HIP - 44

GENERAL CORRESPONDENCE

YEAR(S):

1993 - 1994

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505
(505) 827-7133
Fax: (505) 827-8177

(PLEASE DELIVER THIS FAX)

To: Steve Nelson (505) 327-6332

From: Martyne Kieling (505) 827-7153

Date: 7-30-99

Number of Pages (Includes Cover Sheet) Page 1 of 3

Message: M.A. Pipeline Co. Hydrostatic test Discharge Permit

If you have any trouble receiving this, please call:
(505) 827-7133

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

July 29, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. P-326-936-565

Mr. Ken Klagett
Mid-America Pipeline Co.
135 E. 9th St. Suite A
Durango, CO 81301

Re: Hydrostatic Test Water Discharge Permit
Mid-America Pipeline Company
NW/4 of Section 13, Township 28 North, Range 11 West, NMPM,
San Juan County, New Mexico

Dear Mr. Klagett:

The New Mexico Oil Conservation Division (OCD) has received the Mid-America Pipeline Company (MAPL) request dated July 27, 1999 and supplemental information provided by phone on July 29, 1998 for authorization to discharge approximately 1,500,000 gallons of waste water from the hydrostatic test of approximately 28 miles of 16 inch new pipeline at the above referenced locations.

Based on the information provided in the request, the hydrostatic test water discharge is hereby approved subject to the following conditions:

1. The test water (1,500,000 gallons) will be discharged into the unlined earthen pit located at Williams Kutz Station, Bloomfield NM in NW/4 of Section 13, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico and allowed to evaporate.

2. Only San Juan River water shall be used in the hydrostatic test. Approval to use San Juan River water must be obtained from the appropriate agency prior to testing.

4. At the time of pit closure any solids that accumulate in the pit as a result of the discharge will be subject to full hazardous waste characterization testing to determine the proper means of disposal

5. At the time of pit closure the analytical results will be made available to the OCD along with a request for disposal of the accumulated solids.

Pursuant to WQCC Regulation 3-106.B, this approval will allow MAPL to discharge without an approved discharge plan for a period not to exceed 120 days. If the site is to be used for more than one test discharge, formal reapplication must be made. If the discharge exceeds 120 days, a formal discharge plan must be submitted for review.

Please be advised that this approval does not relieve MAPL of liability should their operation result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve MAPL of responsibility for compliance with other federal, state or local laws and/or regulations.

If there are any questions, please call Martyne Kieling at (505) 827-7153.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

RCA/mjk

xc: OCD Aztec Office
Mr. Steve Nelson, Nelson Consulting Inc., 600 Reilly Ave., Farmington, NM 87402

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time	Date
	10:30	7-29-99

Originating Party	Other Parties
Montgine Kieling	Steve Nelson

Subject: Mid American Pipeline test of 1,500,000 gal

Discussion:

Length of Pipe ≈ 28 miles 147,690. ~~ft~~

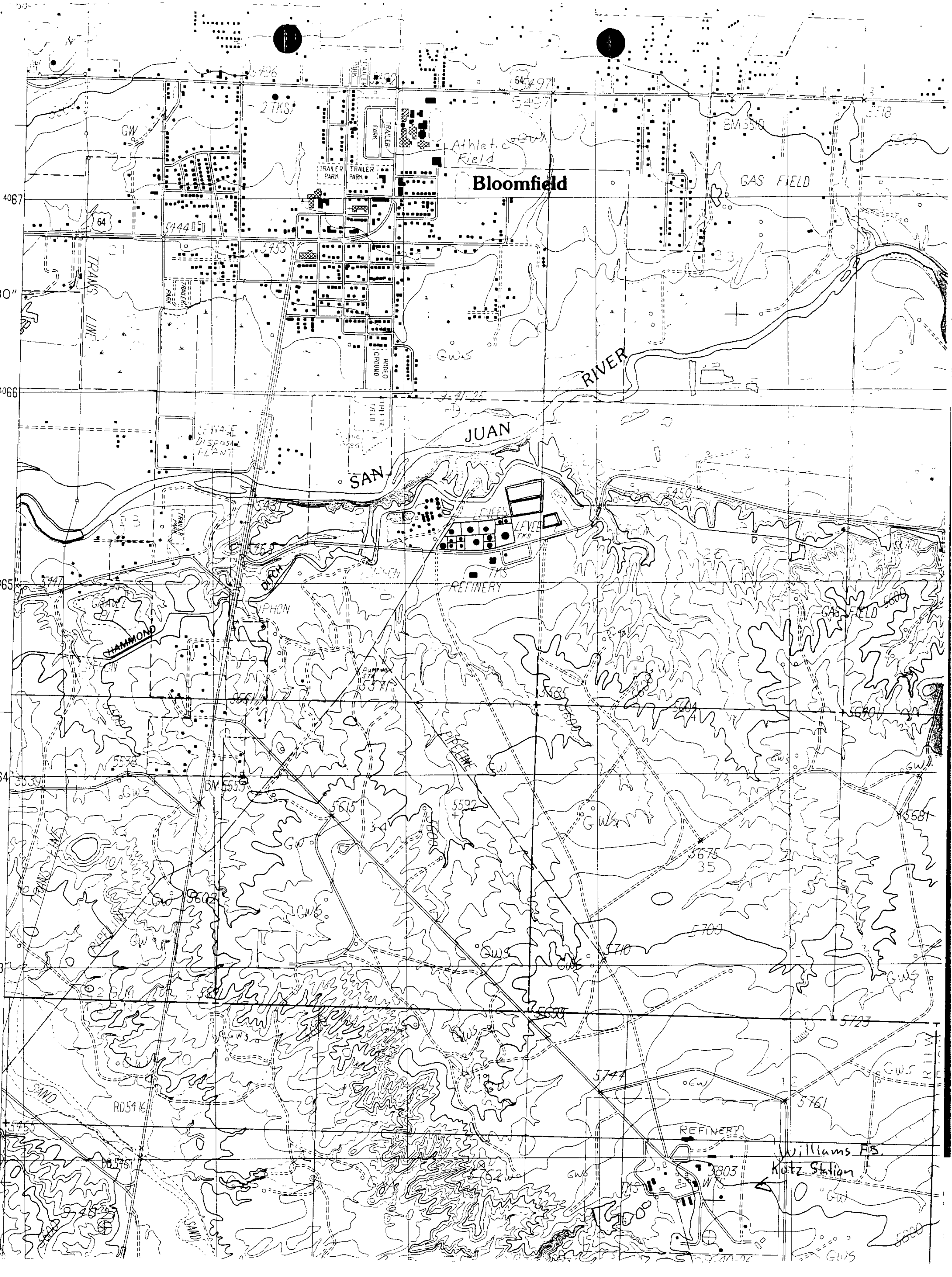
Diameter of Pipe 16 inch

≈ Depth to Gw +100 Feet

Conclusions or Agreements

Distribution

Signed


Bloomfield
SAN JUAN RIVER
Athletic Field
TRAILER PARK
RODEO GROUND
GAS FIELD
BM 5510
Sewage Disposal Plant
LEVEES
TKS
REFINERY
DITCH
SIPHON
GRAVEL PIT
HAMMOND
TRANS LINE
PIPELINE
PUMPING STA
BM 5555
SAND
REFINERY
Williams F.S.
Kutz Station
12′ 30″
40′
4067
4066
4065
4064
4063
4062

MID-AMERICA PIPELINE COMPANY

SEP 03 1998

August 31, 1998

City of Bloomfield
P.O. Box 1839
Bloomfield, New Mexico 87413

Attn: Merle Dennis, City Manager

RE: Mid-America Pipeline Company – Rocky Mountain Loop Project
Request to Purchase Water from the City of Bloomfield

Dear Mr. Dennis,

As discussed in your telephone conversation with Charlie Allaben of ENSR, Mid-America Pipeline Company (Mid-America) wishes to lease water from the City of Bloomfield, New Mexico. Mid-America would use this water for hydrostatic testing of a new natural gas pipeline. Following are the agreed upon terms of the lease as understood by Mid-America based on your telephone conversation with Mr. Allaben:

- Mid-America would notify the City of Bloomfield prior to withdrawal of water from the San Juan River;
- Mid-America would be responsible for securing access to the San Juan River;
- Mid-America would withdraw water directly from the San Juan River at the pipeline crossing location;
- Mid-America would meter all water withdrawn from the San Juan River;
- Mid-America would pay the City of Bloomfield $0.25 per 1,000 gallons of water withdrawn after completion of the withdrawals;
- Mid-America expects that less than 5 acre-feet of water will be required for hydrostatic testing and would notify the City of Bloomfield prior to withdrawal if it is determined that more water is needed;
- Mid-America would not withdraw water from the San Juan River after January 31, 1999, under this agreement.

If you concur with the proposed method of proceeding with this transaction, please sign this letter and the attached duplicate in the space provided and return them to our office at:

Mid-America Pipeline Company
Rocky Mountain Loop Project Office
135 East 9th Street, Suite A
Durango, Colorado 81301

If you have any questions regarding this correspondence, please contact Charlie Allaben of ENSR at (970) 493-8878 or me at (970) 383-8535.

Sincerely,
Mid-America Pipeline Company

Gary Harkey
Project Manager

Cc: Steve Nelson/Nelson Consulting
Charlie Allaben/ENSR
Ronald L. Hobbs, MAPCO

AGREEMENT

I concur with the terms stated herein for the sale of water by the City of Bloomfield to Mid-America Pipeline Company:

City of Bloomfield

Signature: Sidney L Maestas

Printed Name Sidney L. Maestas

Title: Mayor

Date: Sept. 8, 1998

Mid-America Pipeline Company

Signature:

Printed Name: Ronald L. Hobbs

Title: Administrator Real Estate Services

Date: 11/18/98

Nelson Consulting, Inc.

600 Reilly Ave.
Farmington, NM 87402

Phone 505-327-6331
Fax 505-327-6332

(505) 320 0011

July 27, 1999

Ms. Martyne Kieling
New Mexico Energy, Minerals& Natural Resources Department
Oil Conservation Division
2040 South Pacheco St.
Santa Fe, NM 87505

RE: MAPCO Rocky Mountain Expansion Project / Hydrostatic Discharge

Ms. Kieling,

Williams Companies/ Mid America Pipeline Co. are requesting a discharge permit for the new 16" pipeline project being constructed in New Mexico. I have attached a copy of the Guidelines for Hydrostatic Test Dewatering and the answers to those points.
I you have any questions dealing with this request please contact me at 505-327-6331.
Thank you.

Sincerely yours,

Steve L Nelson
Lead BLM Compliance

Cc: NMOCD District III, Aztec
Ingrad Deklau Williams
Gary Harkey Williams
West Hickham Williams
Spence George Williams

Mid America Pipeline Company 7-27-99

General:

1. Water to be put into an unlined earthen pit at Williams Kutz Station, Bloomfield, NM

2. Preliminary Test results attached.

3. Attached

New Pipelines:

1. a) Water volume 1,500,000 gallons

   b) Water taken from the San Juan River, San County, NM.

   c) Water will not re-enter the area waterways.

   d) Ground water is more than 10 feet from the surface. ≈ 100 ft.

   e) Water will not impact BLM ground adjacent to the private property of Williams Kutz Station.

   f) Discharge does not affect fresh water supplies.

   g) This is a one-time disposal.

      1) NW ¼, NW ¼, of Section 13, Township 28N, Range 11W

      2) Date of test 7-30-99

      3) 1,500,000 gallons

      4) San Juan River, Test results attached, The Company is adding anti corrosion chemicals of 120 parts per million of Bactron K-95 and Corton RU-206.

Preface:

This document shall be used as a guide for the preparation of plans and specifications for the discharge of water used for hydrostatic testing of new or existing pipelines that have or will transport hydrocarbon products under the jurisdiction of the Oil Conservation Division (OCD). These include crude oil pipelines and all natural gas pipelines. Hydrostatic testing of these pipelines may lead to the production of water which is contaminated with organic compounds which, if not discharged properly, may contaminate fresh water supplies.

General:

1. No water used in the hydrostatic testing of a petroleum pipeline shall be discharged in unauthorized pits, in any watercourse or in any other place or manner which may constitute a hazard to fresh water supplies.

