHANICAL FLOW DIAGRAM
CHACO PLANT DRAINAGE SYSTEM
LUBE OIL DRAIN & PROCESS AREA DRAIN
SHEET 4 OF 5

SCALE: NONE · W.O.: · DWG. NO. CH-1-P118 · REV. 1

FMD (Rev. 3/12/91)



FMB (Rev. 3/12/91)

LEGEND

REFERENCE DRAWINGS

DWG. NO.	TITLE
CH-1-P96	CHACO PLANT DRAINAGE SYSTEM

REVISIONS

NO	DATE	BY	DESCRIPTION	W.O.	APP.
2	11/26/96	BL	GENERAL REVISIONS PER FLD. MARKED DWGS.		
1	9/11/96	BL	CHNG. DWG. No. (OLD No. CH-1-P97 - 5)		
0	2/16/95	BL	AS BUILT DRAWING		

PRINT RECORD

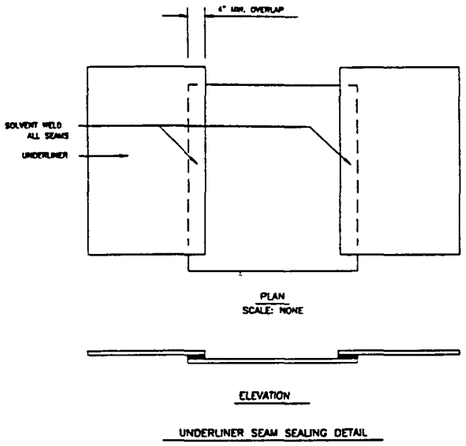
PRT. SEP. DATE	TO	W.O.

ENG. RECORD		DATE
DRAFTING DESIGN	RC	2/10/95
COMPUTER AIDED DRAFTING	BL	02/16/95
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	CH1P119	

El Paso NATURAL GAS COMPANY

MECHANICAL FLOW DIAGRAM
CHACO PLANT DRAINAGE SYSTEM
LUBE OIL DRAIN & PROCESS AREA DRAIN
SHEET 5 OF 5

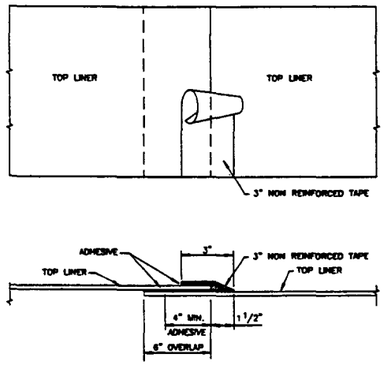
SCALE: NONE	DWG. NO. CH-1-P119	REV. 2
W.O.:		



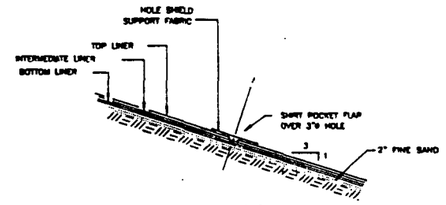
PLAN
SCALE: NONE

ELEVATION

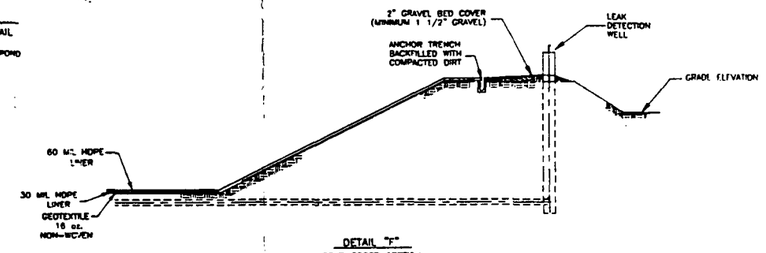
UNDERLINER SEAM SEALING DETAIL



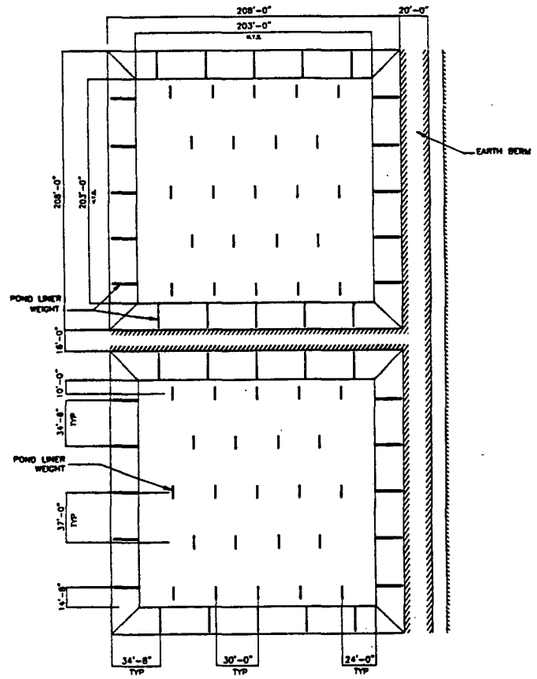
TOP LINER
SEAM SEALING DETAIL
SCALE: NONE



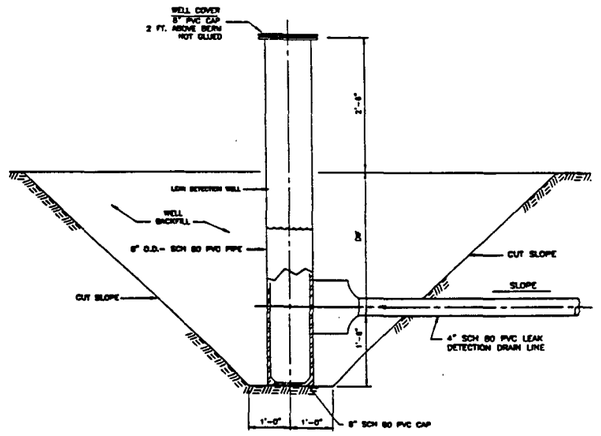
DETAIL "G"
LINER VENT DETAIL
2CH-1-P108
TYPICAL 12 PLACES / POND
SCALE: NONE



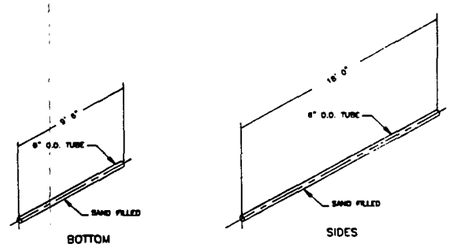
DETAIL "F"
POND CROSS-SECTION
SCALE: NONE



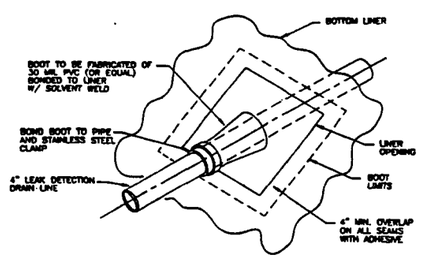
DETAIL 'A'
POND LAYOUT
SCALE: 1"=50'



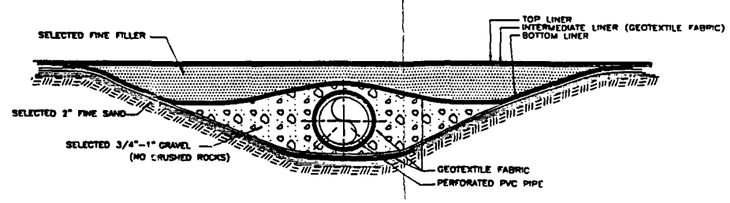
DETAIL "C"
LEAK DETECTION WELL
SCALE: NONE



DETAIL "E"
POND LINER WEIGHT
SCALE: NONE



DETAIL "B"
LINER BOOT
SCALE: NONE



CROSS-SECTION "D"
2CH-1-P109
SCALE: NONE

Plot (Rev. 3/13/91)

LEGEND

DWG. NO.	TITLE
2CH-1-P109	CHACO PLANT - EVAP. PONDS - AS BUILTS

REFERENCE DRAWINGS

NO	DATE	BY	DESCRIPTION	W.O.	APP	PRT	SEP	DATE	TO	W.O.

REVISIONS — PRINT RECORD

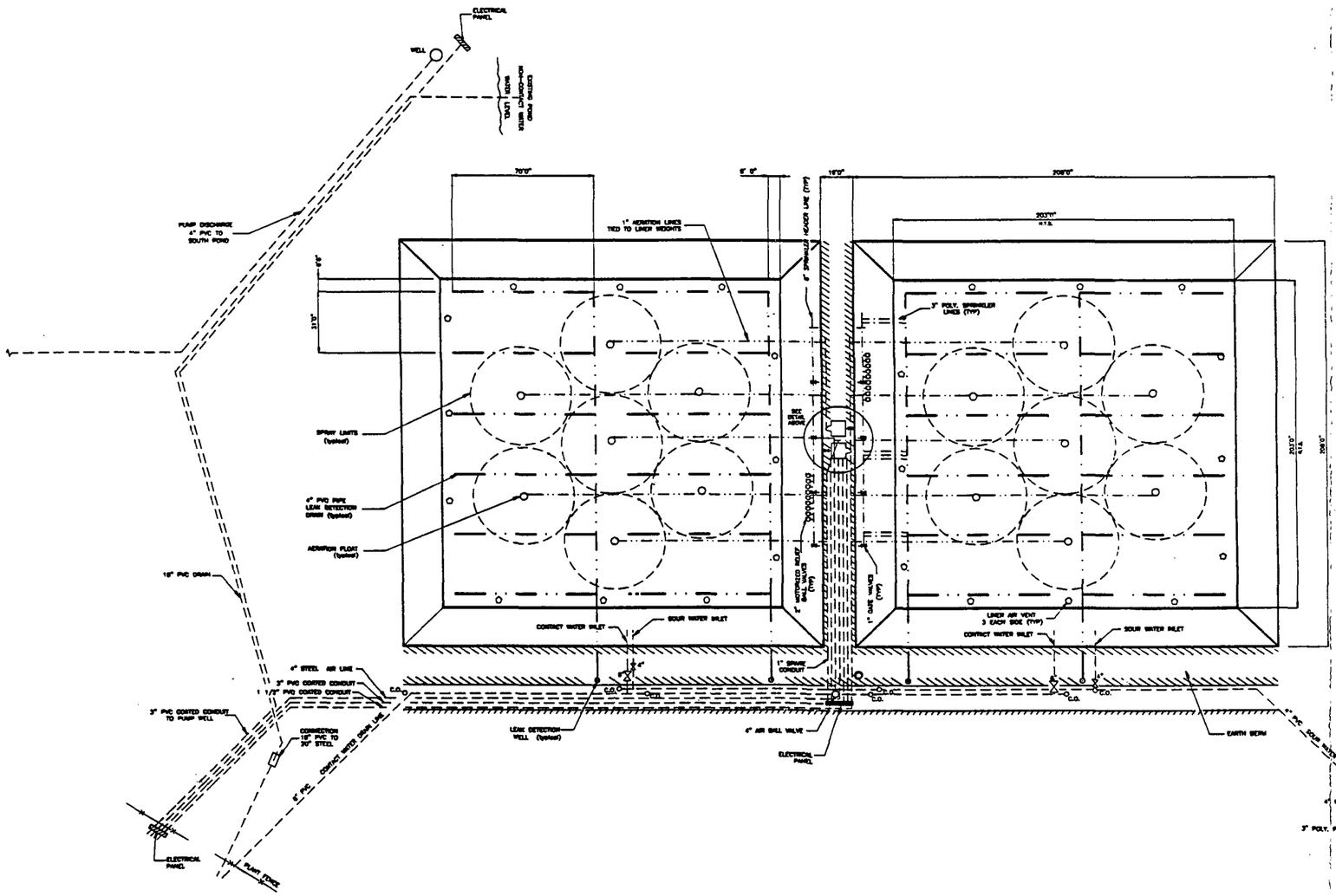
ENG. RECORD		DATE
DRAFTING DESIGN		
COMPUTER AIDED DRAFTING	BL	03/22/95
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL	Rec	8/1/95
COMPUTER SAVE NAME	2CH1P108	

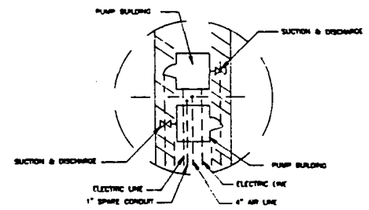
El Paso NATURAL GAS COMPANY

CHACO PLANT
EVAPORATION PONDS
AS-BUILT DETAILS

SCALE: SHOWN
W.O.: L5835
DWG. NO. 2CH-1-P108
REV.

N





DETAIL
SCALE: 1"=10'

LEGEND

NO	DATE	BY	DESCRIPTION	W.O.	APP.	PRT/SEP	DATE	TO	W.O.
			REVISIONS					PRINT RECORD	

REFERENCE DRAWINGS

DWG. NO.	TITLE
2CH-1-P108	CHACO PLANT - EVAP. PONDS AS-BUILT DETAILS

ENG. RECORD		DATE
DRAFTING DESIGN		
COMPUTER AIDED DRAFTING	BL	03/17/95
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL	Rec	5/3/95
COMPUTER SAVE NAME	2CH1P109	

El Paso NATURAL GAS COMPANY

CHACO PLANT
EVAPORATION PONDS
AS-BUILT

SCALE: 1"=30' | DWG. NO. 2CH-1-P109 | REV
W.O.: 15835

PMB (Rev. 3/12/91)

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

March 11, 1997

CERTIFIED MAIL
RETURN RECEIPT NO. P - 288-258-780

PS Form **3800**, April 1995

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

Sent to	Mr. Bays
Street & Number	EPFS - GW-71
Post Office, State, & ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

P 288 258 780

Mr. David Bays
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Molecular Sieve
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Bays:

The New Mexico Oil Conservation Division (OCD) received on March 6, 1997 a letter from EPFS requesting that the RCRA Subtitle C Exempt Molecular Sieve be spread on the facility as road base. **The OCD approves of the spreading of this molecular sieve for the beneficial use as road base at the EPFS Chaco plant within the facility area with the following conditions:**

1. The molecular sieve will be liquid free prior to spreading.

2. EPFS will submit a follow-up letter to the OCD by April 11, 1997 that will include the volume of molecular sieve placed and an MSD Sheet.

Note, that OCD approval does not relieve EPFS of liability should EPFS operation's result in contamination of surface water, ground water, or the environment. OCD approval does not relieve EPFS from compliance with other federal, state, and local regulations/rules that may apply.

Sincerely,

Patricio W. Sanchez,
Petroleum Engineering Specialist
Environmental Bureau

c: Mr. Denny Foust - Aztec District Office, OCD.

EL PASO FIELD SERVICES

Mr. Pat Sanchez
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

Dear Mr. Sanchez:

El Paso Field Services is preparing to locate a molecular sieve type gas dehydrator from the Chaco Plant to the Coyote Gulch Plant in southern Colorado. Prior to relocating the dehydrator EPFS will need to remove the molecular sieve beads and replace them with new beads once the unit is re-installed.

EPFS requests authorization to dispose of the used molecular sieve beads on site at the Chaco Plant by spreading them on a graveled road within the plant property. These beads are a dry calciferous material impregnated with activated alumina, and are virtually inert when removed from service.

If you have any questions, or need additional information, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays
Sr. Environmental Scientist

cc: Denny Foust - NMOCD - Aztec, NM
Mike Hansen
Gerry Hoover
S. D. Miller/R. D. Cosby/Chaco Regulatory file

EL PASO FIELD SERVICES

Mr. Patricio W. Sanchez
Petroleum Engineering Specialist
New Mexico Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, NM 87504

January 31, 1997

Re: Annual Report for Chaco Plant Non-Contact Water Use by Outside Agencies

Several outside agencies continue to request the use of non-contact water from the Chaco Plant for natural gas/oil exploration & production and road maintenance activities. As a condition for this use EPFS is required to submit an annual report documenting these requests, the intended use for the water, and volumes used.

The last water use report submitted to NMOCD was transmitted by the attached letter dated June 3, 1996, which reported outside water usage through April 1996. Also, attached are signed agreements and log sheets that document the outside water uses for the remainder of 1996. This transmittal in conjunction with the June 3, 1996 transmittal completes the Annual Chaco Plant Outside Water Use Report for 1996.

If you have any questions, please give me a call.

John S. Sterrett

JSS/jss

c:

w/ attachments
Denny Foust - NMOCD, Aztec Office
S. Miller/D. Bays/R. Cosby/File: Chaco Plant Regulatory

w/o attachments
David Keck - San Juan County
G. Hoover/M. Hansen - Chaco Plant

EPFS

EL PASO FIELD SERVICES

FEB - 4 1

Mr. Chris Eustice
New Mexico Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, NM 87504

June 3, 1996

Re: Annual Report for Chaco Plant Non-Contact Water Use by Outside Agencies and Request for Modification to Approval Procedures

Mr. Eustice,

As you know, several outside agencies have and continue to request the use of Chaco Plant's non-contact water for natural gas/oil exploration & production and road maintenance activities. As a condition for this use EPFS is required to submit an annual report documenting these requests, the intended use and volumes. Attached you will find signed agreements and the log sheets documenting this use.

Due to the frequency of these request, EPFS request that the following procedure be implemented to accommodate the outside agencies, EPFS and The NMOCD:

1. Outside agencies will continue to sign EPFS' "Agreement for Non-contact Water Use" prior to the removal of water from Chaco Plant at the time of their initial request. This agreement essentially re-emphasizes NMOCD's specifications for the water's use. EPFS will keep these agreements on file and submit them to the NMOCD with the Annual Report of Non-Contact Water Use.
2. Use for dust suppression/road maintenance by San Juan County be approved on an annual basis to avoid the "case by case notification" required by NMOCD per the approval letter dated February 15, 1995 (attached). San Juan County shall be responsible for obtaining this approval and submitting the approval to EPFS/Chaco Plant.
3. All other conditions specified in the February 15th letter shall be observed.

This procedure should shorten the time consuming administrative duties imposed on EPFS and the NMOCD without jeopardizing the compliant use of the non-contact water. Please consider this course and contact me at 505-599-2175 if you have questions about this information or the suggested procedure.

Thank you,

P. S. Marquez

Patrick J. Marquez
Compliance Engineer

xc:
w/attach
Denny Foust - NMOCD
S.Miller/D.Bays/R.Cosby/File: Chaco Plant Regulatory
Bm D.B. KC
w/o attach
David Keck - San Juan County
P.Quintana/G.Hoover/M.Hansen

File: Chaco Plant Regulatory

NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178 Fax (505)334-6170

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALISBURY
CABINET SECRETARY

May 24, 1996

RBU
RBU/SDM/RJC/DB

Mr David Keck
San Juan County Public Works Director
305 South Oliver Drive
Aztec NM 87410-2436

RE: Use of Non-contact Wastewater for Use in County Road Construction and Maintenance

Dear Mr. Keck:

You have requested the use of non-contact wastewater generated and discharged at the El Paso Field Services (Chaco Plant), for San Juan County road construction and maintenance.

You may use this water as proposed with the following conditions:

1. The water will be applied so that no excess water runs off into roadside ditches or into any watercourse.

2. At the end of each day's activity, unused water will be stored in trucks or tanks so the water does not drip or drain onto the ground overnight. Alternatively, the water may be returned to the Chaco Plant, if no other material has been added to the water intentionally or accidentally mixed with liquids that were previously contained in any truck or tank.

This approval is for one year, starting on this letter date; any further requests beyond that time must be approved by this office. This approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters, or the environment that may be actionable under other laws and/or regulations. In addition, OCD approval does not relieve San Juan County of responsibility for compliance with any other county, state, federal, or other local laws and/or regulations.

Sincerely,

Ernie Busch

Ernie Busch
District Geologist/Deputy Oil & Gas Inspector

EB/sh

cc: Roger Anderson
~~Pete~~ Quintana-Superintendent, El Paso Field Services (Chaco Plant)
Paul

File: Chaco Plant. Regulatory.

EPFS
EL PASO FIELD SERVICES

June 5, 1996

Mr. David Keck
San Juan County
112 South Mesa Verde
Aztec, New Mexico 87410-2126

Re: Use of Noncontact Wastewater for Use in Dust Suppression

Dear Mr. Keck:

You asked to use the noncontact wastewater generated and discharged at the El Paso field Services Company ("El Paso") Chaco Plant pursuant to an approved New Mexico Oil Conservation Division discharge plan. El Paso will allow San Juan County ("San Juan") to use the noncontact wastewater provided you agree in advance to the following:

1. Prior to obtaining the wastewater from the Chaco Plant ponds, San Juan truck drivers will notify the Chaco Plant Superintendent;
2. Use of the wastewater is limited to the use as a dust suppressant on unpaved roads of San Juan County, and shall not be used in such a way that allows the water to be discharged into any water of the U.S. as defined in the U.S. Clean Water Act (33 U.S.C. §§ 1251 to 1387) and the New Mexico Water Quality Act (N.M. Stat. Ann. §§ 74-6-1 to 74-6B-14);
3. The wastewater shall never be discharged within one hundred feet (100') of the nearest natural boundary of any wash or; and,
4. San Juan releases El Paso from any liability, claims, or causes of action which may arise from the procurement, use, and discharge of the wastewater by San Juan, its agents, or its contractors

If San Juan agrees to abide by the above terms and conditions, please indicate its approval by signing in the space below and return this letter to me.

Very truly yours,

P. S Marquez

Patrick J. Marquez
Compliance Engineer

AGREED TO AND ACCEPTED
this 14 day ~~May~~ June 1996

by Patricia Wood
its Acting County Manager

APPROVED AS TO FORM
SAN JUAN COUNTY ATTORNEY

BY: [signature]
6-13-96

Chaco Plant - Bayotech.

San Juan County

112 South Mesa Verde
Aztec, New Mexico 87410-2126
(505) 334-9481
Fax: (505) 334-3168

June 17, 1996

Patrick J. Marquez
Compliance Engineer
El Paso Field Services
Chaco Plant
P.O. Box 4990
Farmington, NM 87499

Re: Letter of Agreement/Use of Noncontact Wastewater for Use in Dust Suppression

Dear Mr. Marquez:

Enclosed please find one original Letter of Agreement regarding the above-referenced matter.

Thank you for your assistance.

Sincerely,

Kathy Keck

Kathy Keck
Legal Department

Enclosure as noted

cc: Dave Keck, Public Works

Chaco Plant Non-Contact Waste Water Acceptance Log

Date	Company	Amount (Barrels)	Intended Use	Final Disposition of Water	Signature
7-24-96	SAN JUAN COUNTY	4500 GAL	FOR WATERING ROAD'S	PUT ON C. ROAD 7100	Kelly Hoskins
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "

Chaco Plant Non-Contact Waste Water Acceptance Log

Date	Company	Amount (Barrels)	Intended Use	Final Disposition of Water	Signature
7-23-96	SAN JUAN COUNTY	4500 GAL	FOR WATERING ROADS	PUT ON C.R 7030	Sally Hoskins
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "

Chaco Plant Non-Contact Waste Water Acceptance Log

Date	Company	Amount (Barrels)	Intended Use	Final Disposition of Water	Signature
7-22-96	SAN JUAN COUNTY	4500 GAL	FOR WATERING ROADS	Portal C.R. 7301	Kelly Haddon
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "
"	" "	"	" "	" "	" "

Chaco Plant Non-Contact Waste Water Acceptance Log

Date	Company	Amount (Barrels)	Intended Use	Final Disposition of Water	Signature
7-22-96	SAN JUAN County	5000	water road	CR. 7030	Gene Martinez
7-22-96	SAN JUAN County	5000	water road	CR. 7030	Gene Martinez
7-22-96	SAN JUAN County	5000	water road	CR. 7030	Gene Martinez
7-22-96	SAN JUAN County	5000	water road	CR 7030	Gene Martinez
7-22-96	SAN JUAN County	5000	water road	CR 7030	Gene Martinez
7-22-96	SAN JUAN County	5000	water road	CR 7030	Gene Martinez

Chaco Plant Non-Contact Waste Water Acceptance Log

Date	Company	Amount (Barrels)	Intended Use	Final Disposition of Water	Signature
7-20-96	SAN JUAN COUNTY	4500 GAL	FOR WATERING ROADS	P47 ON ROAD 7030	Sally Hackleton
"	" "	"	" "	"	" "
"	" "	"	" "	"	" "
"	" "	"	" "	"	" "
"	" "	"	" "	"	" "
"	" "	"	" "	"	" "

Chaco Plant Non-Contact Waste Water Acceptance Log

Date	Company	Amount (Barrels)	Intended Use	Final Disposition of Water	Signature
7-19-96	San Juan County	5000 Gal	Water Road	7030	Mike Sterling
7-19-96	"	5000 Gal	"	"	Mike Sterling
"	"	"	"	"	Mike Sterling
"	"	"	"	"	Mike Sterling
"	"	"	"	"	Mike Sterling
"	"	"	"	"	Mike Sterling
"	"	"	"	"	Mike Sterling
"	"	"	"	"	Mike Sterling

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

November 19, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-692

Mr. David Bays
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Discharge Plan GW-071 Renewal
Chaco Gas Plant
San Juan County, New Mexico

Dear Mr. Bays:

On May 18, 1992, the groundwater discharge plan, GW-091, for the **Chaco Gas Plant** located in Section 16, Township 26 North, Range 12 West, NMPM, San Juan County, New Mexico, was approved by the Director of the New Mexico Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years. **The approval will expire on May 18, 1997.**

If the facility continues to have potential or actual effluent or leachate discharges and wishes to continue operation, the discharge plan must be renewed. **Pursuant to Section 3106.F., if an application for renewal is submitted at least 120 days before the discharge plan expires (on or before January 18, 1997), then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved.** The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several weeks to months. Please indicate whether El Paso Field Services has made, or intends to make, any changes in the system, and if so, please include these modifications in the application for renewal.

The discharge plan renewal application for the **Chaco Gas Plant** is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of $50 plus a flat fee of $16675.50 for Gas Plants. The $50 filing fee is to be submitted with the 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.

Should be $ 1,667.50 mg

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

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

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/pws

xc: Mr. Denny Foust

P 288 258 692

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

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

PS Form 3800, April 1995

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

CERT. MAIL NO. P-288-258-688

☒ Telephone (2) ☒ Personal (1)	Time 8:00 AM (1) 8:15 AM (2)	Date 11-18-96
Originating Party		Other Parties
Pat Sanchez - OCD		Roger Anderson / Mark Ashley - OCD

Subject Letter Dated Nov. 13, 1996 from EPFS, Mr. David Bays - regarding impoundments at N. & S. Chaco Plant, Kutz Separator pond, and the Ballard Separator Pond.

Discussion

(A) Method using dye for monitoring is acceptable. (1)

(B) Notify Mr. Bays per phone. (2)

Conclusions or Agreements

(1) Okay to use dye to monitor,
(2) Notified Mr. Bays w/ EPFS - OCD will mail him the Memo - certified as approval.

Distribution Chaco, Kutz, Ballard Files, Denny Foust.

Signed Patricia W. Sanchez
Mark Ashley

P 288 258 688

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail *(See reverse)*

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

PS Form **3800**, April 1995

EL PASO
FIELD SERVICES

November 13, 1996

RECEIVED

NOV 1 8 1996

Environmental Bureau
Oil Conservation Division

Mr. Roger Anderson
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

Dear Mr. Anderson:

During the winter of 1995, El Paso Field Services Co. (EPFS) found water in the leak detection systems in four of the lined surface impoundments in the San Juan Basin area. These four impoundments are the north and south Chaco Plant contact water ponds, the Kutz Separator pond, and the Ballard Separator Pond.

Electronic testing of all four ponds was done in November 1995. Several leaks in the upper liners of all four ponds were pinpointed during the testing.

EPFS has now completed repairs to the liners of all four ponds. All identified leaks were cleaned and patched with new liner material. All patches were installed using a heat welding method rather than the less dependable solvent welding (gluing). After installation of the repair patches, all leak points were tested using a vacuum test box. Two of the leaks in the north Chaco pond and one leak point in the Kutz Separator pond failed the vacuum test. The liner material at all three of these leak points was recleaned, buffed using a wire brush on a disk grinder, and new patches applied. The replacement patches were again tested, and all three passed the vacuum test.

In order to conduct the original electronic testing, it was necessary to introduce large volumes of water into the space between the liners on all four ponds. The recovery of the test water has been very slow due to the lack of slope on the pond bottoms. At this point it is not possible to determine if water seeping into the leak detection wells is from new leaks, or water left from the testing last fall.

Therefore EPFS is proposing to introduce a green colored fluorescent tracer dye into all four ponds. The final concentration of dye in the water will be maintained at approximately 40 parts per million. This dye is detectable using an ultraviolet light source at levels as low as 2 parts per million. During the monthly inspections of the leak detection systems, liquids in the leak detection wells (if any) will be checked for the presence of the dye. If no tracer dye has been recovered in the leak detection systems within the next 12 months, then the ponds will be presumed to have no more leaks.

El Paso Field Services Company P.O. Box 4990 Farmington, New Mexico 87499 Phone (505) 325-2841 Fax (505) 599-2119

NMOCD authorized this same tracer dye method for leak repair verification for the El Paso Natural Gas Co. Lincoln Station during 1994. After a few weeks in service, the dye used at Lincoln did indicate an additional leak, which was then repaired. Please let me know if you believe this method will be adequate to determine the effectiveness of our liner repairs. If you need any additional information, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays
Sr. Environmental Scientist

cc: Mr. Denny Foust
S. D. Miller/J. S. Sterrett/R. D. Cosby/Chaco Plant Regulatory file

EL PASO FIELD SERVICES

P.O. Box 4990
Farmington, NM 87499

Patricio Sanchez
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RE: Chaco Plant Sump Repair

Pat,

During our recent Chaco Plant shutdown an annual sump inspection found that the Process Oil Skimmer Tank had developed a leak. A weld where the 8" receiving inlet is joined to the inner wall was defective. No signs of leakage was observed from the outer wall to the environment. Since that time the sump was taken out of service.

The primary source of the tank was the open drainage system from the amine processing plants. The amine plants were taken out of service during the shutdown due to the installation of the cryogenic plant completion and trial run.

The weld was repaired October 23,1996 and will be available for service as needed. A visual inspection of the remaining welds took place at the time of the repair noting no other discrepancies.