2. In order for hydrostatic test wastewater to be discharged in an area where it may reach fresh water supplies, it must be demonstrated that the wastewater discharges will meet or be better than the quality of the receiving waters and/or not cause the ground water to exceed standards as set forth in Section 3103 A, B, and C of the New Mexico Water Quality Control Commission Regulations.

3. All analyzes of samples will include, but are not limited to, major anions and cations (Ca, Mg, Na, K, HCO3, CO3, Cl, SO4), heavy metals (As, Ba, Cd, Pb, Hg, Se, Fe, Zn), aromatic and halogenated hydrocarbons screens, TDS, Fe, Mn, ph and conductivity. Analyzes for selected other heavy metals may be required depending on the source of the water used and the discharge location. PAH (Polynuclear Aromatic Hydrocarbons) analyzes for used pipelines may be needed.

New Pipelines:

1. Hydrostatic tests of less than 100,000 gallons per test do not require individual permit applications. A renewable five (5) year, discharge permit may be issued, upon application, when the following conditions are applicable:

   a) The volume per test does not exceed 100,000 gallons.

   b) Fresh water from a water supply system or other potable source is used for the test.

c) The discharge does not enter any lake, perennial stream, river or their respective tributaries that may be seasonal.

d) Ground water is not less than 10 feet from the surface at the point of discharge.

e) The discharge does not impact adjacent property.

f) The discharge does not cause any fresh water supplies to be degraded or to exceed standards as set forth in Section 3103A, B, and C of the New Mexico Water Quality Control Commission Regulations.

g) A monthly report, summarizing all tests of new pipe with less than 100,000 gallons each, will be submitted to the OCD and shall contain the following information.

1) Location of test-Section, Township and Range.

2) Date of test.

3) Volume of discharge.

4) Source and quality of test water.

2. A hydrostatic test of new pipe of less than 100,000 gallons that does not meet the conditions of 2 above, or of more than 100,000 gallons will require a discharge permit approved by the OCD prior to commencement. Items to be included in the permit application include:

a) Map showing location of the pipelines to be tested;

b) Description of the test;

c) Source and analysis of test water;

d) Point of discharge of the test water;

e) Method and location for collection and retention of fluids and solids;

f) Depth of ground water at discharge and collection/retention site;

g) Proposed method of disposal of fluids and solids after test completion including closure of any pits;

h) Identification of land owners at and adjacent to the discharge and

Champion Technologies

BACTRON K-95

Biocide

P. O. Box 450499 Houston, Texas 77245 (713) 431-2561

- PHOSPHONIUM QUATERNARY SULFATE.
- EFFECTIVE AGAINST BOTH AEROBIC AND ANAEROBIC FORMS OF BACTERIA.
- HAS SURFACE ACTIVE PROPERTIES FOR PENETRATION OF PROTECTIVE DEPOSITS AND SLIMES.
- EFFECTIVE UNDER ACID, NEUTRAL AND ALKALINE CONDITIONS.
- SUITABLE FOR BOTH SLUG AND CONTINUOUS INJECTION APPLICATIONS.
- SOLUBLE IN FRESH WATER, SEA WATER AND LOW TO MEDIUM BRINES.

Typical Applications

In Water Handling Systems, Pipelines And Packer Fluids.

Treatment Guidelines

- Water Handling Systems and Pipelines Initially: Slug treat with 100-350 ppm for 2-6 hours as needed.
- Subsequently: Slug treat with 15-100 ppm for 2-6 hours as needed or continuously at 15-75 ppm.
- Packer Fluids
- 500-1500 ppm depending on the severity of contamination.

Transfer & Injection Equipment

- Because of the low pH value, all equipment should be of corrosion resistant materials.

TYPICAL PROPERTIES*	
Specific Gravity @ 60°F	1.369+/-0.01
Density, lbs/gal @ 60°F	11.4
Flash Point, (PMCC) °F	NONE
Viscosity, cps @ 75°F	30 - 40
Pour Point, °F	
pH	3.3 - 4.4

*Data might not be current. See latest MSD sheet.

Precautions & Other

- Incompatible with strong oxidizers and strong bases.

Handling & Storage

- Store in cool, dry area away from direct sunlight.
- Handle with care. Protect eyes and skin with goggles, face shield and protective clothing.
- For more information see Material Safety Data Sheet.

For further information and specific recommendations please contact your local Champion representative. RP-05/98

Champion Technologies

CORTRON RU-206

Inorganic Oxygen Scavenger

P. O. Box 450499 Houston, Texas 77245 (713) 431-2561

- CATALYZED BISULFITE SOLUTION.
- PREVENTS CORROSION CAUSED BY DISSOLVED OXYGEN.
- PREVENTS PRECIPITATION OF IRON OXIDE AND RESULTANT PLUGGING OF INJECTION WELLS.
- HELPS CONTROL AEROBIC BACTERIA.

Typical Applications

- Continuous Injection into Water Handling Systems.
- Treatment of any Water (Packer Fluids, Waters for Steam Generators, "Moth-Balling" solutions for Shut-In Wells and Pipelines, etc.) in Which Oxygen Corrosion is a Potential Problem.

Treatment Guidelines

- Theoretically, 12 ppm will scavenge 1 ppm oxygen.
- On a practical basis, continuous injection of 14-15 ppm might be needed for quick removal of 1 ppm oxygen.
- A slight excess (residual) should be maintained to assure complete oxygen removal.
- For static environments, 0.38 gallons will remove 1 ppm oxygen from 1000 bbls of water.

Dispersibility

- Completely soluble in fresh water and most produced brines. See Precautions.

Handling & Storage

Observe normal precautions for industrial chemicals. Keep away from heat, sparks and open flames. For more information see Material Safety Data Sheet.

TYPICAL PROPERTIES*	
Specific Gravity @ 75°F	1.35
Density, lbs/gal @ 75°F	11.1
Flash Point, (PMCC) °F	>200
Viscosity, cps @ 75°F	10 - 20
Pour Point, °F	-30
pH	4.7 - 5.2

*Date might not be current. See latest MSD sheet.

Precautions & Other

- Incompatible with high calcium brines. Specially formulated oxygen scavengers are available for use in such water.
- Incompatible with many biocides. If both oxygen scavenger and biocide must be used, the scavenger should be injected well upstream in the system so that it is reacted out before the biocide is injected.
- Reaction rate is much slower at low temperatures. A special catalyst is available to increase the reaction rate in cold water.

Transfer & Injection Equipment

Because of the low pH value, all equipment should be of corrosion resistant materials.

For further information and specific recommendations please contact your local Champion representative.

08/92
RDS-07/99

MATERIAL SAFETY DATA SHEET

BACTRON K-95

SECTION 1 - IDENTIFICATION IBM 70059

Champion Technologies, Inc.
3130 FM 521 Fresno, TX 77545
PO. BOX 450499 Houston, TX 77245

EMERGENCY TELEPHONE NUMBERS
1-281-431-2561
1-800-424-9300 CHEMTREC

Trade Name: BACTRON K-95
Chemical Family: TETRAKISHYDROXYMETHYL PHOSPHONIUM SULFATE (THPS)
CAS No.: 55566-30-8 Current as of: 4/08/99 By: DAVID H. DRAKE

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Components	CAS No.	Wt.%	OSHA(PEL)
THPS	55566-30-8	75	NE

# Denotes a chemical subject to the reporting requirements of SARA Title III section 313 of 1986 and 40 CFR part 372.
SARA Title III Hazard Catagories: 1

The components of this product are listed on the EPA/TSCA Inventory

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SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point, F:	>200	Specific Gravity (H2O=1):	1.369
Vapor Pressure (mm Hg):	ND	Evaporation Rate:	ND
Vapor Density (Air=1):	ND	(butyl acetate=1)	
pH:	3.2	Viscosity:	ND
Solubility in Water:	MISCIBLE		
Appearance and Odor:	CLEAR, COLORLESS LIQUID, PUNGENT ODOR		

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point, F & Method: NONE PMCC Based on: THPS
Flammable Limits: LEL,% NONE UEL,% NONE

FIRE HAZARDS:
This product is non-flammable; however, if other combustible materials are in the vicinity, these will dictate the necessary actions. Effects of heat on this product can generate an irritant vapor; therefore, the use of a a self-contained breathing apparatus is essential in fire situations.

EXTINGUISHING MEDIA:
Small fires: use sand, foam, dry chemical (powder), carbon dioxide or water spray.
Large fires: use foam or dry chemical (powder)
Hazardous thermal decomposition products include phosphine, phosphine is spontaneously flammable.

Abbreviations: NA=not applicable, ND=not determined, NE=not established

BACTRON K-95

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Chemical Stability: STABLE

Conditions To Avoid: Temperatures above 160 C

Incompatibility (materials to avoid):
Reacts vigorously with oxidizing agents and alkali

Hazardous Decomposition/Byproducts:
Formaldehyde, phosphine, sulfur/phosphorus oxides

Hazardous Polymerization: WILL NOT OCCUR

Hazard Rating Scale: HEALTH: 2 FIRE: 0 REACTIVITY: 0

(4=severe, 3=serious, 2=moderate, 1=slight, 0=minimal)

SECTION 6 - HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY
Inhalation: X Absorption: X Ingestion: X Injection: NA

HEALTH HAZARDS:
Eye and Skin: Severe irritant to the eyes or mucous membranes; absorbed through intact skin; liver toxicity may occur; skin sensitization may occur Allergic contact dermatitis may result following skin sensitization.
Inhalation: Inhalation of mists or fumes may result in respiratory irritation.
Target organ warning: Contains material which causes irritation of the eyes skin or mucous membranes and may cause liver toxicity. California Warning: This product may contain a chemical known to cause cancer, or birth defects or other reproductive harm. Contains <0.1% formaldehyde.

EMERGENCY & FIRST AID PROCEDURES:
IF INHALED: Remove to fresh air. If breathing has stopped, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician. IN CASE OF CONTACT: Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash clothing before re-use. IF INGESTED: Call physician or poison control center. Drink 1 or 2 glasses of water if conscious.
NOTE TO PHYSICIAN: Precautions for shock, respiratory depression and convulsions may be needed.

IF CONDITIONS PERSIST, SEEK MEDICAL ATTENTION.

Carcinogenicity? NO NTP? NO IARC Monograph? NO OSHA Regulated? NO

BACTRON K-95

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
ENVIRONMENTAL IMPACT: Report spills as required to appropriate authorities. Regulations require immediate reporting of spills that could reach any waterway. Report spill to National Response Center - 800 424 8802.
SPILL: Absorb on diatomaceous earth or inert material. Shovel up and dispose of at an appropriate waste disposal facility.
WASTE MANAGEMENT: Neutralize with soda ash and shovel solid into a sealable container. Dispose of at an appropriate waste disposal facility.

WASTE DISPOSAL METHOD:
Contact an EPA or State Approved Disposal Facility.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type):
Wear NIOSH-approved respiratory equipment when there is a potential for airborne exposure. (Recommend exposure limit to be set a 3 mg/m3, TWA-8 hours

Ventilation: Local Exhaust: Recommended General Exhaust: Recommended

Special: Organic and particulate respirator

Protective Gloves: Nitrile or neoprene gloves

Eye Protection: Chemical Safety Goggles / Safety Glasses

Other Protective Clothing or Equipment: Coveralls, Splash Aprons, Eye Wash, and Safety Shower

Work/Hygenic Practices:
Clean up Spills Promptly, Wash Contaminated Clothing.

SECTION 9 - SHIPPING DATA

Hazard Classification: NOT-REGULATED DOT ER Guide No.: NONE
Labels Required: NONE UN/NA No.: NONE

Proper Shipping Name/Description:
NOT REGULATED
BACTRON K-95

DOT RQ in Lbs: NA Flash Point, F: NONE Pkg. Group: NONE
DOT RQ in Gal: NA pH: 3.2 IMDG Pg.No.: NONE

This information is based on data believed by Champion Technologies, Inc. to be accurate, but no warranty, express or implied is made.