Ricky D. Cosby
Compliance Specialist

cc: Denny Foust

file: Chaco Plant Regulatory

EPFS
EL PASO FIELD SERVICES

P.O. Box 4990
Farmington, NM 87499

Pat Sanchez
New Mexico Oil Conservation Division
2040 South Pacheco
P.O. Box 6429
Santa Fe, New Mexico

Date: October 3, 1996

Pat,

I apologize for the poor copy quality of the analytical report submitted October 1, 1996. Enclosed please find another copy for the Chaco Plant inlet water filter media sample analysis. A copy of this report will also be sent to Mr. Denny Foust.

Sincerely,

Ricky D. Cosby
Compliance Specialist

cc: Denny Foust NMOCD

September 30, 1996

RECEIVED
OCT 4 1996
Environmental Bureau
Oil Conservation Division

ANALYTICAL REPORT

Chaco Plant
Multimedia Inlet Water Filter
Filter Media
Lab Sample # 960744
Sampled 9/9/96
Sampled by Bob Heath

REMARKS:
The sample was collected/tested in order to determine disposal characteristics for this material. The sample was tested for Ignitability (Flashpoint), Reactivity, Corrosivity (pH) and TCLP RCRA Metals. Results of the analysis indicate that this material is not a characteristic hazardous waste for the components tested.

Distribution:

David Bays
Rick Cosby
Al Marruffo
Mike Hanson
Results Log Book

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

August 21, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-602

Mr. Ricky Cosby
Compliance Specialist
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Filter Media
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Cosby:

The New Mexico Oil Conservation Division (OCD) has received the EPFS letter dated August 9, 1996 requesting that OCD allow EPFS to spread water filtration media. **The OCD cannot approve of this onsite spreading of the media for the following reasons:**

1. The media is non-exempt from RCRA Subtitle C regulations as defined in 40 CFR Part 261. Therefore the media needs to be characterized for hazardous constituents in terms of TCLP Constituents of Concern, and Reactivity, Ignitability, and Corrosivity. All the media can not be a listed hazardous waste as defined in 40 CFR Part 261 (F, K, P, and U)

2. The spreading of the media must also not cause WQCC Standards as defined in 3103 A, B, and C to be exceeded. and cannot contain constituents that will cause WQCC 1101.TT Toxic pollutant levels to be exceeded.

However, if EPFS wishes to sample and characterize the filter media per points (1.) and (2.) above and can show that neither will be exceeded, then the OCD should be able to approve of the spreading of the filter media at Chaco Plant.

Note: EPFS also has the option of off-site disposal at an OCD approved facility.

Sincerely,

Patricio W. Sanchez
Petroleum Engineer, Environmental Bureau

XC: Mr. Denny Foust - Environmental Geologist

AEN I.D. 609322

September 27, 1996

El Paso Field Services
P.O. Box 4990
Farmington, NM 87499

Multimedia Filter Media
EPFS Lab ID #960744

Project Name/Number: CHACO FILTER N/A

Attention: John Lambdin

JH 9/30/96

On **09/11/96**, American Environmental Network (NM), Inc., (ADHS License No. AZ0015) received a request to analyze **non-aqueous and aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

All analyses were performed by American Environmental Network (FL) Inc., 11 east East Olive Road, Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
General Manager

MR:ft

Enclosure

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (602) 344-4413

American Environmental Network, Inc.

CLIENT	: EL PASO FIELD SERVICES	DATE RECEIVED	: 09/11/96
PROJECT #	: N/A		
PROJECT NAME	: CHACO FILTER	REPORT DATE	: 09/27/96

AEN ID: 609322

	AEN ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	609322-01	960744	NON-AQ	09/09/96
~~02~~	~~609322-02~~	~~960745~~	~~AQUEOUS~~	~~09/10/96~~

Chaco Plant
multimedia Filter Media

9/30/96

---TOTALS---

MATRIX	#SAMPLES
NON-AQ	1
AQUEOUS	1

AEN STANDARD DISPOSAL PRACTICE

he samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 609300
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: HAZARDOUS WASTE EVALUATION
Matrix: SOLID
QC Level: II

Lab ID: 001 Sample Date/Time: 09-SEP-96 1345
Client Sample Id: 609322-01 Received Date: 13-SEP-96

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
FLASHPOINT (1010)	DCENTI	>100	25		FPX041	SG
CYANIDE, REACTIVE (9010)	MG/KG	ND	0.25		RCX032	JL
SULFIDE, REACTIVE (9030)	MG/KG	ND	5		RSX032	JL
PH (9045)	UNITS	7.9	NA		PHS186	MM

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 609300
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: HAZARDOUS WASTE EVALUATION

Client Sample Id:	Parameter:	Unit:	Result:
609322-01	FLASHPOINT (1010)	DCENTI	>100
	PH (9045)	UNITS	7.9

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 609300
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: TCLP HAZARDOUS WASTE EVALUATION, METALS
Matrix: NON-AQUEOUS LEACHATE
QC Level: II

Lab Id: 003
Client Sample Id: 609322-01
Sample Date/Time: 09-SEP-96 1345
Received Date: 13-SEP-96

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
SILVER, TCLP (6010)	MG/L	ND	0.01		A6T050	JR
ARSENIC, TCLP (6010)	MG/L	ND	0.05		R6T050	JR
BARIUM, TCLP (6010)	MG/L	1.4	0.01		B6T050	JR
CADMIUM, TCLP (6010)	MG/L	ND	0.005		C6T050	JR
CHROMIUM, TCLP (6010)	MG/L	ND	0.01		H6T050	JR
MERCURY, TCLP (7470)	MG/L	ND	0.002		M7T047	GJ
LEAD, TCLP (6010)	MG/L	ND	0.05		P6T050	JR
SELENIUM, TCLP (6010)	MG/L	ND	0.1		S6T050	JR

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 609300
Client: AMERICAN ENVIRONMENTAL NETWOkK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: TCLP HAZARDOUS WASTE EVALUATION, METALS

Client Sample Id:	Parameter:	Unit:	Result:
609322-01	BARIUM, TCLP (6010)	MG/L	1.4

American Environmental Network, Inc.

"WetChem Quality Control Report"

Parameter:	FLASHPOINT	RE-CN	RE SULFIDE	PH
Batch Id:	FPX041	RCX032	RSX032	PHS186
Blank Result:	>25	<0.25	<5	N/A
Anal. Method:	1010	9010	9030	9045
Prep. Method:	N/A	N/A	N/A	N/A
Analysis Date:	18-SEP-96	24-SEP-96	24-SEP-96	13-SEP-96
Prep. Date:	18-SEP-96	24-SEP-96	24-SEP-96	13-SEP-96
Sample Duplication				
Sample Dup:	609166-1	609377-2	609377-2	609300-1
Rept Limit:	>25	<0.25	<5	N/A
Sample Result:	<25	<0.25	<5	7.90
Dup Result:	<25	<0.25	<5	7.80
Sample RPD:	N/C+	N/C	N/C	0.10
Max RPD:	>25	0.25	5	0.12
Dry Weight%	N/A	N/A	N/A	N/A
Matrix Spike				
Sample Spiked:	N/A	N/A	N/A	N/A
Rept Limit:	>25	N/A	N/A	N/A
Sample Result:				
Spiked Result:				
Spike Added:				
% Recovery:				
% Rec Limits:				
Dry Weight%				
ICV				
ICV Result:		2.18	18.24	9.95
True Result:		2.00	20.00	10.00
% Recovery:		109	91	100
% Rec Limits:		90-110	90-110	90-110
LCS				
LCS Result:	28			6.97
True Result:	27			6.87
% Recovery:	104			101
% Rec Limits:	96-104			97-103

O.K. 9/30/96

American Environmental Network, Inc.

"Quality Control Comments"

Batch Id:	Comments:
FPX041	609411-1, 609186-1, 609188-1, 609300-1, 609388-1, 609425-1,2 WERE ADDED
FPX041	TO BATCH ON 9/20/96.

American Environmental Network, Inc.

----- Common Footnotes WetChem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DISTILLATION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DISTILLATION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
(*) = DETECTION LIMITS RAISED DUE TO CLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.
(CA) = SEE CORRECTIVE ACTIONS FORM.
**= MATRIX INTERFERENCE
SW-846, 3rd Edition, latest revision
EPA 600/4-79-020, Revised March 1983.
STANDARD METHODS, For the Examination of Water and Wastewater, 18TH ED., 1992
NIOSH Manual of Analytical Methods, 4th Edition.
ANNUAL BOOK OF ASTM STANDARDS, VOLUME 11.01, 1991.
METHODS FOR THE DETERMINATION OF INORGANIC SUBSTANCES IN ENVIRONMENTAL SAMPLES, EPA600/R-93/100, AUGUST 1993

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.
2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.
3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS. IF FLASHPOINT IS LESS THAN 25 DEGREES CELSIUS, THE DETECTION LIMIT BECOMES THE INITIAL STARTING TEMPERATURE.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

DPH = DOLLY P. HWANG
JL = JAN LECLEAR
CF = CHRISTINE FOSTER
PLD = PAULA L. DOUGHTY
SG = SCOTT GRESHAM
NSB = NANCY S. BUTLER
ED = ESTHER DANTIN
RH = RICKY HAGENDORFER
RB = REBECCA BROWN
MM = MIKE MCKENZIE
AB = ANDY BROTHERTON
BH = BARRY HICKS

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	SILVER	ARSENIC	BARIUM	CADMIUM	CHROMIUM	MERCURY
Batch Id:	A6T050	R6T050	B6T050	C6T050	H6T050	M7T047
Blank Result:	<0.01	<0.05	<0.01	<0.005	<0.01	<0.002
Anal. Method:	6010	6010	6010	6010	6010	7470
Prep. Method:	3010	3010	3010	3010	3010	7470
Analysis Date:	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	24-SEP-96
Prep. Date:	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	24-SEP-96
Sample Duplication						
Sample Dup:	609221-1	609221-1	609221-1	609221-1	609221-1	609340-1
Rept Limit:	<0.01	<0.05	<0.01	<0.005	<0.01	<0.002
Sample Result:	1.7	1.9	3.5	1.9	1.9	0.050
Dup Result:	1.7	2.0	3.6	1.9	1.9	0.051
Sample RPD:	0	5	3	0	0	2
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	609221-1	609221-1	609221-1	609221-1	609221-1	609340-1
Rept Limit:	<0.01	<0.05	<0.01	<0.005	<0.01	<0.002
Sample Result:	<0.01	<0.05	1.7	0.008	<0.01	<0.002
Spiked Result:	1.7	1.9	3.5	1.9	1.9	0.050
Spike Added:	2.0	2.0	2.0	2.0	2.0	0.050
% Recovery:	85	95	90	95	95	100
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	5.0	4.8	5.0	5.0	5.0	0.0041
True Result:	5.0	5.0	5.0	5.0	5.0	0.0040
% Recovery:	100	96	100	100	100	103
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	80-120
LCS						
LCS Result:	1.8	2.0	2.0	2.0	2.1	0.0049
True Result:	2.0	2.0	2.0	2.0	2.0	0.0050
% Recovery:	90	100	100	100	105	98
% Rec Limits:	80-120	80-120	80-120	80-120	80-120	80-120

O.K.
9/24/96

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	LEAD	SELENIUM
Batch Id:	P6T050	S6T050
Blank Result:	<0.05	<0.1
Anal. Method:	6010	6010
Prep. Method:	3010	3010
Analysis Date:	19-SEP-96	19-SEP-96
Prep. Date:	19-SEP-96	19-SEP-96
Sample Duplication		
Sample Dup:	609221-1	609221-1
Rept Limit:	<0.05	<0.1
Sample Result:	1.8	2.0
Dup Result:	1.9	2.0
Sample RPD:	5	0
Max RPD:	20	20
Dry Weight%	N/A	N/A
Matrix Spike		
Sample Spiked:	609221-1	609221-1
Rept Limit:	<0.05	<0.1
Sample Result:	<0.05	<0.1
Spiked Result:	1.8	2.0
Spike Added:	2.0	2.0
% Recovery:	90	100
% Rec Limits:	75-125	75-125
Dry Weight%	N/A	N/A
ICV		
ICV Result:	5.2	5.1
True Result:	5.0	5.0
% Recovery:	104	102
% Rec Limits:	90-110	90-110
LCS		
LCS Result:	2.0	2.0
True Result:	2.0	2.0
% Recovery:	100	100
% Rec Limits:	80-120	80-120

C.C
9/30/96

American Environmental Network, Inc.

"Quality Control Comments"

Batch Id:	Comments:
A6T050	ANALYST: JR
A6T050	The results reported under "Sample Duplication" are the MS/MSD.
R6T050	ANALYST: JR
R6T050	The results reported under "Sample Duplication" are the MS/MSD.
B6T050	ANALYST: JR
B6T050	The results reported under "Sample Duplication" are the MS/MSD.
C6T050	ANALYST: JR
C6T050	The results reported under "Sample Duplication" are the MS/MSD.
H6T050	ANALYST: JR
H6T050	The results reported under "Sample Duplication" are the MS/MSD.
M7T047	ANALYST: GJ
M7T047	The results reported under "Sample Duplication" are the MS/MSD.
P6T050	ANALYST: JR
P6T050	The results reported under "Sample Duplication" are the MS/MSD.
S6T050	ANALYST: JR
S6T050	The results reported under "Sample Duplication" are the MS/MSD.

American Environmental Network, Inc.

----- Common Footnotes Metals -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
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@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
J = (FLORIDA DEP 'J' FLAG) - MATRIX SPIKE AND POST SPIKE RECOVERY IS OUT OF THE ACCEPTABLE RANGE. SEE OUT OF CONTROL EVENTS FORM.
U = (FLORIDA DEP 'U' FLAG) - THE COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED.
S = METHOD OF STANDARD ADDITIONS (MSA) WAS PERFORMED ON THIS SAMPLE.

FROM ANALYSIS REPORT:
RL= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.
Q= QUALIFIER (FOOTNOTE)

FROM QUALITY CONTROL REPORT:
RPD= RELATIVE PERCENT DEVIATION.
RPT LIMIT= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.

NOTE: THE UNITS REPORTED ON THE QUALITY CONTROL REPORT ARE REPORTED ON AN AS RUN BASIS.

SW-846, 3rd Edition, latest revision.
EPA 600/4-79-020, Revised March 1983.
NIOSH Manual of Analytical Methods, 4th Edition.
Standard Methods For the Examination of Water and Wastewater, 18th Edition, 1992.
Methods For the Determination of Metals in Environmental Samples - Supplement I, EPA 600/R-94-111, May 1994.