MATERIAL SAFETY DATA SHEET

CORTRON RU-206

SECTION 1 - IDENTIFICATION IBM 11069

Champion Technologies, Inc.
3130 FM 521 Fresno, TX 77545
PO. BOX 450499 Houston, TX 77245

EMERGENCY TELEPHONE NUMBERS
1-281-431-2561
1-800-424-9300 CHEMTREC

Trade Name: CORTRON RU-206
Chemical Family: AMMONIUM BISULFITE
CAS No.: PROPRIETARY Current as of: 1/24/98 By: R. CORRY

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Components	CAS No.	Wt.%	OSHA(PEL)
AMMONIUM BISULFITE	10192-30-0	60	ND

# Denotes a chemical subject to the reporting requirements of SARA Title III section 313 of 1986 and 40 CFR part 372.
SARA Title III Hazard Catagories: 1

The components of this product are listed on the EPA/TSCA Inventory

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SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point, F:	ND	Specific Gravity (H2O=1):	1.35
Vapor Pressure (mm Hg):	ND	Evaporation Rate:	ND
Vapor Density (Air=1):	ND	(butyl acetate=1)	
pH:	4.7-5.2	Viscosity:	10-20 CPS
Solubility in Water:	SOLUBLE		
Appearance and Odor:	CLEAR LIGHT PINK LIQUID		

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point, F & Method			Flammable Limits:	LEL,% ND
>200	PMCC	Based on: NA		UEL,% ND

FIRE HAZARDS:
This material may burn, but does not readily ignite.

EXTINGUISHING MEDIA:
Dry chemical, CO2, water spray or regular foam. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of containers.

Abbreviations: NA=not applicable, ND=not determined, NE=not established

CORTRON RU-206

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Chemical Stability: STABLE

Conditions To Avoid: OPEN FLAMES, SPARKS

Incompatibility (materials to avoid):
STRONG OXIDIZERS

Hazardous Decomposition/Byproducts:
OXIDES OF CARBON AND NITROGEN

Hazardous Polymerization: WILL NOT OCCUR

Hazard Rating Scale: HEALTH: 2 FIRE: 0 REACTIVITY: 0

(4=severe, 3=serious, 2=moderate, 1=slight, 0=minimal)

SECTION 6 - HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY
Inhalation: X Absorption: X Ingestion: X Injection: NA

HEALTH HAZARDS:
May be hazardous if inhaled, ingested or absorbed through the skin. Corrosive to tissue. Direct contact with eyes and skin may cause severe damage and burns. Vapors or mists may cause irritation of mucous membranes.

EMERGENCY & FIRST AID PROCEDURES:
In case of EYE contact, immediately flush eyes with running water and continue washing for at least 15 minutes. In case of INGESTION, give 2 glasses of water and induce vomiting. Obtain medical attention without delay. In case of SKIN contact, remove contaminated clothing and wash skin with soap and water. Obtain medical attention if irritation persists. Wash clothing before rewearing. In case of INHALATION, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen may be given by qualified personnel.

IF CONDITIONS PERSIST, SEEK MEDICAL ATTENTION.

Carcinogenicity? NO NTP? ND IARC Monograph? ND OSHA Regulated? NO

CORTRON RU-206

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Neutralize with alkali. Good ventilation is required during neutralization due to release of SO2 and possibly NH3. Neutralize waste and dispose of at an EPA or State approved disposal facility.

WASTE DISPOSAL METHOD:
Contact an EPA or State Approved Disposal Facility.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type):
USE NIOSH APPROVED RESPIRATOR IF PEL IS EXCEEDED

Ventilation: Local Exhaust: Recommended General Exhaust: Recommended

Special: USE SCBA WHEN ENTERING TANKS

Protective Gloves: Chemically Resistant / Non-Slip

Eye Protection: Chemical Safety Goggles / Safety Glasses

Other Protective Clothing or Equipment: Coveralls, Splash Aprons, Eye Wash, and Safety Shower

Work/Hygenic Practices:
Clean up Spills Promptly, Wash Contaminated Clothing.

SECTION 9 - SHIPPING DATA

Hazard Classification: 8
Labels Required: CORROSIVE
DOT ER Guide No.: 154
UN/NA No.: UN 2693

Proper Shipping Name/Description:
BISULFITES,AQUEOUS SOLUTIONS,N.O.S.,8,UN 2693,PG III
(AMMONIUM BISULFITE)

DOT RQ in Lbs: 8,333 Flash Point, F: >200 Pkg. Group: III
DOT RQ in Gal: 741 pH: 4.7-5.2 IMDG Pg.No.: 8126

This information is based on data believed by Champion Technologies, Inc. to be accurate, but no warranty, express or implied is made.

Champion Technologies, Inc.
2060 SOUTH 1500 EAST
VERNAL, UTAH 84078

Water Analysis Report

Telephone (801) 789-4327

Customer :	**Williams Field Services**	**Field :**	Farmington
Address :		**Lease :**	Farmington
City :		**Location :**	San Juan River
State :	**Postal Code :**	**Sample Point :**	river
Attention :		**Date Sampled :**	20-May-99
cc1 :		**Date Received :**	25-May-99
cc2 :		**Date Reported :**	27-May-99
cc3 :		**Salesman :**	Clay Bingham
Comments :		**Analyst :**	Karen Hawkins Allen

CATIONS

Calcium :	224	mg/l
Magnesium :	156	mg/l
Barium :	0	mg/l
Strontium :	0	mg/l
Iron :	1.0	mg/l
Sodium :	713	mg/l

ANIONS

Chloride :	1,800	mg/l
Carbonate :	0	mg/l
Bicarbonate :	122	mg/l
Sulfate :	108	mg/l

pH (field) :	7.90		**Specific Gravity :**	1.0050	grams/ml
Temperature :	70	degrees F	**Total Dissolved Solids :**	3,124	ppm
Ionic Strength :	0.06		**CO2 in Water :**	1	mg/l
			CO2 in Gas :	0.03	mole %
Resistivity :		ohm/meters	**H2S in Water :**	0.0	mg/l
Ammonia :		ppm	**Dissolved Oxygen :**	8.000	ppm

SI calculations based on Tomson-Oddo parameters

Calcite (CaCO3) SI :	0.51	Calcite PTB :	27.9
Calcite (CaCO3) SI @ 100 F :	0.82	Calcite PTB @ 100 F :	39.4
Calcite (CaCO3) SI @ 120 F :	1.03	Calcite PTB @ 120 F :	45.7
Calcite (CaCO3) SI @ 140 F :	1.24	Calcite PTB @ 140 F :	50.6
Calcite (CaCO3) SI @ 160 F :	1.47	Calcite PTB @ 160 F :	54.9
Gypsum (CaSO4) SI :	-2.07	Gypsum PTB :	N/A
Barite (BaSO4) SI :	N/A	Barite PTB :	N/A
Celestite (SrSO4) SI :	N/A	Celestite PTB :	N/A

Table 1. Coupon appearance following treatment with oxygen scavenger and biocide.

Treatment	24 hours	4 Days
Animas Controls	Covered with brown precipitate, spotted coupon	covered with brown precipitate, black patches on coupons
Animas: 120ppm RU – 206 and 240 ppm K – 103	Clear solution, slight blackness on edges of coupon	Few brown precipitate, black coupon
Animas: 120 ppm RU – 206, and 125 ppm K – 95	Clear solution, Clean coupon	clear solution, clean coupon
McPhee controls	covered with brown precipitate, spotted coupon	covered with brown precipitate, many black patches on coupon
McPhee: 120 ppm RU – 206, and 240 ppm K – 103	Brown precipitate, clean coupon	Brown and black precipitate, spotted coupon
McPhee: 120 ppm RU – 206, and 125 ppm K – 95	clear solution, clean coupon	Clear solution, clean coupon few black precipitate
Florida controls	covered with brown precipitate, spotted coupon	covered with brown precipitate, small black patches on coupon
Florida: 120 ppm RU – 206, and 240 ppm K – 103	clear solution, few black spots on coupon	clear solution, black coupon
Florida: 120 ppm RU – 206, and 125 ppm K – 95	clear solution, clean coupon	clear solution, clean coupon

Table 2. Bacterial growth following treatment with oxygen scavenger and biocide.

Treatment	24 hours			4 Days		
	Log of bacterial cells/ml					
	AAP	ANAP	SRB	AAP	ANAP	SRB
Animas controls	3	2	1	4	3	1
Animas: 120ppm RU – 206 and 240 ppm K – 103	2	1	0	2	1	0
Animas: 120 ppm RU – 206, and 125 ppm K – 95	1	1	0	1	1	0
McPhee controls	3	2	0	4	3	0
McPhee: 120 ppm RU – 206, and 240 ppm K – 103	2	1	0	2	1	0
McPhee: 120 ppm RU – 206, and 125 ppm K – 95	1	1	0	1	1	0
Florida controls	3	3	0	6	6	1
Florida: 120 ppm RU – 206, and 240 ppm K – 103	1	1	0	2	1	0
Florida: 120 ppm RU – 206, and 125 ppm K - 95	1	0	0	1	1	0

Note

AAP = Aerobic acid producing bacteria
ANAP = Anaerobic acid producing bacteria
SRB = Sulfate reducing bacteria

ACZ Laboratories, Inc.
30400 Downhill Drive
Steamboat Springs, CO 80487

SAMPLE RECEIPT FORM

CLIENT: Champion DATE 5/26/99

PROJECT #: L23724

1) Does this project require special handling procedures such as CLP protocol?	(NA)	YES	NO
2) Are the custody seals on the cooler intact?	(NA)	YES	NO
3) Are the custody seals on the sample containers intact?	NA	(YES)	NO
4) Is there a Chain of Custody (COC), or other directive shipping papers present?		(YES)	NO
5) Is the COC complete?		(YES)	NO
Relinquished? Yes ___ No ___ Requested Analysis? Yes ___ No ___			
6) Is the COC in agreement with the samples received?		(YES)	NO
# of Samples: Yes ___ No ___ Sample ID: Yes ___ No ___			
Matrix: Yes ___ No ___ # of Containers: Yes ___ No ___			
7) Is there enough sample for all requested analysis?		(YES)	NO
8) Are all samples within holding times for requested analysis?		(YES)	NO
9) Were all sample containers received intact?		(YES)	NO
10) Are samples requiring no headspace, headspace free?	(NA)	YES	NO
11) Do the samples require a Foriegn Soils Permit Label or quarantine?		YES	(NO)

12) Do samples require special disposal/hold considerations?

Non-Hazardous: Yes ___ No ___ Hazardous: Yes ___ No ___ Hold: ___ months

Describe "NO" items (except #1, 11, & 12): ___

Was the client contacted? Yes ___ No ___

If yes: Date: ___ Name of person contacted: ___

Actions taken or client instructions: ___

Signature: ___

ACZ Laboratories, Inc.
30400 Downhill Drive
Steamboat Springs, CO 80487

SAMPLE RECEIPT FORM

CLIENT: Chevron DATE 5/28/99
PROJECT #: 623372 ANALYST: MT

TEMPERATURE VERIFICATION SAMPLE CHECK (°C)

CONTAINER ID	TEMP (°C) 2° to 6°	RAD µR/hr
Clients	—	16

If container radioactivity is > 25 µR/hr then each sample must be screened.

PRESERVATION CHECK (pH) & RADIOACTIVITY SCREEN

SAMPLE	R <2	G <2	Y <2	YG <2	B <2	BG <2	O <2	T >12	P >12	RAD µR/hr
1	—		+							
2	—		+							
3	—		+							
4	+		+							
5	+		+							
6	—		+							
7	+		+							

Temperature of container taken using temperature blank bottle __ or next to samples in container __.

INTERNAL COMMENTS: + preserved @ ACZ.

REPORT COMMENTS:

ALBRIGHT & WILSON

Biocides

TOLCIDE® PS

Results of current studies on the toxicity of Tetrakishydroxymethyl phosphonium sulphate (THPS)

The active ingredient, THPS, manufactured by Albright & Wilson Limited, forms the basis of the TOLCIDE PS range of biocide concentrates and formulations. Albright & Wilson Ltd has a total commitment to follow quality principles in the supply of its biocide products, with manufacture conforming to BS5750 part II, ISO 9002-1987, EN29002-1987.

It is the policy of Albright & Wilson Ltd to support the activities of our customers in the correct handling and use of our products. In those countries where registrations or approvals are required we will provide, where possible, appropriate toxicological data on our biocide products to allow compliance with local regulations for both active ingredient and end use formulations.

We make every endeavour to ensure that our technical, toxicological and environmental data is to current standards, follows recognised protocols such as those issued by the EPA, FDA, and OECD and conforms to the principles of Good Laboratory Practice. The following summary of toxicological data has been established using the active ingredient THPS at a 75% concentration in aqueous solution.