GJ = GARY JACOBS
JLH = JAMES L. HERED
CD = CHRISTY DRAPER
JR = JOHN REED
LV = LASSANDRA VON APPEN

American Environmental Network
Albuquerque, New Mexico

609300

Interlab Chain of Custody

DATE: 9/11 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER:
Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
609322-01	9/9	1345	AQ	
-02	9/10	1000	AQ	

SAMPLE ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)	TOX	TOC	Gen Chemistry	Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)	Reactivity	Ignitability, Corrosivity	TO-14	Gross Alpha/Beta	NUMBER OF CONTAINERS
609322-01				X														X	X			
-02															X							

PROJECT INFORMATION

PROJECT NUMBER: 609322
PROJECT NAME: Chaco Filter
QC LEVEL: (STD.) IV
QC REQUIRED: MS MSD BLANK
TAT: (STANDARD) RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND./COLD	
LAB NUMBER	

DUE DATE: 9/23
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL CERTIFICATION REQUIRED: ☐YES ☐NO

SAMPLES SENT TO:

SAN DIEGO	
FT. COLLINS	
RENTON	
PENSACOLA	X
PORTLAND	
PHOENIX	

RELINQUISHED BY: 1.
Signature: [signature] Time: 1700
Printed Name: John Caldwell Date: 9/11/96
Albuquerque

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: M Patrick Time: 0929
Printed Name: M Patrick Date: 9-13-96
Company: AEN

AnalyticalTechnologies of New Mexico, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque • Anchorage

CHAIN OF CUSTODY

DATE: 9/10/96 PAGE: 1 OF 1

ATI LAB I.D.: 609322

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

PROJECT MANAGER:	John LAMBDEN
COMPANY:	El Paso Field Services Co
ADDRESS:	P.O. Box 4990
PHONE:	(505) 599-2144
FAX:	(505) 599-2261
BILL TO:	(SAME AS ABOVE)
COMPANY:	
ADDRESS:	FARMINGTON, NM 87499

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB ☐ / DBCP ☐	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry	BACTERIA	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Ignitability	Corrosivity	NUMBER OF CONTAINERS
960744	9/9/96	1345	Soil	-01										X							X				X	X	X	2
960745	9/10/96	1000	Water	-02										X														2

PROJECT INFORMATION	
PROJ. NO.:	N/A
PROJ. NAME:	Chaco Filter
P.O. NO.:	N/A
SHIPPED VIA:	Fed-X

SAMPLE RECEIPT	
TOTAL CONTAINERS:	4
CUSTODY SEALS:	N/A
RECEIVED INTACT:	Y
BLUE ICE:	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) [ ] 24hr [ ] 48hr [ ] 72hr [ ] 1 WEEK (NORMAL) [X] 2 WEEK

CERTIFICATION REQUIRED: [ ] NM [ ] OTHER

METHANOL PRESERVATION [ ]

COMMENTS:

Need low level detection for PAH's.

PNA on WATER only!

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: John Lambden Time: 1130	Signature: Time:
Printed Name: John LAMBDEN Date: 9/10/96	Printed Name: Date:
Company: El Paso Field Svs.	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time: 1025
Printed Name: Date:	Printed Name: John Caldwell Date: 9/11/96
Company:	Analytical Technologies of New Mexico

10/30/95 ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 681-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI Pink - ORIGINATOR

Analytical Technologies of New Mexico, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque • Anchorage

CHAIN OF CUSTODY

DATE: 9/10/96 PAGE: 1 OF 1

ATI LAB I.D. 609322

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John Lambden

COMPANY: El Paso Field Services Co
ADDRESS: P.O. Box 4990

PHONE: (505) 599-2144
FAX: (505) 599-2261

BILL TO: (SAME AS ABOVE)
COMPANY:
ADDRESS: Farmington, NM 87499

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry	Ignitability	Corrosivity	RCRA Metals by TCLP (Method 1311)	RCRA Metals (8)	Target Analyte List Metals (23)	Priority Pollutant Metals (13)	624 Acrolein	NUMBER OF CONTAINERS
960744	9/9/96	1345	Soil	-01										*	9/11/96								X				X	1
960745	9/10/96	1000	Water	-02										X									X					1

PROJECT INFORMATION

PROJ. NO.: N/A
PROJ. NAME: Chaco Filter
P.O. NO.: N/A
SHIPPED VIA: Fed-X

SAMPLE RECEIPT

NO. CONTAINERS	3
CUSTODY SEALS	Y/N/(NA)
RECEIVED INTACT	Y
BLUE ICE/ICE	9°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) [ ] 24hr [ ] 48hr [ ] 72hr [ ] 1 WEEK (NORMAL) [X] 2 WEEK

CERTIFICATION REQUIRED: [ ] NM [ ] OTHER

METHANOL PRESERVATION [ ]

COMMENTS: Need low level detection for PAH's.

PNA ON WATER ONLY!

RELINQUISHED BY: 1.
Signature: John Lambden Time: 1130
Printed Name: John Lambden Date: 9/10/96
Company: El Paso Field Svs.

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: Time: 1025
Printed Name: John Caldwell Date: 9/11/96
Analytical Technologies of New Mexico

El Paso Natural Gas Company

A 2692

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis					Remarks
	CHACO MULTIMEDIA FILTERS								
Samplers: (Signature) B.J. Hand	Date: 9-7-96								

	Date	Time	Comp.	GRAB	Sample Number							
	9-4-96	1345	✓		96072(4	P1	4°C					3 PART COMPOSITE

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
B.J. Hand	9-9-96 1405				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:	
Carrier Co:		Carrier Phone No.		Date Results Reported / by: (Signature)	
Air Bill No.:					

san juan repro Form 71-55 A

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

October 3, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P - 288-258-649

Mr. Ricky D. Cosby
Compliance Specialist
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

P 288 258 649

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

Sent to	Cosby - EPFS
Street & Number	NEMM Filter Media
Post Office, State, & ZIP Code	Chaco, GW-71
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

RE: Non-Exempt Filter Media
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Cosby:

The New Mexico Oil Conservation Division (OCD) has received the EPFS letter dated October 1, 1996 requesting that the OCD allow EPFS to spread a non-exempt/non-hazardous filter media. **The OCD hereby approves of the spreading of this non-exempt/non-hazardous Filter Media for the beneficial use at the EPFS Chaco plant within the facility area, subject to the following condition.**

- EPFS will provide better copies of the sample analysis to the Santa Fe and Aztec OCD offices within one week of receipt of this letter.

Note, that OCD approval does not relieve EPFS of liability should EPFS operation's result in contamination of surface waters, ground waters or the environment. OCD approval does not relieve EPFS from compliance with other Federal, State, and Local Regulations/Rules that may apply.

Sincerely,

Patricio W. Sanchez,
Petroleum Engineering Specialist
Environmental Bureau

XC: Mr. Denny Foust - Aztec District Office

EPFS

EL PASO FIELD SERVICES

P.O. Box 4990
Farmington, NM 87499

Pat Sanchez
New Mexico Oil Conservation Division
2040 South Pacheco
P.O. Box 6429
Santa Fe, New Mexico

Date: October 1, 1996

RE: Filter Media GW-71, Chaco Plant

Mr. Sanchez,

EPFS requests approval to use the filter media as described in our letter dated August 9, 1996 as road base within the plant yard facility.

EPFS submits the following analytical results from the filter media. The sample was tested for Ignitability (Flashpoint), Reactivity, Corrosivity (pH) and TCLP RCRA Metals. Enclosed for your review is a copy of the results. The analysis results indicate levels are below regulatory limits.

Sincerely,

Ricky D. Cosby
Compliance Specialist

cc: Denny Foust, Aztec NMOCD
encl.

bc: Ray Maldonado (EPFS) w/o attachments
Mike Hanson (EPFS) w/o attachments
Roy Fagan (EPFS) w/o attachments
File: Chaco Regulatory

September 30, 1996

ANALYTICAL REPORT

Chaco Plant
Multimedia Inlet Water Filter
Filter Media
Lab Sample # 960744
Sampled 9/9/96
Sampled by Bob Heath

REMARKS:
The sample was collected/tested in order to determine disposal characteristics for this material. The sample was tested for Ignitability (Flashpoint), Reactivity, Corrosivity (pH) and TCLP RCRA Metals. Results of the analysis indicate that this material is not a characteristic hazardous waste for the components tested.

Distribution:

David Bays
Rick Cosby
Al Marruffo
Mike Hanson
Results Log Book

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

August 21, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-602

Mr. Ricky Cosby
Compliance Specialist
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Filter Media
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Cosby:

The New Mexico Oil Conservation Division (OCD) has received the EPFS letter dated August 9, 1996 requesting that OCD allow EPFS to spread water filtration media. **The OCD cannot approve of this onsite spreading of the media for the following reasons:**

1. The media is non-exempt from RCRA Subtitle C regulations as defined in 40 CFR Part 261. Therefore the media needs to be characterized for hazardous constituents in terms of TCLP Constituents of Concern, and Reactivity, Ignitability, and Corrosivity. All the media can not be a listed hazardous waste as defined in 40 CFR Part 261 (F, K, P, and U)

2. The spreading of the media must also not cause WQCC Standards as defined in 3103 A, B, and C to be exceeded, and cannot contain constituents that will cause WQCC 1101.TT Toxic pollutant levels to be exceeded.

However, if EPFS wishes to sample and characterize the filter media per points (1.) and (2.) above and can show that neither will be exceeded, then the OCD should be able to approve of the spreading of the filter media at Chaco Plant.

Note: EPFS also has the option of off-site disposal at an OCD approved facility.

Sincerely,

Patricio W. Sanchez
Petroleum Engineer, Environmental Bureau

XC: Mr. Denny Foust - Environmental Geologist

AEN I.D. 609322

September 27, 1996

El Paso Field Services
P.O. Box 4990
Farmington, NM 87499

Multimedia Filter Media
EPFS Lab ID #960744

Project Name/Number: CHACO FILTER N/A

Attention: John Lambdin

JF 9/30/96

On **09/11/96**, American Environmental Network (NM), Inc., (ADHS License No. AZ0015) received a request to analyze **non-aqueous and aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

All analyses were performed by American Environmental Network (FL) Inc., 11 east East Olive Road, Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at 505 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
General Manager

MR:ft

Enclosure

American Environmental Network, Inc.

CLIENT	: EL PASO FIELD SERVICES	DATE RECEIVED	: 09/11/96
PROJECT #	: N/A		
PROJECT NAME	: CHACO FILTER	REPORT DATE	: 09/27/96

AEN ID: 609322

	AEN ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	609322-01	960744	NON-AQ	09/09/96
~~02~~	~~609322-02~~	~~960745~~	~~AQUEOUS~~	~~09/10/96~~

Chaco Plant
Multimedia Filter media

9/30/96

---TOTALS---

MATRIX	#SAMPLES
NON-AQ	1
AQUEOUS	1

AEN STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 609300
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: HAZARDOUS WASTE EVALUATION
Matrix: SOLID
QC Level: II

Lab ID: 001 Sample Date/Time: 09-SEP-96 1345
Client Sample Id: 609322-01 Received Date: 13-SEP-96

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
FLASHPOINT (1010)	DCENTI	>100	25		FPX041	SG
CYANIDE, REACTIVE (9010)	MG/KG	ND	1.25		RCX032	JL
SULFIDE, REACTIVE (9030)	MG/KG	ND	5		RSX032	JL
PH (9045)	UNITS	7.9	NA		PHS186	MM

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 609300
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: HAZARDOUS WASTE EVALUATION

Client Sample Id:	Parameter:	Unit:	Result:
609322-01	FLASHPOINT (1010)	DCENTI	>100
	PH (9045)	UNITS	7.9

American Environmental Network, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 609300
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: TCLP HAZARDOUS WASTE EVALUATION, METALS
Matrix: NON-AQUEOUS LEACHATE
QC Level: II

Lab Id: 003
Client Sample Id: 609322-01
Sample Date/Time: 09-SEP-96 1345
Received Date: 13-SEP-96

Parameters:	Units:	Results:	Rpt Lmts:	I:	Batch:	Analyst:
SILVER, TCLP (6010)	MG/L	ND	0.01		A6T050	JR
ARSENIC, TCLP (6010)	MG/L	ND	0.05		R6T050	JR
BARIUM, TCLP (6010)	MG/L	1.4	0.01		B6T050	JR
CADMIUM, TCLP (6010)	MG/L	ND	0.005		C6T050	JR
CHROMIUM, TCLP (6010)	MG/L	ND	0.01		H6T050	JR
MERCURY, TCLP (7470)	MG/L	ND	0.002		M7T047	GJ
LEAD, TCLP (6010)	MG/L	ND	0.05		P6T050	JR
SELENIUM, TCLP (6010)	MG/L	ND	0.1		S6T050	JR

Comments:

American Environmental Network, Inc.

"Method Report Summary"

Accession Number: 609300
Client: AMERICAN ENVIRONMENTAL NETWORK OF NEW MEXICO
Project Number: 609322
Project Name: EPFS
Project Location: N/S
Test: TCLP HAZARDOUS WASTE EVALUATION, METALS

Client Sample Id:	Parameter:	Unit:	Result:
609322-01	BARIUM, TCLP (6010)	MG/L	1.4

American Environmental Network, Inc.

"WetChem Quality Control Report"

Parameter:	FLASHPOINT	RE-CN	RE SULFIDE	PH
Batch Id:	FPX041	RCX032	RSX032	PHS186
Blank Result:	>25	<0.25	<5	N/A
Anal. Method:	1010	9010	9030	9045
Prep. Method:	N/A	N/A	N/A	N/A
Analysis Date:	18-SEP-96	24-SEP-96	24-SEP-96	13-SEP-96
Prep. Date:	18-SEP-96	24-SEP-96	24-SEP-96	13-SEP-96
Sample Duplication				
Sample Dup:	609166-1	609377-2	609377-2	609300-1
Rept Limit:	>25	<0.25	<5	N/A
Sample Result:	<25	<0.25	<5	7.90
Dup Result:	<25	<0.25	<5	7.80
Sample RPD:	N/C+	N/C	N/C	0.10
Max RPD:	>25	0.25	5	0.12
Dry Weight%	N/A	N/A	N/A	N/A
Matrix Spike				
Sample Spiked:	N/A	N/A	N/A	N/A
Rept Limit:	>25	N/A	N/A	N/A
Sample Result:				
Spiked Result:				
Spike Added:				
% Recovery:				
% Rec Limits:				
Dry Weight%				
ICV				
ICV Result:		2.18	18.24	9.95
True Result:		2.00	20.00	10.00
% Recovery:		109	91	100
% Rec Limits:		90-110	90-110	90-110
LCS				
LCS Result:	28			6.97
True Result:	27			6.87
% Recovery:	104			101
% Rec Limits:	96-104			97-103

9/24/96

American Environmental Network, Inc.

"Quality Control Comments"

Batch Id:	Comments:
FPX041	609411-1, 609186-1, 609188-1, 609300-1, 609388-1, 609425-1,2 WERE ADDED
FPX041	TO BATCH ON 9/20/96.

American Environmental Network, Inc.

----- Common Footnotes WetChem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DISTILLATION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DISTILLATION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
E = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
*) = DETECTION LIMITS RAISED DUE TO DLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.
CA) = SEE CORRECTIVE ACTIONS FORM.
**= MATRIX INTERFERENCE
SW-846, 3rd Edition, latest revision
EPA 600/4-79-020, Revised March 1983.
STANDARD METHODS, For the Examination of Water and Wastewater, 18TH ED., 1992
NIOSH Manual of Analytical Methods, 4th Edition.
ANNUAL BOOK OF ASTM STANDARDS, VOLUME 11.01, 1991.
METHODS FOR THE DETERMINATION OF INORGANIC SUBSTANCES IN ENVIRONMENTAL SAMPLES, EPA600/R-93/100, AUGUST 1993

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.
2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.
3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS. IF FLASHPOINT IS LESS THAN 25 DEGREES CELSIUS, THE DETECTION LIMIT BECOMES THE INITIAL STARTING TEMPERATURE.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).

RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

DPH = DOLLY P. HWANG
JL = JAN LECLEAR
CF = CHRISTINE FOSTER
PLD = PAULA L. DOUGHTY
SG = SCOTT GRESHAM
NSB = NANCY S. BUTLER
ED = ESTHER DANTIN
RH = RICKY HAGENDORFER
RB = REBECCA BROWN
MM = MIKE MCKENZIE
AB = ANDY BROTHERTON
BH = BARRY HICKS

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	SILVER	ARSENIC	BARIUM	CADMIUM	CHROMIUM	MERCURY
Batch Id:	A6T050	R6T050	B6T050	C6T050	H6T050	M7T047
Blank Result:	<0.01	<0.05	<0.01	<0.005	<0.01	<0.002
Anal. Method:	6010	6010	6010	6010	6010	7470
Prep. Method:	3010	3010	3010	3010	3010	7470
Analysis Date:	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	24-SEP-96
Prep. Date:	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	19-SEP-96	24-SEP-96
Sample Duplication						
Sample Dup:	609221-1	609221-1	609221-1	609221-1	609221-1	609340-1
Rept Limit:	<0.01	<0.05	<0.01	<0.005	<0.01	<0.002
Sample Result:	1.7	1.8	3.6	1.9	1.9	0.050
Dup Result:	1.7	2.0	3.6	1.9	1.9	0.051
Sample RPD:	0	5	0	0	0	2
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	609221-1	609221-1	609221-1	609221-1	609221-1	609340-1
Rept Limit:	<0.01	<0.05	<0.01	<0.005	<0.01	<0.002
Sample Result:	<0.01	<0.05	1.7	0.008	<0.01	<0.002
Spiked Result:	1.7	1.8	3.6	1.9	1.9	0.050
Spike Added:	2.0	2.0	2.0	2.0	2.0	0.050
% Recovery:	85	85	90	95	95	100
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	5.0	4.8	5.0	5.0	5.0	0.0041
True Result:	5.0	5.0	5.0	5.0	5.0	0.0040
% Recovery:	100	96	100	100	100	103
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	80-120
LCS						
LCS Result:	1.8	2.0	2.0	2.0	2.1	0.0049
True Result:	2.0	2.0	2.0	2.0	2.0	0.0050
% Recovery:	90	100	100	100	105	98
% Rec Limits:	80-120	80-120	80-120	80-120	80-120	80-120

O.K
9/24/96

American Environmental Network, Inc.

"Metals Quality Control Report"

Parameter:	LEAD	SELENIUM
Batch Id:	P6T050	S6T050
Blank Result:	<0.05	<0.1
Anal. Method:	6010	6010
Prep. Method:	3010	3010
Analysis Date:	19-SEP-96	19-SEP-96
Prep. Date:	19-SEP-96	19-SEP-96
Sample Duplication		
Sample Dup:	609221-1	609221-1
Rept Limit:	<0.05	<0.1
Sample Result:	1.8	2.0
Dup Result:	1.9	2.0
Sample RPD:	5	0
Max RPD:	20	20
Dry Weight%	N/A	N/A
Matrix Spike		
Sample Spiked:	609221-1	609221-1
Rept Limit:	<0.05	<0.1
Sample Result:	<0.05	<0.1
Spiked Result:	1.8	2.0
Spike Added:	2.0	2.0
% Recovery:	90	100
% Rec Limits:	75-125	75-125
Dry Weight%	N/A	N/A
ICV		
ICV Result:	5.2	5.1
True Result:	5.0	5.0
% Recovery:	104	102
% Rec Limits:	90-110	90-110
LCS		
LCS Result:	2.0	2.0
True Result:	2.0	2.0
% Recovery:	100	100
% Rec Limits:	80-120	80-120

American Environmental Network, Inc.

"Quality Control Comments"

Batch Id:	Comments:
A6T050	ANALYST: JR
A6T050	The results reported under "Sample Duplication" are the MS/MSD.
R6T050	ANALYST: JR
R6T050	The results reported under "Sample Duplication" are the MS/MSD.
B6T050	ANALYST: JR
B6T050	The results reported under "Sample Duplication" are the MS/MSD.
C6T050	ANALYST: JR
C6T050	The results reported under "Sample Duplication" are the MS/MSD.
H6T050	ANALYST: JR
H6T050	The results reported under "Sample Duplication" are the MS/MSD.
M7T047	ANALYST: GJ
M7T047	The results reported under "Sample Duplication" are the MS/MSD.
P6T050	ANALYST: JR
P6T050	The results reported under "Sample Duplication" are the MS/MSD.
S6T050	ANALYST: JR
S6T050	The results reported under "Sample Duplication" are the MS/MSD.

American Environmental Network, Inc.

----- Common Footnotes Metals -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DIGESTION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DIGESTION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. DILUTION PRIOR TO ANALYSIS)
$ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
C = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE %C CALCULATIONS.
NH= SAMPLE AND , OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
J = (FLORIDA DEP 'J' FLAG) - MATRIX SPIKE AND POST SPIKE RECOVERY IS OUT OF THE ACCEPTABLE RANGE. SEE OUT OF CONTROL EVENTS FORM.
U = (FLORIDA DEP 'U' FLAG) - THE COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED.
S = METHOD OF STANDARD ADDITIONS (MSA) WAS PERFORMED ON THIS SAMPLE.

FROM ANALYSIS REPORT:
RL= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.
Q= QUALIFIER (FOOTNOTE)

FROM QUALITY CONTROL REPORT:
RPD= RELATIVE PERCENT DEVIATION.
RPT LIMIT = REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.

NOTE: THE UNITS REPORTED ON THE QUALITY CONTROL REPORT ARE REPORTED ON AN AS RUN BASIS.

SW-846, 3rd Edition, latest revision.
EPA 600/4-79-020, Revised March 1983.
NIOSH Manual of Analytical Methods, 4th Edition.
Standard Methods For the Examination of Water and Wastewater, 18th Edition, 1992.
Methods For the Determination of Metals in Environmental Samples - Supplement I, EPA 600/R-94-111, May 1994.

GJ = GARY JACOBS
JLH = JAMES L. HERED
CD = CHRISTY DRAPER
JR = JOHN REED
LV = LASSANDRA VON APPEN

American Environmental Network
Albuquerque, New Mexico

6U4300

Interlab Chain of Custody

DATE: 9/11 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER: Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
609322-01	9/9	1345	AQ	
-02	9/10	1000	AQ	

	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry			Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)	Reactivity, Ignitability, Corrosivity	TO-14	Gross Alpha/Beta					NUMBER OF CONTAINERS
609322-01				X															4			X	X					
-02																												

PROJECT INFORMATION

PROJECT NUMBER: 609322
PROJECT NAME: Chaco Filter
QC LEVEL: (STD.) IV
QC REQUIRED: MS MSD BLANK
TAT: (STANDARD) RUSH!

DUE DATE: 9/23
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL CERTIFICATION REQUIRED: [ ] YES [ ] NO

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND./COLD	
LAB NUMBER	

SAMPLES SENT TO:

SAN DIEGO	
FT. COLLINS	4
RENTON	
PENSACOLA	X
PORTLAND	
PHOENIX	

RELINQUISHED BY: 1.
Signature: [signature] Time: 1700
Printed Name: John Caldwell Date: 9/11/96
Albuquerque

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: M Patrick Time: 0929
Printed Name: M Patrick Date: 9-13-96
Company: AEN

Labs: San Diego (619) 458 9141 • Phoenix (602) 496 4400 • Seattle (206) 228 8335 • Pensacola (904) 474 1001 • Portland (503) 684 0447 • Albuquerque (505) 344 3777

Analytical Technologies of New Mexico, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft Collins • Portland • Albuquerque • Anchorage

CHAIN OF CUSTODY

DATE: 9/9/96 PAGE: 1 OF 1

ATI LAB I.D. 609322

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John Lambden
COMPANY: El Paso Field Services Co
ADDRESS: P.O. Box 4990
PHONE: (505) 599-2144
FAX: (505) 599-2261
BILL TO: (SAME AS ABOVE)
COMPANY:
ADDRESS: Farmington, NM 87499

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
960744	9/9/96	1315	Soil	-01
960745	9/9/96	1000	Water	-02

Petroleum Hydrocarbons (418.1 TRPH)
(MCD 8015) Diesel/Direct Inject
(M8015) Gas/Purge & Trap
Gasoline/BTEX & MTBE (M8015/8020)
BTEX/MTBE (8020)
BTEX & Chlorinated Aromatics (602/8020)
BTEX/MTBE/EDC & EDB (8020/8010/Short)
Chlorinated Hydrocarbons (601/8010)
504 EDB / DBCP
Polynuclear Aromatics (610/8310) X
Volatile Organics (624/8240) GC/MS
Volatile Organics (8260) GC/MS
Pesticides/PCB (608/8080)
Herbicides (615/8150)
Base/Neutral/Acid Compounds GC/MS (625/8270)
General Chemistry
X Reactivity
Priority Pollutant Metals (13)
Target Analyte List Metals (23)
RCRA Metals (8)
X RCRA Metals by TCLP (Method 1311)
X Ignitability
X Corrosivity
NUMBER OF CONTAINERS

PROJECT INFORMATION
PROJ. NO.: N/A
PROJ. NAME: Chaco Filter
P.O. NO.: N/A
SHIPPED VIA: Fed-X

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS
(RUSH) [ ] 24hr [ ] 48hr [ ] 72hr [ ] 1 WEEK (NORMAL) [X] 2 WEEK
CERTIFICATION REQUIRED [ ] NM [ ] OTHER
METHANOL PRESERVATION [ ]
COMMENTS: Need low level detection for PAH's.
PNA on WATER only!

RELINQUISHED BY: 1.
Signature: John Lambden Time: 1130
Printed Name: John Lambden Date: 9/9/96
Company: El Paso Field Svs.

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.
Signature Time
Printed Name Date
Company:

RECEIVED BY: (LAB) 2.
Signature Time: 1025
Printed Name Date: John Caldwell 9/11/96
Analytical Technologies of New Mexico

10/7/95 ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-1400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White, Canary - ATI Pink - ORIGINATOR

AnalyticalTechnologies of New Mexico, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque • Anchorage

CHAIN OF CUSTODY

DATE: 9/19/96 PAGE: 1 OF 1

ATI LAB I.D. 609322

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: John Lambden

COMPANY: El Paso Field Services Co

ADDRESS: P.O. Box 4990

PHONE: (505) 599-2144

FAX: (505) 599-2261

BILL TO: (SAME AS ABOVE)

COMPANY:

ADDRESS: Farmington, NM 87499

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
960744	9/9/96	1345	Soil	-01
960745	9/14/96	1000	Water	-02

ANALYSIS REQUEST

SAMPLE ID	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE (8020)	BTEX & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC & EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry	Bioactivity	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Ignitability	Corrosivity	NUMBER OF CONTAINERS
960744										X							X				X	X	X	1
960745										X														1

PROJECT INFORMATION

PROJ. NO.: N/A

PROJ. NAME: Chaco Filter

P.O. NO.: N/A

SHIPPED VIA: Fed-X

SAMPLE RECEIPT

NO. CONTAINERS	3
CUSTODY SEALS	Y/N (NA)
RECEIVED INTACT	Y
BLUE ICE/ICE	9°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) [ ] 24hr [ ] 48hr [ ] 72hr [ ] 1 WEEK (NORMAL) [X] 2 WEEK

CERTIFICATION REQUIRED [ ] NM [ ] OTHER

METHANOL PRESERVATION [ ]

COMMENTS: Need low level detection for PAH's.

PNA on WATER only!

RELINQUISHED BY: 1.

Signature: John Lambden Time: 1130

Printed Name: John Lambden Date: 9/19/96

Company: El Paso Field Svs.

RECEIVED BY: 1.

Signature: Time:

Printed Name. Date.

Company

RELINQUISHED BY: 2.

Signature Time

Printed Name Date.

Company:

RECEIVED BY: (LAB) 2.

Signature: John Caldwell Time: 1025

Printed Name: John Caldwell Date: 9/19/96

Analytical Technologies of New Mexico

El Paso Natural Gas Company

A 2692

CHAIN OF CUSTODY RECORD

Project No.	Project Name	Type and No. of Sample Containers	Preservation Technique	Requested Analysis	Remarks
	CHACRA MESA NO 1				
Samplers: (Signature)	Date:				
	4-14-96				

Date	Time	Comp.	GRAB	Sample Number							
4-14-96	1345	✓		CMC 7664	1	4°C					SPARE COMPOSITE

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	4/14/96 1700				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks:

Carrier Co:	Carrier Phone No.	Date Results Reported / by: (Signature)
Air Bill No.:		

san juan repro Form 71-55 A

EPFS

EL PASO FIELD SERVICES

P.O. Box 4990
Farmington, NM 87499

Patricio Sanchez
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

Date: September 11, 1996

RE: Chaco Plant Sump Inspection

Pat,

During the annual El Paso Field Services (EPFS) shutdown at the Chaco Plant facility the following sumps were inspected.

Name	Description	Contents	Test	Status
A Gas Compressor Sump 1	Cylindrical Metal With Leak Detection	Oil & Water From A Gas Compressor	Hydrocarbon/ Water interface meter	Pass
A Gas Compressor Sump 2	Cylindrical Metal With Leak Detection	Oil & Water From A Gas Compressor	Hydrocarbon/ Water interface meter	Pass
B Gas Compressor Sump	Cylindrical Metal	Oil & Water From B Gas Compressor	Hydrocarbon/ Water interface meter - liquid level monitoring	Pass
Oil Classifier System Process Oil Skimmer Tank	Below Grade Double Wall With Leak Detection	Oil & Water From A & B Amine Gasoline Plant	Visual	**Fail**
Oil Classifier System Lube Oil Skimmer Tank	Below Grade Double Wall With Leak Detection	A & B Compressor Sumps	Visual	Pass
Oil Classifier System Processor Water Skimmer Tank	Below Grade Double Wall With Leak Detection	Water Phase of Process & Lube Oil Skimmer Tanks	Visual	Pass

The Oil Classifier Process Oil Skimmer Tank was inspected visually from the leak detection ports and was found to have an oil level. The liquids found in the detection area were pumped into a truck and the detection area was again checked for leaks. At this stage no leaks were observed. The liquids were then emptied into the liquid receiving section of the tank. This caused a rise in the tank level. The detection area was again checked and a leak was detected in a welded area where the 8" receiving inlet is joined to the inner tank wall. No signs of leakage were observed from the outer containment wall. Arrangements for the repair of The Process Oil Tank are currently in progress and will be resolved in a timely manner. A completion report of the repairs will subsequently follow.