We will be pleased to offer further advice on any aspect of our products and to give assistance in ensuring their safe use. Our Regulatory Affairs department can also offer assistance in compliance with registration or approval procedures for formulated products based on our active ingredient supportive data.

For further information or advice on the toxicological profile of THPS, please contact the Albright & Wilson Biocides Group Technical Sales Staff.

Toxicological Profile
Tetrakishydroxymethyl phosphonium sulphate (THPS)

Acute Studies

Oral LD_{50} - Rats	- 575 mg/kg bodyweight.
Dermal LD_{50} - Rats	- >2000 mg/kg bodyweight.
Dermal Irritation - Rabbit	- No dermal irritation.
Eye Irritation - Rabbit	- Positive response in one animal, according to FIFRA criteria. Ocular lesions produced.
Inhalation - Rat (six hour exposure on four consecutive days)	- No toxicological significance.
Inhalation LC_{50} - Rats (4 hr)	- 5.55 mg/l.
Sensitisation (M&K) - Guinea Pig	- Positive sensitiser

ALBRIGHT & WILSON

Biocides

Toxicological Profile
Tetrakishydroxymethyl phosphonium sulphate (THPS)

Sub Acute Studies

13 week oral gavage - Rat	- Treatment for 13 weeks at dose levels of 1, 5 or 10 mg/kg/day. There were no clinical signs that could be associated with treatment. The only treatment related effects observed during this study were microscopic changes of the liver enzymes (ALT & AST). These responses were considered to be due to a direct toxic effect. The no observed effect level (NOEL) for this study was 1 mg/kg/day.
28 day dermal - Rat	- Application corrosive hence no longer term dermal study on Rat.
Oral Teratology (Gavage) - Rabbit	- Treatment at 60 mg/kg/day has elicited marked maternal toxicity. This has not adversely affected growth or survival of the embryo/foetus but a high incidence of foetuses showed characteristic eye and limb malformations. There was no indication of an effect of treatment, maternal or foetal, at 6 or 18 mg/kg/day.
Oral Teratology (Gavage) - Rat	- Treatment at 60 mg/kg/day elicited maternal toxicity in three animals. Since two foetuses in the group showed eye malformations and there was a significant increase in the incidence of foetuses with supernumerary ribs, an effect on development of the foetus could not be discounted. There was no indication of an effect of treatment, material or foetal at 15 mg/kg/day.

ALBRIGHT & WILSON

BIOcides

Toxicological Profile
Tetrakishydroxymethyl phosphonium sulphate (THPS)

Ecotoxicology - Freshwater

96 Hr LC_{50} - Rainbow trout	- 119 mg/l
96 Hr LC_{50} - Bluegill sunfish	- 93 mg/l < 22.7 mg/l - NOEC
48 Hr EC_{50} - Daphnia magna	- 19.4 mg/l
21 day Juvenile reproduction test under semistatic conditions - Daphnia magna	- age (days) / LC_{50} (µg/l) 4 - 7 / >320 14 / 179 21 / 154 32 µg/l - NOEC
EC_{50} algae - S. capricornutum	- 652 µg/l - ErC 204 µg/l - EbC

Ecotoxicology - Birds

LD_{50} - Mallard Duck	- 311 mg/kg bodyweight
Dietary LC_{50} - Mallard Duck	- 1313 ppm
Dietary LC_{50} - Bobwhite Quail	- 2414 ppm

Toxicological Profile
Tetrakishydroxymethyl phosphonium sulphate (THPS)

Ecotoxicology - Marine

96 Hr LC_{50} - Juvenile Plaice	- 86 mg/l
96 Hr LC_{50} - Brown Shrimp	- 340 mg/l
96 Hr LC_{50} - Mysid Shrimp	- 3.3 mg/l 1.3 mg/l NOEC
96 Hr LC_{50} - Sheepshead Minnow	- 74.3 mg/l 36 mg/l NOEC

EC_{50} - Oyster shell deposition

Age (days)	EC_{50} (mg/l)
4	0.91
10	0.81

ALBRIGHT & WILSON
Biocides

Albright & Wilson UK Limited
Water Management Chemicals
210-222 Hagley Road West
Oldbury, Warley
West Midlands B68 0NH
Telephone: 0121-420 5300
Telex: 339081
Fax: 0121-420 5320

Avonmouth Works
Avonmouth
Bristol BS11 0YT
Telephone: 0117[redacted]
Telex: 449301
Fax: 0117[redacted]

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 10:20	Date 7-2-98
Originating Party		**Other Parties**
Martyne Kieling		Steve Nelson (505) 327-6331 Nelson Consulting

Subject MID American Pipeline Co Hydrostatic test Discharge

Discussion

Volume of water : 622,000 gal
Type of Pipe : New Pipe
surface owner : BLM
Water Source : NAPE Irragation well water
≈ 400 'Above River Bottom San Juan River

Conclusions or Agreements

I Need to check Vunerable Area Status
No Liner Required if Gw is at Depth and not in Vunerable Area..

Distribution

Signed Martyne J Kieling

VULNERABLE AREA MAP CHECK
NW 1/4, SEC 21, T26, R10W

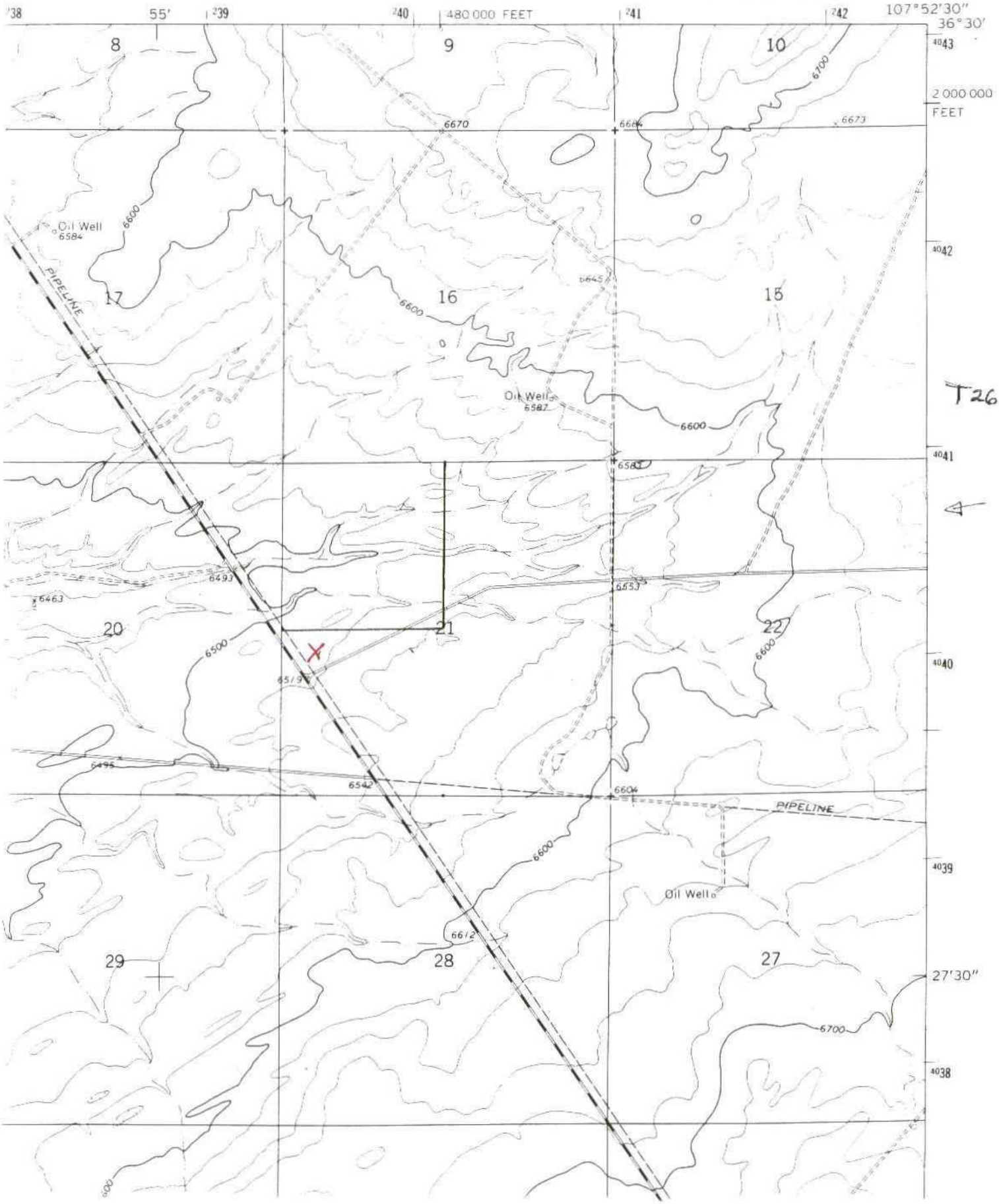
HUERFANO TRADING POST NW QUADRANGLE

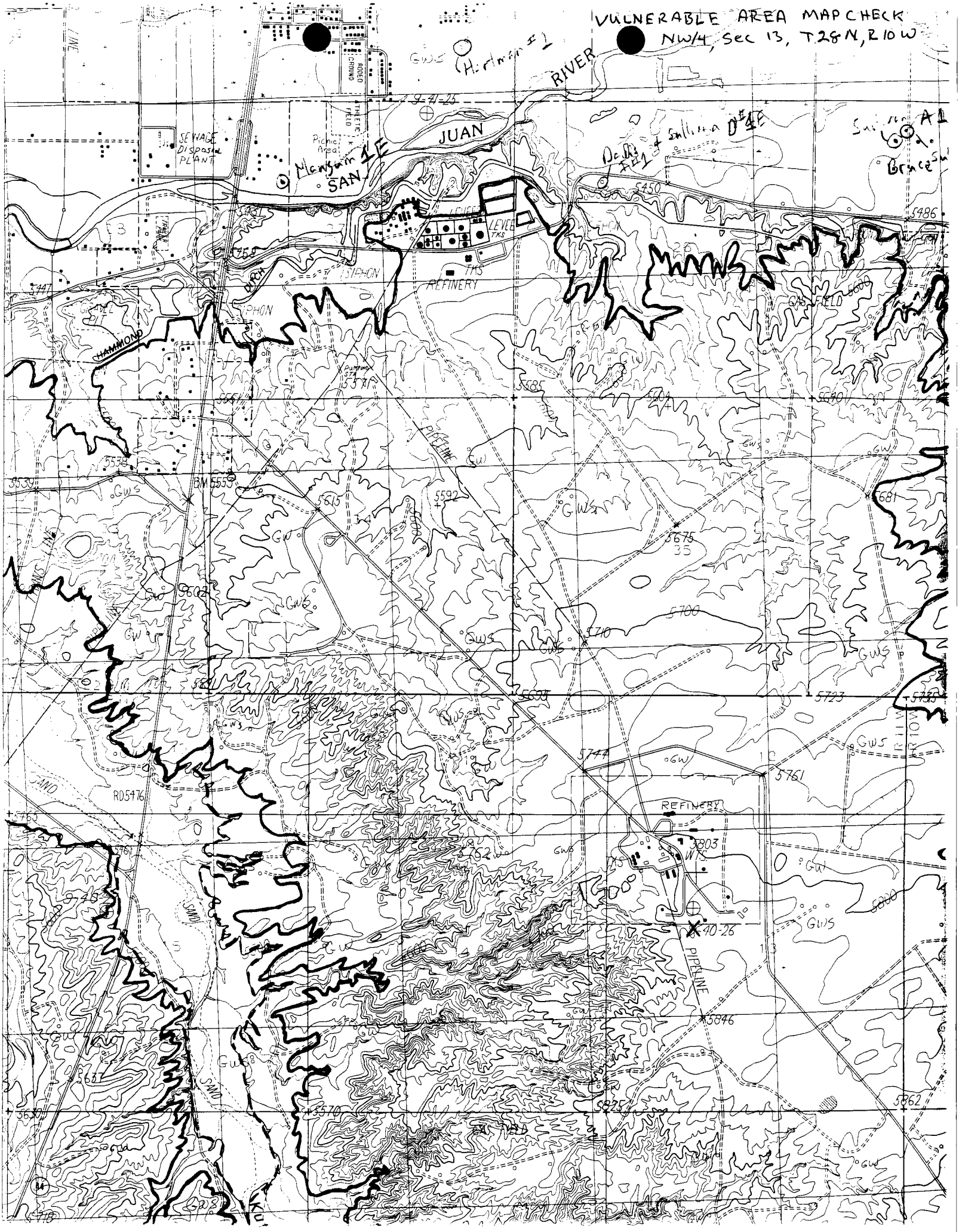
NEW MEXICO – SAN JUAN CO.

7.5 MINUTE SERIES (TOPOGRAPHIC)

~~Range~~ R 10 W

T26 N



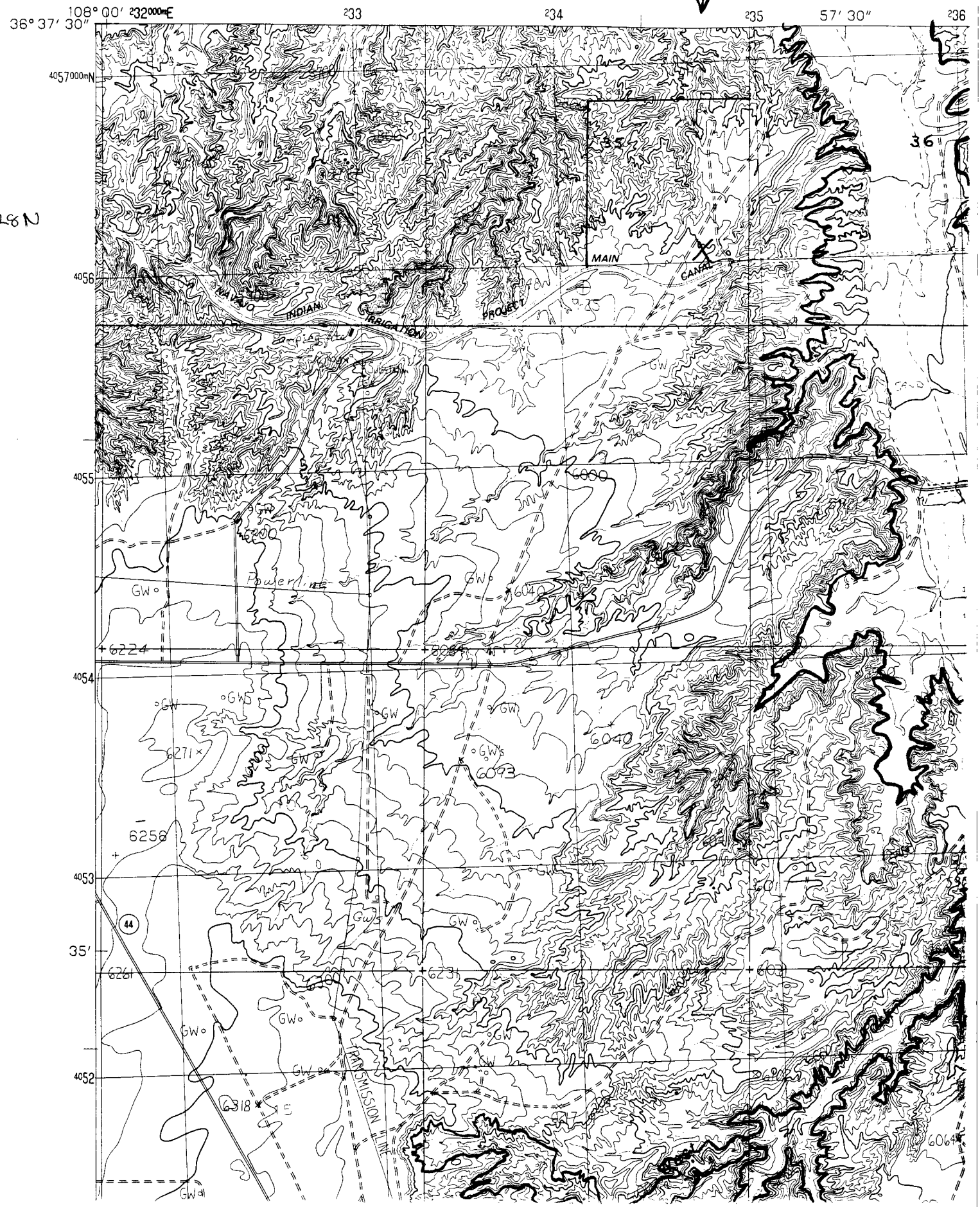

VULNERABLE AREA MAPCHECK
NW/4, Sec 13, T28N, R10W
RIVER
JUAN
SAN
SEWAGE DISPOSAL PLANT
Picnic Area
RODEO GROUND
ATHLETIC FIELD
LEVEE
TKS
REFINERY
SIPHON
DITCH
HAMMOND
PUMPING STA.
PIPELINE
GAS FIELD
BM 5559
REFINERY
PIPELINE
SAND
RD5476
GWS
GW

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SE/4, Sec 35 T28N, R11W
VULNERABLE AREA MAP CHECK

R 11W

T28N



Nelson Consulting, Inc.

7415 East Main
Farmington, NM 87402

Ph. 505-327-6331
fax 505-327-6332

June 15, 1998

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

Re: Mid-America Pipeline Company's Request for Authorization to Discharge Hydrostatic Test Water on the Surface.

San Juan Co. ~~67,000~~
New Pipe - . 622,000
BLM Land .

Dear Mr. Anderson:

This letter is the Mid-America Company's (MAPL) request for authorization to discharge hydrostatic test water onto the surface into three impoundment ponds. The MAPL's proposed 16-inch pipeline would begin at Huerfano Station located in the NW1/4 of Section 21, T26N, R10W and would end at Kutz Station located in the NW1/4 of Section 13, T28N, R11W. We are also proposing to install a 12-inch pipeline which would begin in the SE1/4 of Section 36, T26N, R11W and would end at Kutz Station in the NW1/4 of Section 13, T28N, R10W.
R11W ?

We are proposing to construct three impoundment ponds to discharge the test water upon completion of the testing. The first impoundment pond dimensions would be 400 x 400-feet adjacent to Huerfano Station located in the NW1/4 of Section 21, T26N, R10W. The second impoundment pond dimensions would be 100 x 100-feet adjacent to the proposed pipeline right-of-way located in the SE1/4 of Section 35, T28N, R11W. The third impoundment pond dimensions would be 150 x 150-feet adjacent to Kutz Station located in the NW1/4 of Section 13, T28N. R10W (see attached maps for site locations).

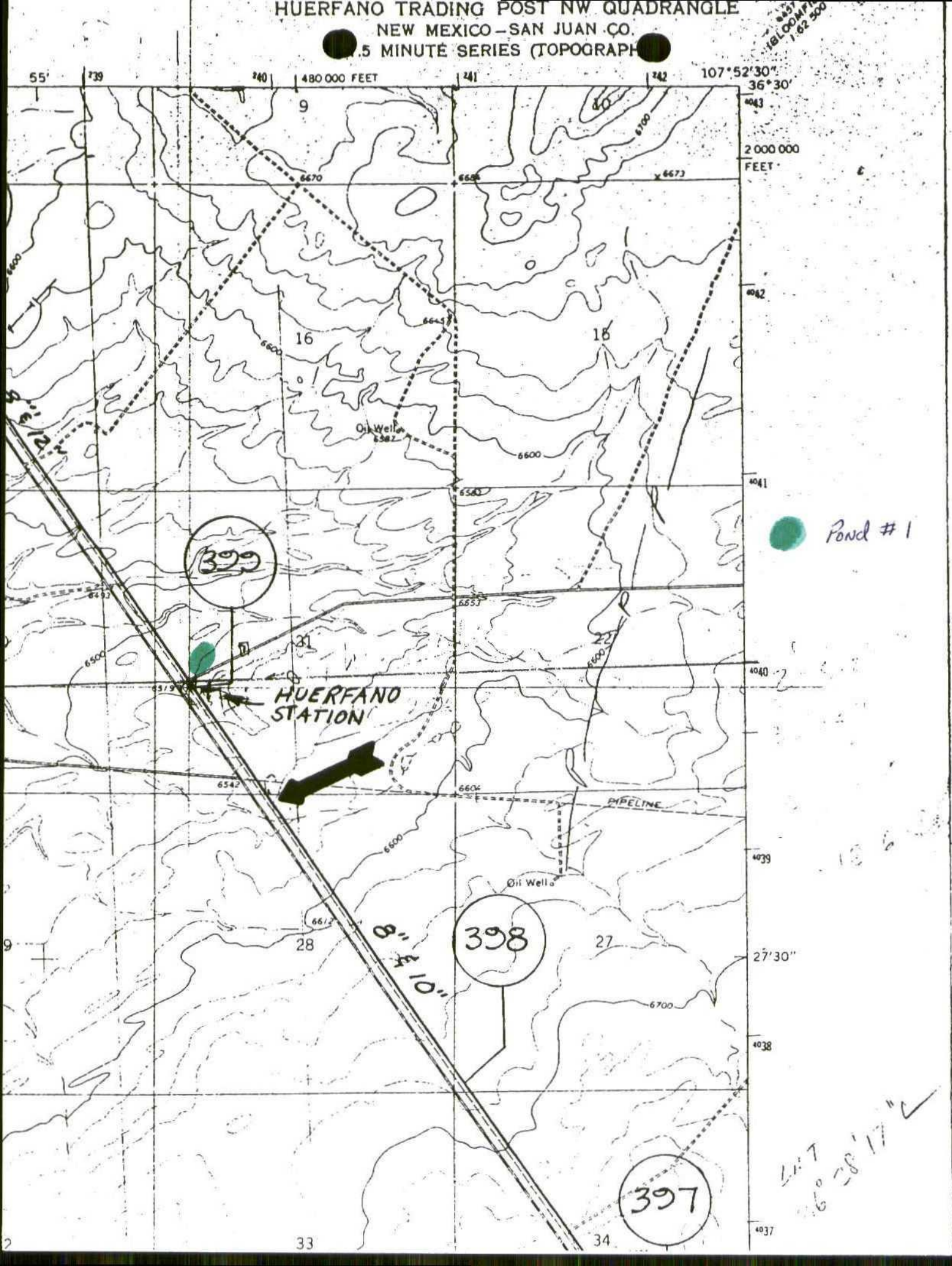
? R11W

MAPL submitted a draft Environmental Assessment to the Farmington District Office, Bureau of Land Management for review on June 2, 1998. This Environmental Assessment is still under review at the present time. The Environmental Assessment addresses all issues inclusive of constructing a pipeline, including; Threatened and Endangered Species, Cultural Resources, and Noxious Weeds. The proposed target date to begin the construction of this pipeline is July 6, 1998, but is contingent upon receiving all required permits.

Thank you for your time and consideration in this matter. If you need further information, please contact me at (505) 327-6331.