Sincerely,

Ricky D. Cosby
Compliance Specialist

cc: Sandra Miller
Mike Hanson
Roy Fagen
Denny Foust (NMOCD Aztec)

file: Chaco Plant Regulatory

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

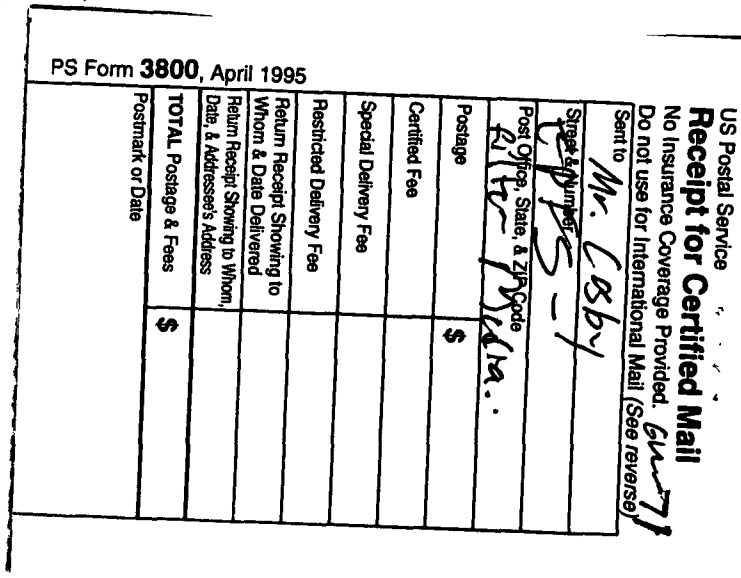
OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

August 21, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-288-258-602

Mr. Ricky Cosby
Compliance Specialist
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Filter Media
GW-71, Chaco Plant
San Juan County, NM


PS Form 3800, April 1995

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

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

P 288 258 602

Dear Mr. Cosby:

The New Mexico Oil Conservation Division (OCD) has received the EPFS letter dated August 9, 1996 requesting that OCD allow EPFS to spread water filtration media. **The OCD cannot approve of this onsite spreading of the media for the following reasons:**

1. The media is non-exempt from RCRA Subtitle C regulations as defined in 40 CFR Part 261. Therefore the media needs to be characterized for hazardous constituents in terms of TCLP Constituents of Concern, and Reactivity, Ignitability, and Corrosivity. All the media can not be a listed hazardous waste as defined in 40 CFR Part 261 (F, K, P, and U)

2. The spreading of the media must also not cause WQCC Standards as defined in 3103 A, B, and C to be exceeded, and cannot contain constituents that will cause WQCC 1101.TT Toxic pollutant levels to be exceeded.

However, if EPFS wishes to sample and characterize the filter media per points (1.) and (2.) above and can show that neither will be exceeded, then the OCD should be able to approve of the spreading of the filter media at Chaco Plant.

Note: EPFS also has the option of off-site disposal at an OCD approved facility.

Sincerely,

Patricio W. Sanchez
Petroleum Engineer, Environmental Bureau

XC: Mr. Denny Foust - Environmental Geologist

EPFS

EL PASO FIELD SERVICES

P.O. Box 4990
Farmington N.M. 87499

Pat Sanchez
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Date: August 9, 1996

RECEIVED
AUG 19 1996
Environmental Bureau
Oil Conservation Division

Mr. Sanchez,

El Paso Field Services' Chaco Plant is planning to replace the existing inlet water filtration system due to internal piping and vessel corrosion. All material used in the filtration system is an inert, unregulated solid. The existing filter media consists of graduated layers of sands, gravel and carbon (anthracite coal). Filtration consists totally of a physical process to remove suspended solids from river water supplied from the Blanco pond. No chemical additives are used.

EPFS requests approval to use this filter media as road base within the plant yard facility. The original installation of the inlet filtration system occurred in the late 1950's and no material data sheet is available.

EPFS plans to remove this system during the scheduled annual Chaco Plant shutdown scheduled September 09,1996.

For any additional information please call (505) 599-2158.

Thank you

Ricky D. Cosby
Compliance Specialist

cc: Denny Foust (NMOCD Aztec)
File: Chaco Plant / Regulatory

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

P 594 835 305

August 19, 1996

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

Sent to Mr. David Bays	
Street & Number EPFS	
Post Office, State, & ZIP Code Chaco - Cooling Tower	
Postage	$ Sludge.
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

CERTIFIED MAIL
RETURN RECEIPT NO. P-594-835-305

Mr. David Bays
Sr. Environmental Scientist
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Cooling Tower Sludge
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Bays:

The New Mexico Oil Conservation Division (OCD) has received the EPFS letter dated August 12, 1996 requesting that the OCD allow EPFS to spread the cooling tower sludge onsite. The OCD on August 6, 1993 verbally approved the spreading of this same sludge at the facility, and therefore **hereby approves of the spreading of this non-hazardous sludge at the EPFS Chaco plant on a road way within the facility fence.**

Note, that OCD approval does not relieve EPFS of liability should EPFS operation's result in contamination of surface waters, ground waters or the environment.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

XC: Mr. Denny Foust - Environmental Geologist

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal | Time 8:00 AM | Date 8-15-96

Originating Party	Other Parties
Mr. David Bays - EPFS (Returning my call from 8-14-96)	Pat Sanchez - OCD

Subject: August 12, 1996 from EPFS requesting the spreading of Non-Hazardous cooling Tower sludge at the Chaco Plant site.

Discussion: (1) I asked David if EPFS had run RIC on the Sludge - He said no - the sludge according to David is too "liquid" like for RIC.

(2) David said he had spoke to RCA about the spreading of the sludge and RCA said it was okay. (Note: OCD has verbally approved of this in the past according to Mr. Bays/and our own files - see letter from EPNG dated August 6, 1993.)

(3) I made David aware that his analysis of the sample sludge was over 1 yr. old - He said it is still okay based on knowledge of process and that RCA said the analysis was still good.

Conclusions or Agreements:

(1) Pat Sanchez will Draft a letter of approval for RCA to sign - Note: I do not agree with #(1) above - also letter dated August 12, 1996 has no certification Regarding F, K, P, U listing!

Distribution: File, RCA, Denny Foust

Signed: Patricia W. Sanchez

EPFS

EL PASO FIELD SERVICES

August 12, 1996

New Mexico Oil Conservation Division
Attn: Mr. Pat Sanchez
2040 S. Pacheco
Santa Fe. NM 87505

Dear Mr. Sanchez:

El Paso Field Services Co. (EPFS) has scheduled the annual shut down for our Chaco Plant to begin on September 9, 1996. As required by the Discharge Plan, number GW-71, during the shut down we will drain, clean and inspect the basins of the three plant cooling towers.

The sludge from the cooling towers was characterized prior to the 1995 shut down, and found to be free of any RCRA regulated component. The waste stream has not been modified in any way since that analysis (a copy is attached for your reference). Based on the characterization of this waste stream, EPFS proposes to spread the solid material on a road way within the plant fence. The liquid waste from the cooling towers will be placed in the contact waste water ponds.

If you need any more information, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays, REM
Sr. Environmental Scientist

cc: Mr. Denny Foust- NMOCD - Aztec
S. D. Miller/J. Sterrett/Chaco Gen. File

SOUND ANALYTICAL SERVICES, INC.

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: Philip Environmental Laboratory Date: May 12, 1995

Report On: Analysis of Sludge Lab No.: 48312

IDENTIFICATION:
Samples received on 04-28-95
Project: EPNG Company
P. O. No. 58659

ANALYSIS:

Chacc Plant
"A" Cooling Tower

Lab Sample No. 48312-1 Client ID: 950511 95-A7081

Toxicity Characteristic Leaching Procedure (TCLP) Method 1311
ICP Metals by EPA Method 6010
Date Extracted: 5-4-95
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Arsenic	0.19	0.10	5.0
Barium	0.65	0.005	100.0
Cadmium	ND	0.005	1.0
Chromium	0.33	0.01	5.0
Lead	0.08	0.05	5.0
Selenium	ND	1.0	1.0
Silver	ND	0.01	5.0

Mercury by Cold Vapor AA Per EPA Method 7470
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Mercury	ND	0.002	0.2

ND - Not Detected
PQL - Practical Quantitation Limit

2

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950511 95-A7081
Lab ID:	48312-01
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/9/95
% Solids	-

TCLP Volatile Organics by USEPA Method 8240

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
1,2-Dichloroethane-d4	97		76	114
Toluene-d8	91		88	110
Bromofluorobenzene	102		86	115

Analyte	Result (mg/L)	PQL	Flags
Vinyl Chloride	ND	0.2	
1,1-Dichloroethene	ND	0.1	
Chloroform	ND	0.1	
1,2-Dichloroethane	ND	0.1	
2-Butanone (MEK)	ND	0.1	
Carbon Tetrachloride	ND	0.1	
Trichloroethene	ND	0.1	
Benzene	ND	0.1	
Tetrachloroethene	ND	0.1	
Chlorobenzene	ND	0.1	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950511 95-A7081
Lab ID:	48312-01
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/11/95
% Solids	-

TCLP Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	67		35	114
2 - Fluorobiphenyl	68		43	116
p - Terphenyl - d14	87		33	141
Phenol - d5	53		10	94
2 - Fluorophenol	67		21	100
2,4,6 - Tribromophenol	53		10	123

Analyte	Result (mg/L)	PQL	Flags
1,4-Dichlorobenzene	ND	0.01	
2-Methylphenol	ND	0.01	
3 & 4-Methylphenol	ND	0.01	
Hexachloroethane	ND	0.01	
Nitrobenzene	ND	0.01	
Hexachlorobutadiene	ND	0.01	
2,4,6-Trichlorophenol	ND	0.01	
2,4,5-Trichlorophenol	ND	0.01	
2,4-Dinitrotoluene	ND	0.01	
Hexachlorobenzene	ND	0.01	
Pentachlorophenol	ND	0.05	
Pyridine	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Philip Environmental Laboratory
Project: EPNG Company
Lab No. 48312
May 12, 1995

Chaco Plant
"B" Cooling Tower

Lab Sample No. 48312-2 Client ID: 950512 95-A7082

Toxicity Characteristic Leaching Procedure (TCLP) Method 1311
ICP Metals by EPA Method 6010
Date Extracted: 5-4-95
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Arsenic	0.23	0.10	5.0
Barium	0.93	0.005	100.0
Cadmium	ND	0.005	1.0
Chromium	0.48	0.01	5.0
Lead	0.10	0.05	5.0
Selenium	ND	1.0	1.0
Silver	ND	0.01	5.0

Mercury by Cold Vapor AA Per EPA Method 7470
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Mercury	ND	0.002	0.2

ND - Not Detected
PQL - Practical Quantitation Limit

3

SOUND ANALYTICAL SERVICES, INC.

Client Name:	Philip Environmental Laboratory
Client ID:	950512 95-A7082
Lab ID:	48312-02
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/9/95
% Solids	-

TCLP Volatile Organics by USEPA Method 8240

Surrogate	% Recovery	Flags	Recovery Limits Low	High
1,2-Dichloroethane-d4	94		76	114
Toluene-d8	94		88	110
Bromofluorobenzene	87		86	115

Analyte	Result (mg/L)	PQL	Flags
Vinyl Chloride	ND	0.2	
1,1-Dichloroethene	ND	0.1	
Chloroform	ND	0.1	
1,2-Dichloroethane	ND	0.1	
2-Butanone (MEK)	ND	0.1	
Carbon Tetrachloride	ND	0.1	
Trichloroethene	ND	0.1	
Benzene	ND	0.1	
Tetrachloroethene	ND	0.1	
Chlorobenzene	ND	0.1	

6

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950512 95-A7082
Lab ID:	48312-02
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/11/95
% Solids	

TCLP Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	68		35	114
2 - Fluorobiphenyl	70		43	116
p - Terphenyl - d14	85		33	141
Phenol - d5	60		10	94
2 - Fluorophenol	65		21	100
2,4,6 - Tribromophenol	54		10	123

Analyte	Result (mg/L)	PQL	Flags
1,4-Dichlorobenzene	ND	0.01	
2-Methylphenol	ND	0.01	
3 & 4-Methylphenol	ND	0.01	
Hexachloroethane	ND	0.01	
Nitrobenzene	ND	0.01	
Hexachlorobutadiene	ND	0.01	
2,4,6-Trichlorophenol	ND	0.01	
2,4,5-Trichlorophenol	ND	0.01	
2,4-Dinitrotoluene	ND	0.01	
Hexachlorobenzene	ND	0.01	
Pentachlorophenol	ND	0.05	
Pyridine	ND	0.01	

C

SOUND ANALYTICAL SERVICES, INC.

Philip Environmental Laboratory
Project: EPNG Company
Lab No. 48312
May 12, 1995

Chaco Plant
"C" Cooling Tower

Lab Sample No. 48312-3 Client ID: 950513 95-A7083

Toxicity Characteristic Leaching Procedure (TCLP) Method 1311
ICP Metals by EPA Method 6010
Date Extracted: 5-4-95
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Arsenic	0.22	0.10	5.0
Barium	0.55	0.005	100.0
Cadmium	ND	0.010	1.0
Chromium	0.05	0.01	5.0
Lead	0.07	0.05	5.0
Selenium	ND	1.0	1.0
Silver	ND	0.01	5.0

Mercury by Cold Vapor AA Per EPA Method 7470
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Mercury	ND	0.002	0.2

ND - Not Detected
PQL - Practical Quantitation Limit

4

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950513 95-A7083
Lab ID:	48312-03
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/9/95
% Solids	

TCLP Volatile Organics by USEPA Method 8240

Surrogate	% Recovery	Flags	Recovery Limits Low	High
1,2-Dichloroethene-d4	94		76	114
Toluene-d8	105		88	110
Bromofluorobenzene	79	X9	86	115

Analyte	Result (mg/L)	PQL	Flags
Vinyl Chloride	ND	0.2	
1,1-Dichloroethene	ND	0.1	
Chloroform	ND	0.1	
1,2-Dichloroethane	ND	0.1	
2-Butanone (MEK)	0.11	0.1	
Carbon Tetrachloride	ND	0.1	
Trichloroethene	ND	0.1	
Benzene	ND	0.1	
Tetrachloroethene	ND	0.1	
Chlorobenzene	ND	0.1	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	350513 95-A7063
Lab ID:	48312-03
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/11/95
% Solids	

TCLP Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	80		35	114
2 - Fluorobiphenyl	81		43	116
p - Terphenyl - d14	81		33	141
Phenol - d5	59		10	94
2 - Fluorophenol	62		21	100
2,4,6 - Tribromophenol	12		10	123

Analyte	Result (mg/L)	PQL	Flags
1,4-Dichlorobenzene	ND	0.01	
2-Methylphenol	ND	0.01	
3 & 4-Methylphenol	ND	0.01	
Hexachloroethane	ND	0.01	
Nitrobenzene	ND	0.01	
Hexachlorobutadiene	ND	0.01	
2,4,6-Trichlorophenol	ND	0.01	
2,4,5-Trichlorophenol	ND	0.01	
2,4-Dinitrotoluene	ND	0.01	
Hexachlorobenzene	ND	0.01	
Pentachlorophenol	ND	0.05	
Pyridine	ND	0.01	

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal | Time 8:00 AM | Date 8-15-96

Originating Party	Other Parties
Mr. David Bays - EPFS (Returning my call from 8-14-96)	Pat Sanchez - OCD

Subject: August 12, 1996 from EPFS requesting the spreading of Non-Hazardous cooling Tower sludge at the Chaco Plant site.

Discussion: (1) I asked David if EPFS had run RIC on the Sludge - He said no - the sludge according to David is too "liquid" like for RIC.
(2) David said he had spoke to RCA about the spreading of the sludge and RCA said it was okay. (Note: OCD has verbally approved of this in the past according to Mr. Bays/and our own files - see letter from EPNG dated August 6, 1993.)
(3) I made David aware that his analysis of the ple sludge was over 1 yr. old - He said it is still okay based on knowledge of process and that RCA said the analysis was still good.

Conclusions or Agreements: (1) Pat Sanchez will Draft a letter of approval for RCA to sign - Note: I do not agree with #(1) above - also letter dated August 12, 1996 has no certification Regarding F, K, P, U listing!

Distribution: File, RCA, Denny Foust

Signed: Patricia W. Sanchez

EPFS

EL PASO FIELD SERVICES

August 12, 1996

New Mexico Oil Conservation Division
Attn: Mr. Pat Sanchez
2040 S. Pacheco
Santa Fe. NM 87505

Dear Mr. Sanchez:

El Paso Field Services Co. (EPFS) has scheduled the annual shut down for our Chaco Plant to begin on September 9, 1996. As required by the Discharge Plan, number GW-71, during the shut down we will drain, clean and inspect the basins of the three plant cooling towers.

The sludge from the cooling towers was characterized prior to the 1995 shut down, and found to be free of any RCRA regulated component. The waste stream has not been modified in any way since that analysis (a copy is attached for your reference). Based on the characterization of this waste stream, EPFS proposes to spread the solid material on a road way within the plant fence. The liquid waste from the cooling towers will be placed in the contact waste water ponds.

If you need any more information, please call me at (505) 599-2256.

Sincerely yours,

David Bays

David Bays, REM
Sr. Environmental Scientist

cc: Mr. Denny Foust- NMOCD - Aztec
S. D. Miller/J. Sterrett/Chaco Gen. File

SOUND ANALYTICAL SERVICES, INC.

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: Philip Environmental Laboratory Date: May 12, 1995

Report On: Analysis of Sludge Lab No.: 48312

IDENTIFICATION:
Samples received on 04-28-95
Project: EPNG Company
P. O. No. 58659

ANALYSIS:

Chacc Plant
"A" Cooling Tower

Lab Sample No. 48312-1 Client ID: 950511 95-A7081

Toxicity Characteristic Leaching Procedure (TCLP) Method 1311
ICP Metals by EPA Method 6010
Date Extracted: 5-4-95
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Arsenic	0.19	0.10	5.0
Barium	0.65	0.005	100.0
Cadmium	ND	0.005	1.0
Chromium	0.33	0.01	5.0
Lead	0.08	0.05	5.0
Selenium	ND	1.0	1.0
Silver	ND	0.01	5.0

Mercury by Cold Vapor AA Per EPA Method 7470
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Mercury	ND	0.002	0.2

ND - Not Detected
PQL - Practical Quantitation Limit

2

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950511 95-A7081
Lab ID:	48312-01
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/9/95
% Solids	-

TCLP Volatile Organics by USEPA Method 8240

Surrogate	% Recovery	Flags	Recovery Limits Low	High
1,2-Dichloroethane-d4	97		78	114
Toluene-d8	91		88	110
Bromofluorobenzene	102		86	115

Analyte	Result (mg/L)	PQL	Flags
Vinyl Chloride	ND	0.2	
1,1-Dichloroethene	ND	0.1	
Chloroform	ND	0.1	
1,2-Dichloroethane	ND	0.1	
2-Butanone (MEK)	ND	0.1	
Carbon Tetrachloride	ND	0.1	
Trichloroethene	ND	0.1	
Benzene	ND	0.1	
Tetrachloroethene	ND	0.1	
Chlorobenzene	ND	0.1	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950511 95-A7081
Lab ID:	48312-01
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/11/95
% Solids	-

TCLP Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	67		35	114
2 - Fluorobiphenyl	68		43	116
p - Terphenyl - d14	87		33	141
Phenol - d5	58		10	94
2 - Fluorophenol	67		21	100
2,4,6 - Tribromophenol	53		10	123

Analyte	Result (mg/L)	PQL	Flags
1,4-Dichlorobenzene	ND	0.01	
2-Methylphenol	ND	0.01	
3 & 4-Methylphenol	ND	0.01	
Hexachloroethane	ND	0.01	
Nitrobenzene	ND	0.01	
Hexachlorobutadiene	ND	0.01	
2,4,6-Trichlorophenol	ND	0.01	
2,4,5-Trichlorophenol	ND	0.01	
2,4-Dinitrotoluene	ND	0.01	
Hexachlorobenzene	ND	0.01	
Pentachlorophenol	ND	0.05	
Pyridine	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Philip Environmental Laboratory
Project: EPNG Company
Lab No. 48312
May 12, 1995

Chaco Plant
"B" Cooling Tower

Lab Sample No. 48312-2 Client ID: 950512 95-A7082

Toxicity Characteristic Leaching Procedure (TCLP) Method 1311
ICP Metals by EPA Method 6010
Date Extracted: 5-4-95
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Arsenic	0.23	0.10	5.0
Barium	0.93	0.005	100.0
Cadmium	ND	0.005	1.0
Chromium	0.48	0.01	5.0
Lead	0.10	0.05	5.0
Selenium	ND	1.0	1.0
Silver	ND	0.01	5.0

Mercury by Cold Vapor AA Per EPA Method 7470
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Mercury	ND	0.002	0.2

ND - Not Detected
PQL - Practical Quantitation Limit

3

SOUND ANALYTICAL SERVICES, INC.

Client Name:	Philip Environmental Laboratory
Client ID:	950512 95-A7082
Lab ID:	48312-02
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/9/95
% Solids	

TCLP Volatile Organics by USEPA Method 8240

Surrogate	% Recovery	Flags	Recovery Limits Low	High
1,2-Dichloroethane-d4	94		76	114
Toluene-d8	94		88	110
Bromofluorobenzene	87		86	115

Analyte	Result (mg/L)	PQL	Flags
Vinyl Chloride	ND	0.2	
1,1-Dichloroethene	ND	0.1	
Chloroform	ND	0.1	
1,2-Dichloroethane	ND	0.1	
2-Butanone (MEK)	ND	0.1	
Carbon Tetrachloride	ND	0.1	
Trichloroethene	ND	0.1	
Benzene	ND	0.1	
Tetrachloroethene	ND	0.1	
Chlorobenzene	ND	0.1	

G

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	960512 95-A7082
Lab ID:	48312-02
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/11/95
% Solids	

TCLP Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	68		35	114
2 - Fluorobiphenyl	70		43	116
p - Terphenyl - d14	85		33	141
Phenol - d5	60		10	94
2 - Fluorophenol	65		21	100
2,4,6 - Tribromophenol	54		10	123

Analyte	Result (mg/L)	PQL	Flags
1,4-Dichlorobenzene	ND	0.01	
2-Methylphenol	ND	0.01	
3 & 4-Methylphenol	ND	0.01	
Hexachloroethane	ND	0.01	
Nitrobenzene	ND	0.01	
Hexachlorobutadiene	ND	0.01	
2,4,6-Trichlorophenol	ND	0.01	
2,4,5-Trichlorophenol	ND	0.01	
2,4-Dinitrotoluene	ND	0.01	
Hexachlorobenzene	ND	0.01	
Pentachlorophenol	ND	0.05	
Pyridine	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Philip Environmental Laboratory
Project: EPNG Company
Lab No. 48312
May 12, 1995

Chaco Plant
"C" Cooling Tower

Lab Sample No. 48312-3 Client ID: 950513 95-A7083

Toxicity Characteristic Leaching Procedure (TCLP) Method 1311
ICP Metals by EPA Method 6010
Date Extracted: 5-4-95
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Arsenic	0.22	0.10	5.0
Barium	0.55	0.005	100.0
Cadmium	ND	0.010	1.0
Chromium	0.05	0.01	5.0
Lead	0.07	0.05	5.0
Selenium	ND	1.0	1.0
Silver	ND	0.01	5.0

Mercury by Cold Vapor AA Per EPA Method 7470
Date Analyzed: 5-5-95
Units: mg/L

Parameter	Result	PQL	Max Conc.
Mercury	ND	0.002	0.2

ND - Not Detected
PQL - Practical Quantitation Limit

4

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950513 95-A7083
Lab ID:	48312-03
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/9/95
% Solids	

TCLP Volatile Organics by USEPA Method 8240

Surrogate	% Recovery	Flags	Recovery Limits Low	High
1,2-Dichloroethane-d4	94		76	114
Toluene-d8	105		88	110
Bromofluorobenzene	79	X9	86	115

Analyte	Result (mg/L)	PQL	Flags
Vinyl Chloride	ND	0.2	
1,1-Dichloroethene	ND	0.1	
Chloroform	ND	0.1	
1,2-Dichloroethane	ND	0.1	
2-Butanone (MEK)	0.11	0.1	
Carbon Tetrachloride	ND	0.1	
Trichloroethene	ND	0.1	
Benzene	ND	0.1	
Tetrachloroethene	ND	0.1	
Chlorobenzene	ND	0.1	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Philip Environmental Laboratory
Client ID:	950513 95-A7083
Lab ID:	48312-03
Date Received:	4/28/95
Date Prepared:	5/9/95
Date Analyzed:	5/11/95
% Solids	

TCLP Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	60		35	114
2 - Fluorobiphenyl	61		43	116
p - Terphenyl - d14	81		33	141
Phenol - d5	59		10	94
2 - Fluorophenol	62		21	100
2,4,6 - Tribromophenol	12		10	123

Analyte	Result (mg/L)	PQL	Flags
1,4-Dichlorobenzene	ND	0.01	
2-Methylphenol	ND	0.01	
3 & 4-Methylphenol	ND	0.01	
Hexachloroethane	ND	0.01	
Nitrobenzene	ND	0.01	
Hexachlorobutadiene	ND	0.01	
2,4,6-Trichlorophenol	ND	0.01	
2,4,5-Trichlorophenol	ND	0.01	
2,4-Dinitrotoluene	ND	0.01	
Hexachlorobenzene	ND	0.01	
Pentachlorophenol	ND	0.05	
Pyridine	ND	0.01	

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

August 14, 1996

P 594 835 304

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

Sent to Mr. Ricky Crosby	
Street & Number EPFS - Minor Mod.	
Post Office, State, & ZIP Code Gw-71 Chaco	
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

CERTIFIED MAIL
RETURN RECEIPT NO. P-594-835-304

Mr. Ricky D. Cosby
Compliance Specialist
El Paso Field Services (EPFS)
P.O. Box 4990
Farmington, NM 87499

RE: Minor Modification
GW-71, Chaco Plant
San Juan County, NM

Dear Mr. Cosby:

The New Mexico Oil Conservation Division (OCD) has received the EPFS letter dated August 7, 1996 requesting the addition of a 100 barrel steel lubricating oil storage tank at the Chaco Plant to serve the "Bisti 8" compressor. The EPFS request is considered a minor modification to the above referenced discharge plan and public notice will not be issued. **The requested minor modification is hereby approved,** with the following conditions:

1. **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.

2. **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.

3. **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.

The Application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3107.C and is approved pursuant to WQCC Regulation 3109.

Please note that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3107.C EPFS is required to notify the Director of any facility expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

Note, that OCD approval does not relieve EPFS of liability should EPFS operation's result in contamination of surface waters, ground waters or the environment.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/pws

XC: Mr. Denny Foust - Environmental Geologist

AUG 12 1996

EPFS
EL PASO FIELD SERVICES

P. O. Box 4990
Farmington, NM 87499

August 7,1996

Mr. Bill Olson
New Mexico Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, NM 87504

RECEIVED
AUG 13 1996
Environmental Bureau
Oil Conservation Division

RE: **Minor Modification to the Discharge Plan GW-71**
EPNG Chaco Canyon Gas Processing Plant

Mr. Olson

El Paso Services requests approval for a minor modification to the Chaco Plant Discharge Plan. The modification will incorporate one-100 bbl. tank for the storage of unused lube oil servicing the new caterpillar "Bisti 8" compressor. The Chaco Plant facility is located in SW/4 Section 16, Township 26N, Range 12W.

Tank and assembly specifications are as follows:

- One (1)- 100 bbl. aboveground tank for bulk storage servicing the new Bisti 8 skid mounted compressor.
- One (1) air driven Wilden Model M-2 pump (placed inside berm) for pumping lube oil from the storage tank to the day tank.
- The tank is to be placed on the former electrically driven "Bisti 8" concrete compressor pad foundation (compressor has been retired and replaced with a skid mounted caterpillar compressor).
- The compressor pad and area within a metal berm will be covered with approximately 3" of soil. An impermeable liner will cover this area and an additional 2" to 3" of soil will be placed over the top of the liner.
- The metal will be able to contain at a minimum 1/3 times the total capacity of the tank.
- A 1"O.D. or larger line to transfer the new lube oil to the lube oil "day tank".

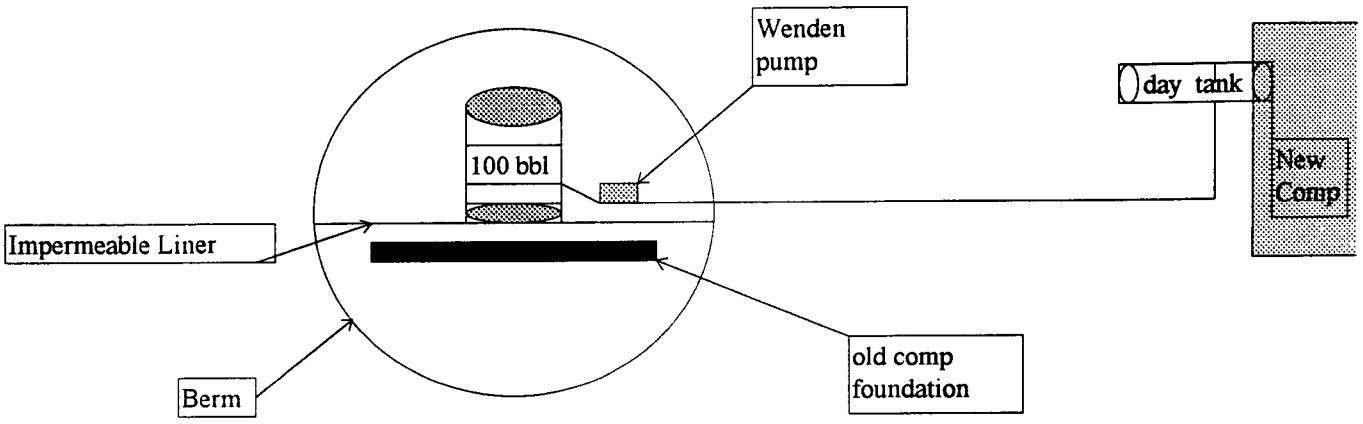
EPFS requests approval for the subject tank installation. If you require more information please don't hesitate to call (505)599-2158.

Thank you.

Ricky D. Cosby
Compliance Specialist

cc: Denny Foust
File: Chaco Plant Discharge Plan GW-71 1996 Chaco Regulatory

Installation of 100bbl. lube oil storage tank.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

June 13, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. P-269-269-390

Mr. Patrick Marquez
El Paso Field Services Company
P.O. Box 4990
Farmington, NM 87499

Re: Minor Modification to Discharge Plan (GW-71)
Chaco Gas Plant
San Juan County, New Mexico

Dear Mr. Marquez:

The New Mexico Oil Conservation Division has received El Paso Field Services Company's correspondence dated March 8, 1996 requesting approval to modify the existing discharge plan (GW-71). The modification proposed is to transfer contact water from the permitted lined ponds to industrial pond #3 and the temporary lined pond on an as needed basis.

Based upon the information provided, the New Mexico Oil Conservation Division hereby approves the transfer of the contact water under the following conditions:

1. This is a temporary approval for a period of one year. The temporary approval will expire March 8, 1997. Formal reapplication must be sought at that time if the ponds are to be used past that date.