Sincerely

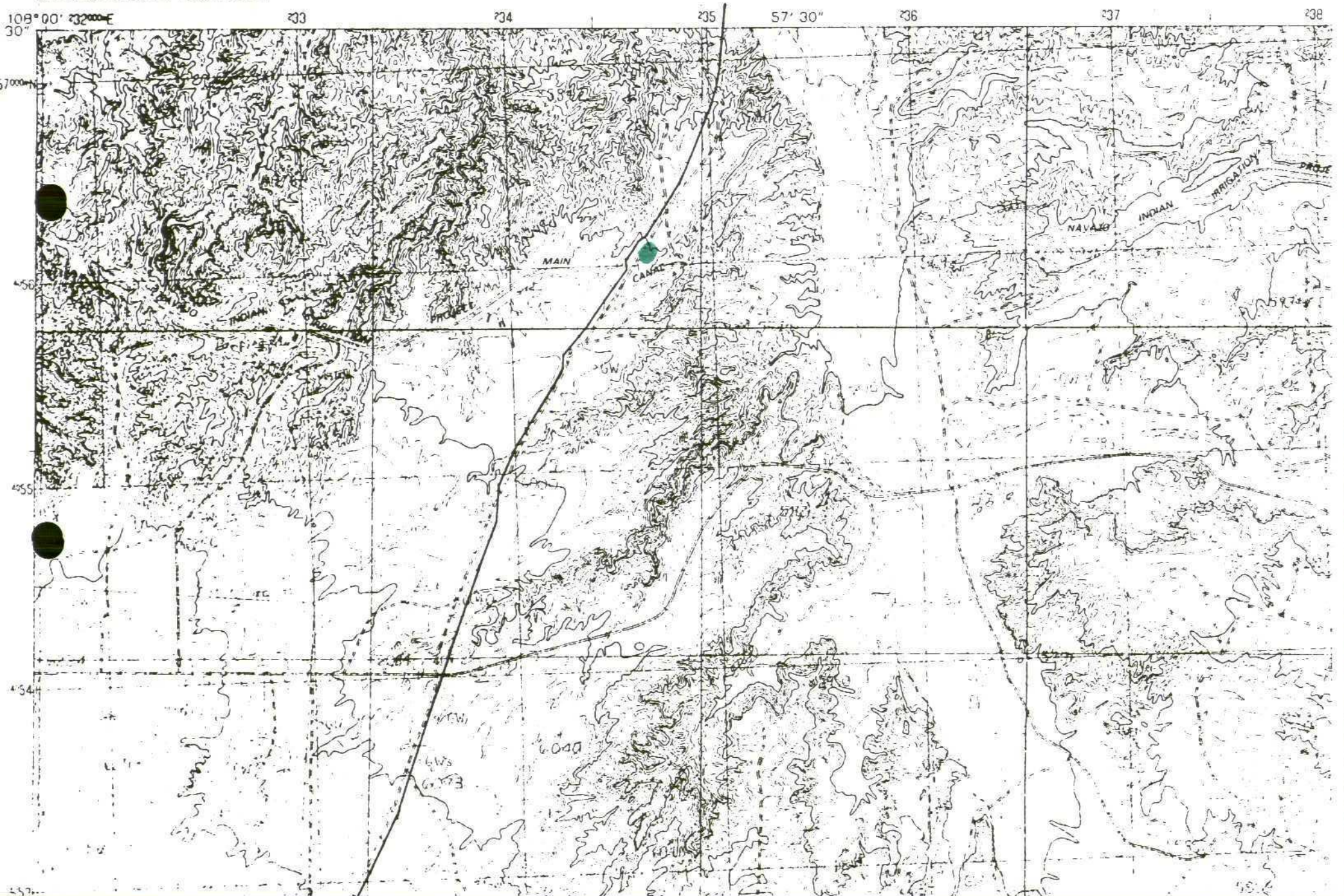
Steve Nelson

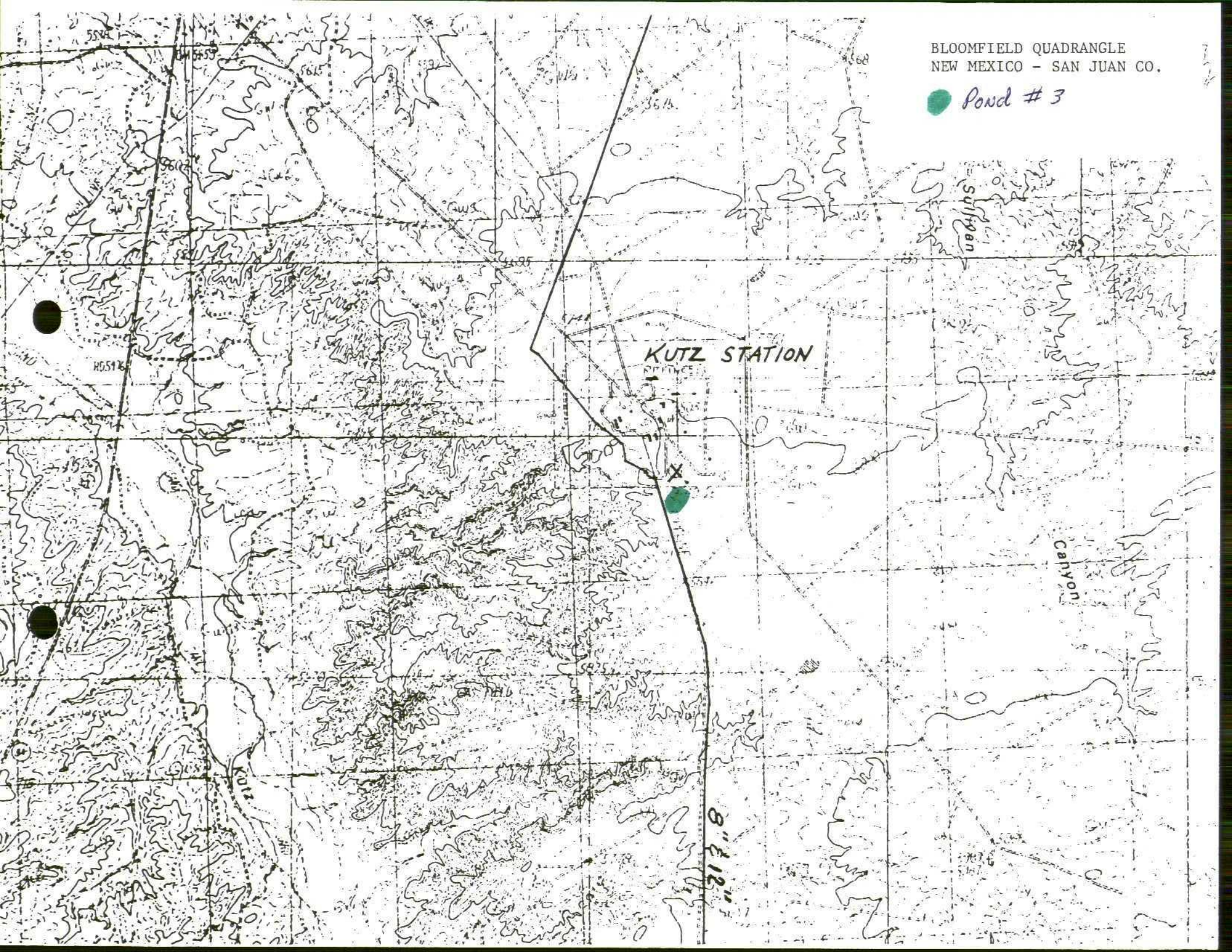

HUERFANO TRADING POST NW QUADRANGLE
NEW MEXICO – SAN JUAN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
480 000 FEET
107°52'30"
36°30'
2 000 000 FEET
27'30"
Pond #1
399
398
397
HUERFANO STATION
8" & 12"
8" & 10"
PIPELINE
Oil Wells
16
21
22
27
28
33
34

UNITED STATES
EPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

EAST FORK KUTZ CANYON QUADRANGLE
NEW MEXICO - SAN JUAN CO.

Pond # 2




BLOOMFIELD QUADRANGLE
NEW MEXICO - SAN JUAN CO.
Pond #3
KUTZ STATION
Sullivan
Canyon
8" 12"

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

November 28, 1995

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

Subject: Application for individual permit to discharge over 100,000 gallons of hydrostatic test water in Sandoval County, New Mexico.

Dear Mr. Anderson:

Mid-America Pipeline Company is constructing and hydrostatic testing its new 12-inch pipeline loop approximately 400 miles in length adjacent to its existing pipeline system, from a point near Hobbs, New Mexico in Gaines County, Texas to a point approximately 15 miles south of Farmington in San Juan County, New Mexico. A 10-inch lateral approximately 12 miles in length is also being constructed in San Juan County.

Mid-America Pipeline Company respectfully requests a permit for discharge of water used to test segments of its 12-inch and 10-inch pipelines approximately 46 miles in length from a point 3 miles southeast of Lybrook to a point approximately 15 miles south of Farmington, New Mexico. The discharge volume will be up to 1,500,000 gallons of water. Items included in this permit application are as follows:

a) Map showing location of the pipeline to be tested.

See attached Exhibit A.

b) Description of the test.

The test is an 8-hour hydrostatic test of new 10-inch and 12-inch steel line pipe required to qualify the pipelines for their design operating pressures. The segments to be tested include approximately 46 miles of buried pipe including 12 miles of 10-inch pipe and 34 miles of 12-inch pipe. The pipe to be tested begins at a point approximately 3 miles southeast of Lybrook in Sandoval

County and ends at El Paso Natural Gas Company's Chaco Plant in San Juan County, New Mexico approximately 15 miles south of Farmington. The test water will be transported through the pipeline as construction and testing progresses. When testing is complete, the water willl be discharged as described herein.

c) Source and analysis of test water.

The water will be pumped from holding ponds containing non-contact water from wells at El Paso Natural Gas Company's Chaco Plant in the SW 1/4 of Section 16 and the SE 1/4 of Section 17, T26N, R12W, San Juan County, New Mexico.

Analysis of test water- See attached Exhibit B. Note that the water sample analysis indicated a Total Dissolved Solids content of 1100 MG/L.

d) Point of discharge of the test water.

SE 1/4, S26, T23N, R7W, Sandoval County, New Mexico
Point of discharge is shown on Exhibit A.

e) Method and location for collection and retention of fluids and solids.

The test water will be collected and retained in an existing drainage holding pond at the point of discharge. The pond will be improved and enlarged prior to use. The water will be discharged into a hay bale filtration structure before entering the pond.

f) Depth of ground water at discharge site.

890 feet

g) Proposed method of disposal of fluids and solids after test completion including closure of any pits.

The test water will be mixed in the pond with test water from the previous discharge of approximately 1.5 million gallons having a TDS of 240 MG/L. In this manner, the TDS will be diluted to approximately 670 MG/L. The resultant TDS is calculated as follows:

1.5 million gallons x 240 MG/L x 3.7854 L /gallon=1362 million MG
+1.5 million gallons x 1100 MG/L x 3.7854 L /gallon= 6246 million MG
= 3 million gallons or 11.36 million Liters 7608 million MG

7608 million MG/11.36 million L = 670 MG/L resultant TDS

The water table is approximately 890 feet below the surface of the ground according to records available at the State Engineer's Office. It is proposed that the surface water will not contact the ground water without first being highly modified by the soil media through which it must pass.

No significant solid materials are anticipated. The water will be retained in the holding pond until it is dissipated by absorption into the ground and by evaporation.

h) Identification of land owners at and adjacent to the discharge site.

Land owner at the discharge site is:
U. S. A. Bureau of Land Management (BLM)

Land owners adjacent to the discharge site are as follows:
North boundary- Larry H. Reiger and Sandra G. Salazar
South boundary- U. S. A. in trust for the Navajo Tribe
West and East boundaries- U. S. A. (BLM)
East (southeast) boundary- State of New Mexico

l) Written permission from the land owner of the collection/retention site.

See attached Exhibit C.

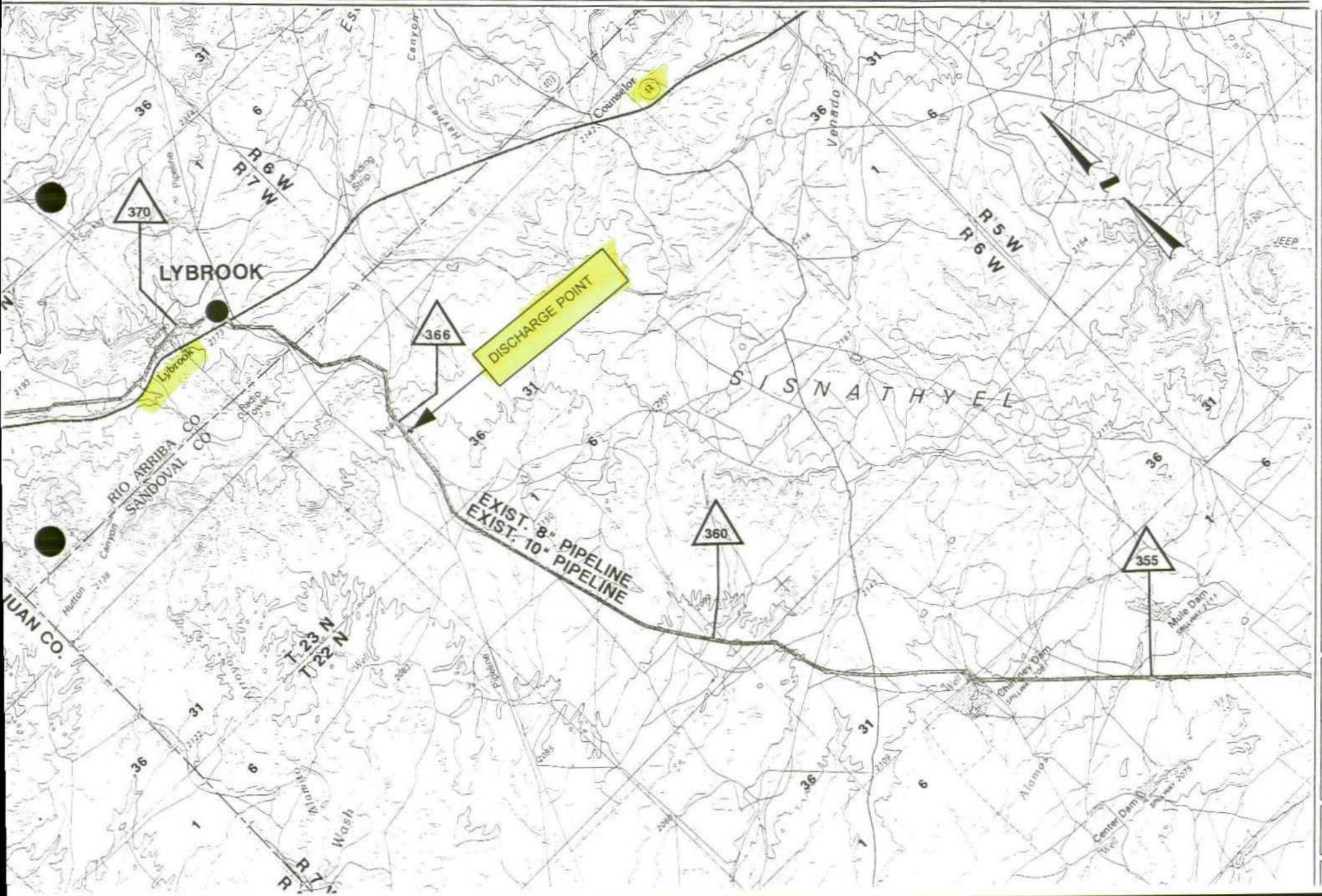
I trust that sufficient information has been provided to allow you to issue the requested permit. Should you have any questions or desire any additional information, please do not hesitate to call me or Jim Brooking at (505) 823-9443.

Very truly yours,

Gary Harkey
Project Manager

attachments

EXHIBIT A



Vicinity Map
No Scale

MID-AMERICA PIPELINE COMPANY
TULSA, OKLAHOMA

PROPOSED FOUR CORNERS
PIPELINE LOOP
SANDOVAL, RIO ARRIBA, & SAN JUAN CO., NM.

Aerial Marker Location:
A.M. 355 to A.M. 375

DRAWN SER | SCALE

EXHIBIT B
4 PAGES

Analytical Technologies, Inc.

CLIENT : MID AMERICA PIPELINE CO. DATE RECEIVED: 11/14/95
PROJECT # : EPNG CHACO PLANT
PROJECT NAME : FOUR CORNERS REPORT DATE : 11/21/95

ATI ID: 511333

	ATI PENSACOLA ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	511333-01	EPNG HOLDING POND	AQUEOUS	11/13/95
02		TRIP BLANK	AQUEOUS	09/08/95

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	2

ATI 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.

Analytical Technologies, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession: 511332
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 511333
Project Name: FOUR CORNERS-MAPCO
Project Location: N/S
Test: Group of Single Wetchem
Matrix: WATER
QC Level: II

Lab ID: 001
Client Sample Id: 511333-01
Sample Date/Time: 13-NOV-95 1030
Received Date: 15-NOV-95

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
ALKALINITY (2320B)	MG/L	89	1		ASW059	AB
CHLORIDE (325.3)	MG/L	24	1		CIW048	ED
CONDUCTIVITY (120.1)	UMH/CM	1300	1		CDW061	RB
PH (150.1)	UNITS	7.3	NA		PHW240	SG
SULFATE (375.4)	MG/L	470	250	+	SEW103	SG
TOTAL DISSOLVED SOLIDS (160.1)	MG/L	1100	5		TDW081	ED

Comments:

Analytical Technologies, Inc.

TOTAL METALS

Lab Name: Analytical Technologies, Inc.

Client Name: ATI - NM

Client Project ID: Four Corners-Mapco

Lab Sample ID: 95-11-108-01

Sample Matrix: Aqueous

Sample ID: **EPNG Holding Pond**

Date Collected: 11/13/95

Prep Date: 11/15/95

Date Analyzed: 11/15/95

Analyte	Modified Method	Concentration mg/L	Detection Limit mg/L
Arsenic	6010	ND	0.01
Barium	6010	0.2	0.1
Cadmium	6010	ND	0.005
Calcium	6010	160	1
Iron	6010	2.1	0.1
Lead	6010	ND	0.003
Magnesium	6010	33	1
Manganese	6010	0.16	0.01
Mercury	7470	ND	0.0002
Potassium	6010	19	1
Selenium	6010	ND	0.005
Sodium *	6010	120	5
Zinc	6010	0.41	0.02

ND = Not Detected

* Detection limit raised. Dilution required due to analyte concentration.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : MID AMERICA PIPELINE CO. ATI I.D.: 511333
PROJECT # : EPNG CHACO PLANT
PROJECT NAME : FOUR CORNERS

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	EPNG HOLDING POND	AQUEOUS	11/13/95	NA	11/14/95	1
02	TRIP BLANK	AQUEOUS	09/08/95	NA	11/14/95	1

PARAMETER	UNITS	01	02
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.3	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2 D(1)	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.3	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		107	93
TRIFLUOROTOLUENE (%)		105	100

D(1)=DILUTED 1X, ANALYZED 11/15/95

EXHIBIT C

Nelson Consulting, Inc.
P.O. Box 5556
Farmington, NM 87499

11-15-95

Jim Brooking
Mid-America Pipeline Co.
Albuquerque, NM

RE: Four Corners Pipeline Project
Hydro Static Water Disposal Pond
Sec. 26,T23N,R7W SE,SE,NE Station 6969+00
Sandoval County, NM

Dear Jim,

I spoke to Alyse Gold and Jerry Crockford at the BLM Farmington District office on November 13, 1995. In regards to accessing a section of land to act as a holding pond for the water from the hydrostatic test done on the 12", 10" pipeline project, they have no problem with the disposal pond as long as the disposal is permitted by the state of New Mexico and all stipulations are followed. Once the water is tested and proved to be acceptable, then the water can be unloaded into a straw bale straining dam where it will filter out onto the ground. The pond will be constructed in an existing drainage pond that is adjacent to the pipeline right of way. The pond will remain so that it may provide water for wildlife and livestock in the area. The area was Arched by O.C.A. on 11-16-95 an no sensitive areas were discovered. An O.C.A. Arch monitor will be present during excavation of the pond. I will get written authorization from the BLM after they finish there extended vacation.

BLM Compliance Officer
MAPCO Four Corners Project
Steve Nelson
505-320-0011

cc: Jerry Crockford BLM
Joe Jaramillo BLM

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

December 4, 1995

Mr. Chris Eustice
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Subject: Application for individual permit to discharge over 100,000 gallons of hydrostatic test water in San Juan County, New Mexico.

Dear Mr. Eustice:

Mid-America Pipeline Company is constructing and hydrostatic testing its new 12-inch pipeline loop approximately 400 miles in length adjacent to its existing pipeline system, from a point near Hobbs, New Mexico in Gaines County, Texas to a point approximately 15 miles south of Farmington in San Juan County, New Mexico. A 10-inch lateral approximately 12 miles in length is also being constructed in San Juan County.

Mid-America Pipeline Company respectfully requests a permit for discharge of water used to test its 10-inch lateral approximately 12 miles in length from our Huerfano Pump Station west to the El Paso Chaco Plant. The El Paso Chaco Plant is approximately 15 miles south of Farmington, New Mexico. The Huerfano Pump Station is located just east of State Highway 44 approximately 5 miles northwest of Huerfano Trading Post. The discharge volume will be approximately 276,000 gallons of water. Items included in this permit application are as follows:

a) Map showing location of the pipeline to be tested.

See attached Exhibit A.

b) Description of the test.

The test is an 8-hour hydrostatic test of new 10-inch steel line pipe required to qualify the pipeline for its design operating pressure. The segment to be tested is approximately 12 miles of 10-inch buried pipe in San Juan County, New Mexico, located as described

Jim Brockings called 12-5-95
@ 1045 AM to tell me BLM
would not allow.
He instructed me to
ignore this request

above. When testing is complete, the water willl be discharged near the Huerfano Pump Station as described herein.

c) Source and analysis of test water.

The water will be pumped from holding ponds containing non-contact water from wells at El Paso Natural Gas Company's Chaco Plant in the SW 1/4 of Section 16 and the SE 1/4 of Section 17, T26N, R12W, San Juan County, New Mexico.

Analysis of test water- See attached Exhibit B.

d) Point of discharge of the test water.

SW 1/4, S21, T26N, R10 W, San Juan County, New Mexico
Point of discharge is shown on Exhibit A.

e) Method and location for collection and retention of fluids and solids.

The test water will be disbursed as irrigation water in a rural area. The water will be discharged into a hay bale filtration structure to dissipate the energy of the flow and mitigate surface erosion.

f) Depth of ground water at discharge site.

The State Engineer's Office in Aztec has records of a well at Huerfano Trading Post whose depth to ground water is 516 feet. This is likely the closest well to the dewatering site.

g) Proposed method of disposal of fluids and solids after test completion including closure of any pits.

No significant solid materials are anticipated and no pits will be used. The test water will be disbursed as irrigation water in a rural area covered with native vegetation. The amount of water to be discharged is quite small in comparison to the ground surface area available for absorption.

The water table is approximately 500 feet below the surface of the ground according to records available at the State Engineer's Office. It is proposed that the surface water will not contact the ground water before being absorbed by soil particles and/or evaporated.

h) Identification of land owners at and adjacent to the discharge site.

Land owner at the discharge site is:
U. S. A. Bureau of Land Management (BLM)

Land owners adjacent to the discharge site:
North boundary- BLM
South boundary- BLM
West boundary- State Highway 44
East boundary- Unknown, but 2000 feet away from dewatering site. Land slopes away from property.

l) Written permission from the land owner of the collection/retention site.

Permission currently being obtained from the BLM by our Compliance Officer, Mr. Steve Nelson.

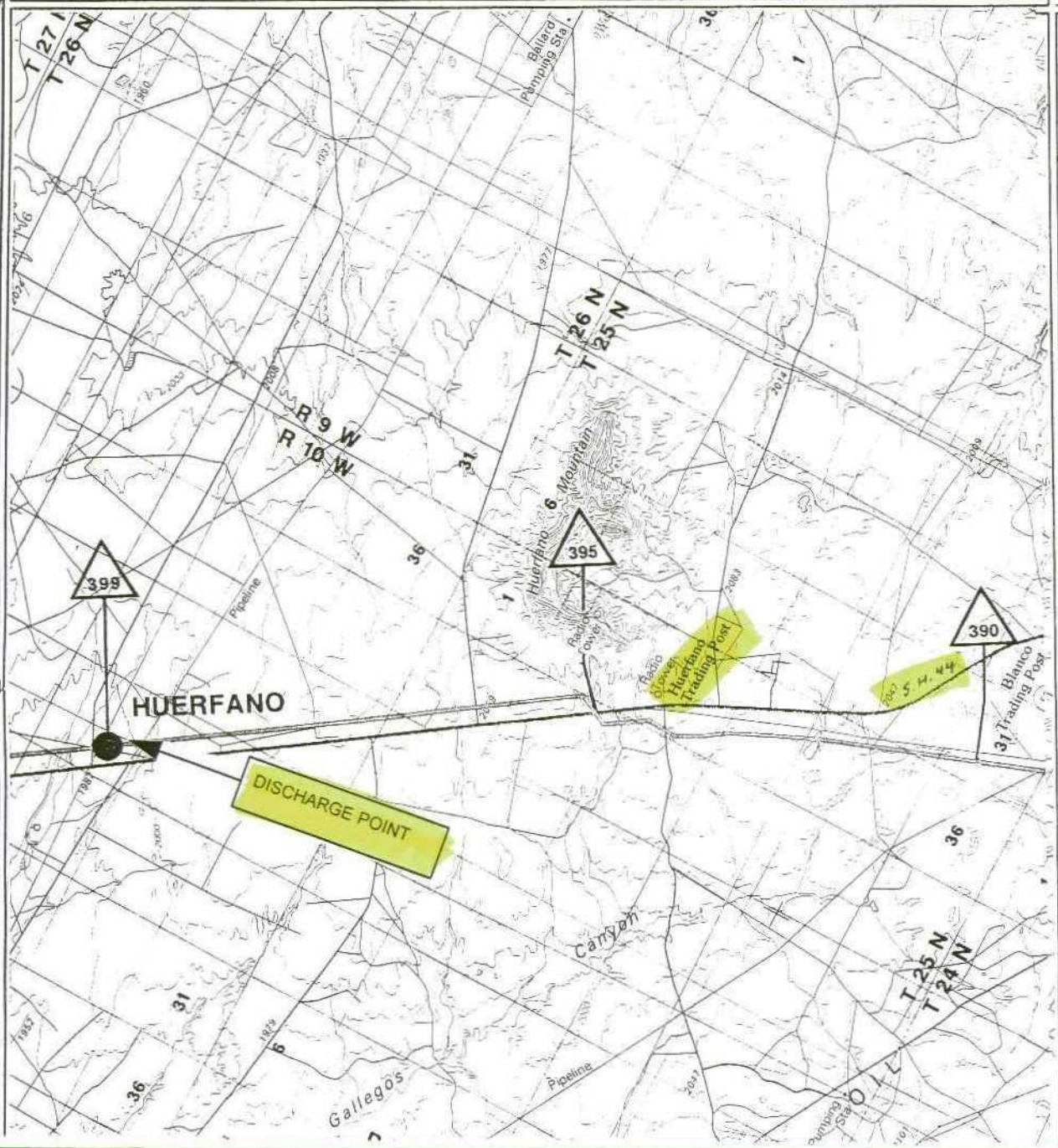
I trust that sufficient information has been provided to allow you to issue the requested permit. Should you have any questions or desire any additional information, please do not hesitate to call me or Jim Brooking at (505) 823-9443.