2. This contact water shall be annually sampled , and a report submitted to the New Mexico Oil Conservation Division, for the constituents listed in Water Quality Control Commission Regulation 3103.A except for the radioactive species. This condition is consistent with the September 14, 1994 conditions of approval for the installation of the lined evaporation ponds and can be incorporated into that required annual report.

3. All other discharge plan requirements will remain in effect.

Please be advised that New Mexico Oil Conservation Division approval does not relieve El Paso Field Services Company of liability should their operation result in pollution of ground water, surface water or the environment. In addition, New Mexico Oil Conservation Division approval does not relieve El Paso Field Services Company of responsibility for compliance with other federal, state and/or local regulations.

If there are any questions on this matter, please contact Chris Eustice at (505) 827-7153.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/cee

cc: New Mexico Oil Conservation Division-Aztec Office

EPFS

EL PASO FIELD SERVICES

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

March 8, 1996

Subject: **Request approval to transfer contact water (CW) to Industrial Pond #3 and extend the approval period for the use of the Temporary Lined Pond at Chaco Plant.**

History

- Lined ponds installed in mid 1995
- Began to experience capacity problems in December 1995
- Received approval for temporary pond to alleviate the capacity problem and to accommodate the liner repairs.

Current Status of the Pond Operation

- All three lined ponds are approximately one week shy of full capacity
- Based on preliminary investigation of the lined pond capacity, EPFS feels that: 1) the lined pond design may be inadequate 2) upstream changes in gas quality (i.e. water content) have changed, increasing water volume

Extent of EPFS's Requests/Proposal

- To prevent the uncontrolled release of CW - immediately begin transfer of (CW) to the former unlined (CW) pond immediately west to the lined ponds (industrial pond #3 which currently accepts non-contact water). This proposal is supported by the following:

1. Chaco Plant is **outside** the water vulnerable zone (Appropriate map is attached)
2. The former pond was used for nearly 40 years with no significant impact to ground water - Monitor well data has been provided to your office via annual MW analysis report and flare pit/contact water pond closure report.

EPFS's Plans for a Permanent Solution

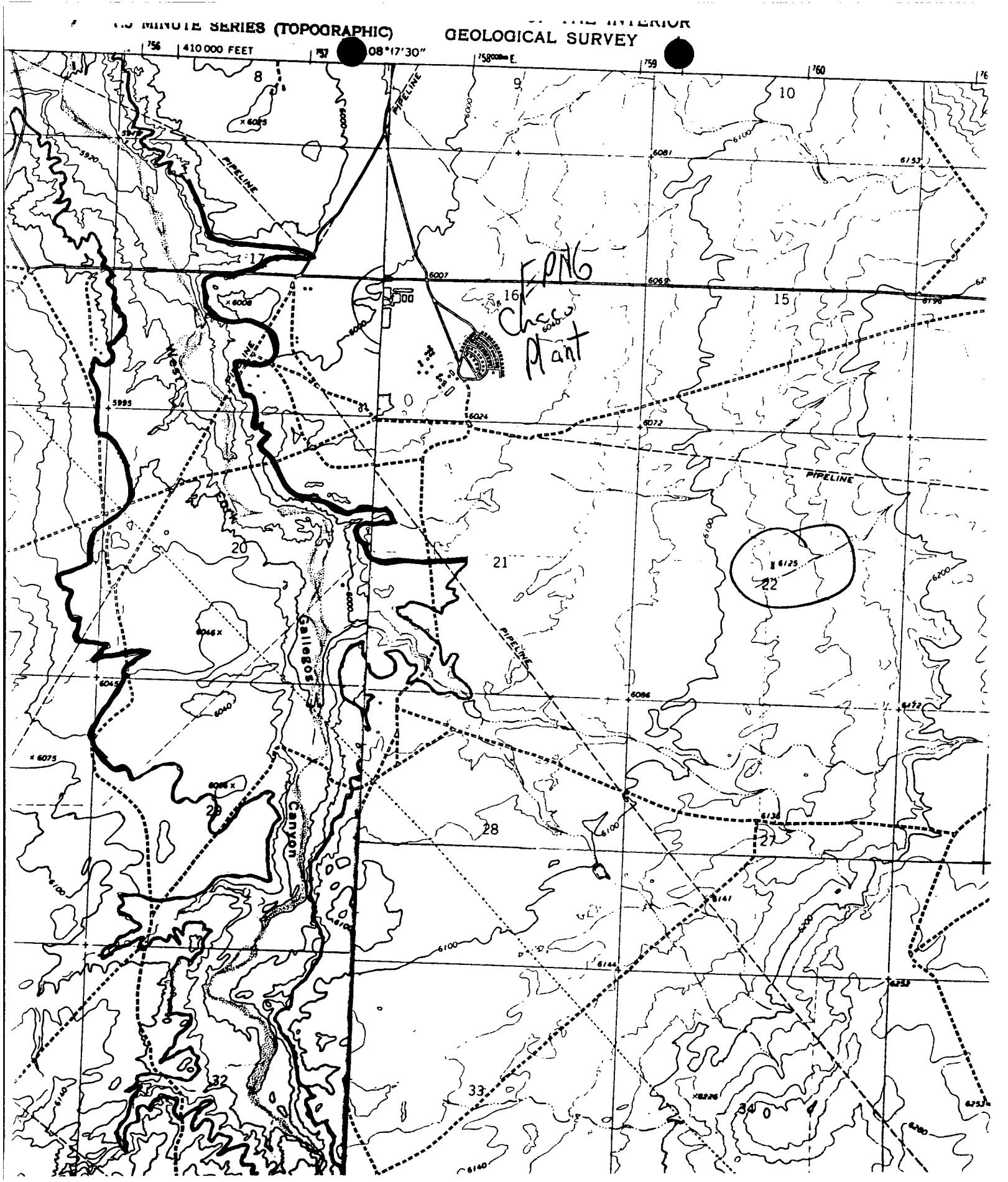
- EPFS has and will continue to investigate the sources and volumes of contact water entering the lined ponds.
- Permanent solutions may include: 1) Construction and operation of additional lined ponds 2) reuse of the CW in the processing of natural gas liquids 3) redesign/modification to the enhanced evaporation system.

El Paso Field Services respectfully requests permission to 1) transfer contact water from the lined ponds to industrial pond #3 on an as need basis for a period of six months and 2) extend the approval for use of the temporary lined pond for an additional six months. At that time EPFS shall update the NMOCD on the progress of the investigation/solutions. Please call at 505-599-2175 if you need additional information.

Thank you,

Patrick J. Marquez
Compliance Engineer

cc:
Denny Foust (NMOCD- Aztec)
Bob Yungert
Lyndell Smith/Gerry Hoover
Sandra Miller/David Bays/Ricky Cosby/File: 5212 Chaco Regulatory


15 MINUTE SERIES (TOPOGRAPHIC)
GEOLOGICAL SURVEY
410 000 FEET
08°17'30"
PIPELINE
Chaco Plant
Gallegos Canyon

EPFS
EL PASO FIELD SERVICES

Rec. by DWG on 8-15-96

Mr. Chris Eustice
New Mexico Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, NM 87504

June 3, 1996

Re: Annual Report for Chaco Plant Non-Contact Water Use by Outside Agencies and Request for Modification to Approval Procedures

Mr. Eustice,

As you know, several outside agencies have and continue to request the use of Chaco Plant's non-contact water for natural gas/oil exploration & production and road maintenance activities. As a condition for this use EPFS is required to submit an annual report documenting these requests, the intended use and volumes. Attached you will find signed agreements and the log sheets documenting this use.

Due to the frequency of these request, EPFS request that the following procedure be implemented to accommodate the outside agencies, EPFS and The NMOCD:

1. Outside agencies will continue to sign EPFS' "Agreement for Non-contact Water Use" prior to the removal of water from Chaco Plant at the time of their initial request. This agreement essentially re-emphasizes NMOCD's specifications for the water's use. EPFS will keep these agreements on file and submit them to the NMOCD with the Annual Report of Non-Contact Water Use.
2. Use for dust suppression/road maintenance by San Juan County be approved on an annual basis to avoid the "case by case notification" required by NMOCD per the approval letter dated February 15, 1995 (attached). San Juan County shall be responsible for obtaining this approval and submitting the approval to EPFS/Chaco Plant.
3. All other conditions specified in the February 15th letter shall be observed.

This procedure should shorten the time consuming administrative duties imposed on EPFS and the NMOCD without jeopardizing the compliant use of the non-contact water. Please consider this course and contact me at 505-599-2175 if you have questions about this information or the suggested procedure.

Thank you,

P. J. Marquez

Patrick J. Marquez
Compliance Engineer

xc:
w/attach
Denny Foust - NMOCD
S.Miller/D.Bays/R.Cosby/File: Chaco Plant Regulatory

w/o attach
David Keck - San Juan County
P.Quintana/G.Hoover/M.Hansen

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 2/1/96

or cash received on _____ in the amount of $ 50.00

from El Paso Nat Chaco Co

for Chaco Plant GW071

(Facility Name) (DP No.)

Submitted by: _____ Date: _____

Submitted to ASD by: R C Anderson Date: 3/25/96

Received in ASD by: Angela Herrera Date: 3-29-96

Filing Fee X New Facility ___ Renewal ___

Modification ___ Other _____

(specify)

Organization Code 521.07 Applicable FY 96

To be deposited in the Water Quality Management Fund.

Full Payment ___ or Annual Increment ___

THIS MULTI-TONE AREA OF THE DOCUMENT CHANGES COLOR GRADUALLY AND EVENLY FROM DARK TO LIGHT WITH DARKER AREA [redacted]

EL PASO NEW CHACO COMPANY
P O Box 99234 El Paso, TX 79999-9234

Payable At
CITIBANK DELAWARE
ONE PENN'S WAY
NEW CASTLE, DE 19720

62-20
311

Date 02/01/96

Pay ****Fifty and 00/100 US Dollars****

To The Order Of

Pay Amount $50.00****

Void After 1 Year

NMED WATER QUALITY MANAGEMENT
2040 S PACHECO
SANTA FE, NM 87505

Filing Fee for GW-071
Approval (Receipt No. Z-765-962-604)

H. Grant Austin

Authorized Signature

COPYBAN® ANTI-FRAUD PROTECTION - PATENTS 4,210,346; 4,227,720; 4,310,180; 5,197,766

[redacted]

Check Date: 02/01/96 EL PASO NEW CHACO COMPANY Phone: 915/541-3885 **Check No:** [redacted]

Voucher	Comment	Invoice	Invoice Date	Amount	Discount	Paid Amount
00000031		CKREQ960131	01/31/96	$50.00	$0.00	$50.00

Filing Fee for GW-071
Discharge Modification for Chaco Cryo Plant.
NMOCD to EPFS 12/21/95 Receipt # Z-765-962-604

Vendor Number	Vendor Name			Total Discounts	
0000000969	NMED WATER QUALITY MANAGEMENT			$0.00	
Check Number	**Date**	**Account No.**	**Total Amount**	**Discount Taken**	**Total Paid Amount**
[redacted]	02/01/96		$50.00	$0.00	**$50.00**

EPFS
EL PASO FIELD SERVICES

February 2, 1996

Mr. Chris Eustice
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87504

Subject: Filing Fee for Major Modification to Groundwater Discharge Plan GW-071

Dear Mr. Eustice:

Enclosed you will find the a check (#01000008) for payment of the filing fee associated with EPNG's latest request for modification to Discharge Plan GW-071.

The approval letter dated December 21, 1995 states that this payment had already been received by your office; however, several weeks later you informed me that, in fact, it had not. Our records confirm that only the flat rate of one thousand sixty-seven dollars and fifty cents ($1667.50) had been paid to the NMOCD leaving a balance of fifty dollars ($50).

Please do not hesitate to call if you need information at 505 599 2175.

Thank you,

P. S. Marquez

Patrick J. Marquez
Compliance Engineer

cc:

File: 5212 Chaco Plant

January 11, 1996

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-962-606

Mr. Patrick Marquez
El Paso Natural Gas Company
P.O. Box 4990
Farmington, New Mexico 87499

Re: Contact Water Ponds
*** Chaco Gas Plant (GW-71)**
San Juan County, New Mexico

Dear Mr. Marquez:

The New Mexico Oil Conservation Division (OCD) has received El Paso Natural Gas Company's (EPNG) request dated December 11, 1995 to transfer water from the north and south contact water ponds to a temporarily lined pond. This transfer of water will allow EPNG to repair leaks in the liners of both the north and the south contact water ponds and provide the needed storage capacity for an excess of contact water.

Based upon the information provided the OCD hereby approves the request subject to the following conditions:

1. A temporary pond will be lined with a 12 mil liner and the water from the two permanent contact water ponds will be transferred to this temporarily lined pond.

2. Leaks in the two permanent contact water pond liners will be repaired and the results of the repairs will be reported to the OCD.

3. EPNG will submit a closure plan to the OCD Santa Fe Office for the temporary pond prior to initiating closure activities.

4. This temporary pond is authorized until June 30, 1996.

Please be advised that OCD approval does not relieve EPNG of liability should their operation result in pollution of ground water, surface water or the environment. In addition, OCD approval does not relieve EPNG of responsibility for compliance with other federal, state and/or local regulations.

If there are any questions on this matter, please contact me at (505) 827-7153.

Sincerely,

Chris Eustice
Geologist

xc: OCD Aztec Office

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 1/4/96,

or cash received on 1/16/96 in the amount of $ 1667.50

from EPNG C (EPNG)

for Chaco Plant (Facility Name) GW-21 (DP No.)

Submitted by: _____ Date: _____

Submitted to ASD by: [signature] Date: 1/16/96

Received in ASD by: Cinda Herrera Date: 1-17-96

Filing Fee ___ New Facility ___ Renewal ___

Modification X Other _____ (specify)

Organization Code 5210.7 Applicable FY 96

To be deposited in the Water Quality Management Fund.

Full Payment X or Annual Increment ___

[redacted]

THIS MULTI-TONE AREA OF THE DOCUMENT CHANGES COLOR GRADUALLY AND EVENLY FROM DARK TO LIGHT WITH DARKER AREAS

EL PASO NEW CHACO COMPANY
P.O. Box 99234
El Paso, TX 79999-9234

Payable at
CITIBANK DELAWARE
ONE PENN'S WAY
NEW CASTLE, DE 19720

62-20
311

Date 01/04/96

Pay ****One Thousand Six Hundred Sixty-Seven and 50/100 US Dollars****

Pay Amount $1,667.50****

To The Order Of

NMED WATER QUALITY MANAGEMENT
2040 S PACHECO
SANTA FE, NM 87505

Void After 1 Year

[signature]
Authorized Signature

COPYBANK ANTI-FRAUD PROTECTION - PATENTS

[redacted]

Check Date: 01/04/96 EL PASO NEW CHACO COMPANY Phone: 915/541-2600 **Check No:** [redacted]

Voucher	Comment	Invoice	Invoice Date	Amount	Discount	Paid Amount
00000010		CHKREQ010396	01/03/96	$1,667.50	$0.00	$1,667.50

Chaco Mod.

Vendor Number	Vendor Name			Total Discounts	
0000000969	NMED WATER QUALITY MANAGEMENT			$0.00	
Check Number	**Date**	**Account No.**	**Total Amount**	**Discount Taken**	**Total Paid Amount**
[redacted]	01/04/96		$1,667.50	$0.00	$1,667.50