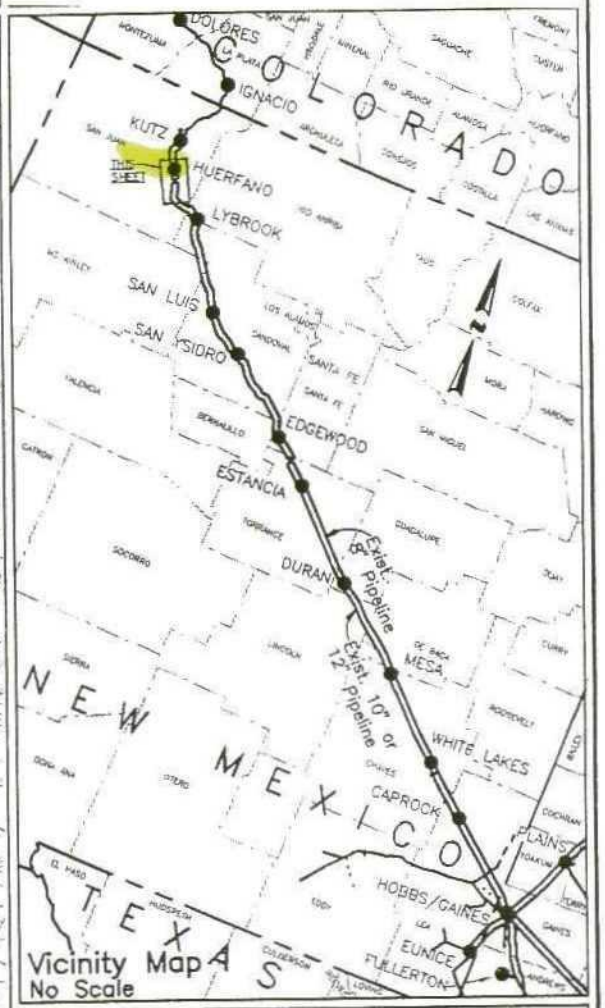
Very truly yours,

Gary Harkey
Project Manager

attachments

EXHIBIT A





MID-AMERICA PIPELINE COMPANY
TULSA, OKLAHOMA

PROPOSED FOUR CORNERS PIPELINE LOOP

SAN JUAN COUNTY, NEW MEXICO

Aerial Marker Location:
A.M. 375 to A.M. 399

DRAWN SER | SCALE Miles 1 0 1 2

EXHIBIT B
4 PAGES

Analytical Technologies, Inc.

CLIENT : MID AMERICA PIPELINE CO. DATE RECEIVED: 11/14/95
PROJECT # : EPNG CHACO PLANT
PROJECT NAME : FOUR CORNERS REPORT DATE : 11/21/95

ATI ID: 511333

	ATI PENSACOLA ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	511333-01	EPNG HOLDING POND	AQUEOUS	11/13/95
02		TRIP BLANK	AQUEOUS	09/08/95

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	2

ATI 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.

Analytical Technologies, Inc.

"FINAL REPORT FORMAT - SINGLE"

Accession:	511332
Client:	ANALYTICAL TECHNOLOGIES, INC.
Project Number:	511333
Project Name:	FOUR CORNERS-MAPCO
Project Location:	N/S
Test:	Group of Single Wetchem
Matrix:	WATER
QC Level:	II

Lab ID: 001
Client Sample Id: 511333-01

Sample Date/Time: 13-NOV-95 1030
Received Date: 15-NOV-95

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
ALKALINITY (2320B)	MG/L	89	1		ASW059	AB
CHLORIDE (325.3)	MG/L	24	1		CIW048	ED
CONDUCTIVITY (120.1)	UMH/CM	1300	1		CDW061	RB
PH (150.1)	UNITS	7.3	NA		PHW240	SG
SULFATE (375.4)	MG/L	470	250	+	SEW103	SG
TOTAL DISSOLVED SOLIDS (160.1)	MG/L	1100	5		TDW081	ED

Comments:

Analytical Technologies, Inc.

TOTAL METALS

Lab Name: Analytical Technologies, Inc.

Sample ID: EPNG Holding Pond

Client Name: ATI - NM

Client Project ID: Four Corners-Mapco

Date Collected: 11/13/95

Lab Sample ID: 95-11-108-01

Prep Date: 11/15/95

Sample Matrix: Aqueous

Date Analyzed: 11/15/95

Analyte	Modified Method	Concentration mg/L	Detection Limit mg/L
Arsenic	6010	ND	0.01
Barium	6010	0.2	0.1
Cadmium	6010	ND	0.005
Calcium	6010	160	1
Iron	6010	2.1	0.1
Lead	6010	ND	0.003
Magnesium	6010	33	1
Manganese	6010	0.16	0.01
Mercury	7470	ND	0.0002
Potassium	6010	19	1
Selenium	6010	ND	0.005
Sodium *	6010	120	5
Zinc	6010	0.41	0.02

ND = Not Detected

* Detection limit raised. Dilution required due to analyte concentration.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : MID AMERICA PIPELINE CO. ATI I.D.: 511333
PROJECT # : EPNG CHACO PLANT
PROJECT NAME : FOUR CORNERS

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	EPNG HOLDING POND	AQUEOUS	11/13/95	NA	11/14/95	1
02	TRIP BLANK	AQUEOUS	09/08/95	NA	11/14/95	1

PARAMETER	UNITS	01	02
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.3	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2 D(1)	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.3	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		107	93
TRIFLUOROTOLUENE (%)		105	100

D(1)=DILUTED 1X, ANALYZED 11/15/95

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

November 16, 1995

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

Subject: Application for individual permit to discharge over 100,000 gallons of hydrostatic test water in Sandoval County, New Mexico.

Dear Mr. Anderson:

Mid-America Pipeline Company is hydrostatic testing its new 12-inch pipeline loop approximately 400 miles in length adjacent to its existing pipeline system, from a point near Hobbs, New Mexico in Gaines County, Texas to a point approximately 15 miles south of Farmington in San Juan County, New Mexico.

Mid-America Pipeline Company respectfully requests a permit for discharge of water used to test a segment of its pipeline approximately 86 miles in length from a point 3 miles north of Bernalillo near the Rio Grande River to a point approximately 3 miles southeast of Lybrook, New Mexico. The discharge volume will be up to 2,000,000 gallons of water. Items included in this permit application are as follows:

a) Map showing location of the pipeline to be tested.

See attached Exhibit A.

b) Description of the test.

The test is an 8-hour hydrostatic test of new 12-inch steel line pipe required to qualify the pipeline for its design operating pressure. The segment to be tested is buried pipe approximately 86 miles in length beginning north of the town of Bernalillo in Santa Fe County, New Mexico and ending at the discharge point approximately 3 miles southeast of the village of Lybrook in Sandoval County, New Mexico. The test water source is the Bernalillo Drain located just north of the town of Bernalillo. The test water will be transported

through the pipeline as construction and testing progresses. When testing is complete, the water willl be discharged as described herein.

c) Source and analysis of test water.

Source of the test water is the Bernalillo Drain located in the NE1/4, S 16, T13N, R4E, Sandoval County, New Mexico.

Analysis of test water- See attached Exhibit B

d) Point of discharge of the test water.

SE 1/4, S26, T23N, R7W, Sandoval County, New Mexico
Point of discharge is shown on Exhibit A.

e) Method and location for collection and retention of fluids and solids.

The test water will be collected and retained in an existing drainage holding pond at the point of discharge. The pond will be improved and enlarged prior to use. The water will be discharged into a hay bale filtration structure before entering the pond.

f) Depth of ground water at discharge site.

890 feet

g) Proposed method of disposal of fluids and solids after test completion including closure of any pits.

No significant solid materials are anticipated. The water will be retained in the holding pond until it is dissipated by absorption into the ground and by evaporation.

h) Identification of land owners at and adjacent to the discharge site.

Land owner at the discharge site is:
U. S. A. Bureau of Land Management (BLM)

Land owners adjacent to the discharge site are as follows:

North boundary- Larry H. Reiger and Sandra G. Salazar
South boundary- U. S. A. in trust for the Navajo Tribe
West and East boundaries- U. S. A. (BLM)
East (southeast) boundary- State of New Mexico

l) Written permission from the land owner of the collection/retention site.

The BLM representative on site from whom permission was granted has been furloughed due to the government shutdown and is not available to prepare a written permission statement. The Mid-America Pipeline Company representative, Mr. Steve Nelson, BLM Compliance Officer, has submitted a letter stating the particulars of the agreement. See attached Exhibit C.

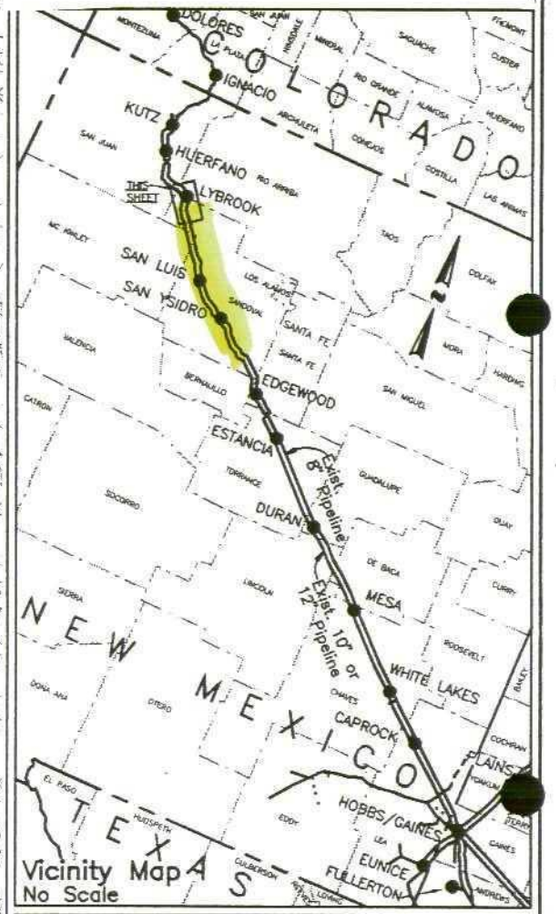
I trust that sufficient information has been provided to allow you to issue the requested permit. Should you have any questions or desire any additional information, please do not hesitate to call me or Jim Brooking at (505) 823-9443.

Very truly yours,

Gary Harkey
Project Manager

attachments

EXHIBIT A



MID-AMERICA PIPELINE COMPANY
TULSA, OKLAHOMA

PROPOSED FOUR CORNERS PIPELINE LOOP
SANDOVAL, RIO ARRIBA, & SAN JUAN CO., NM.

Aerial Marker Location:
A.M. 355 to A.M. 375

DRAWN	SCALE
SER	Miles 1 0 1 2

DATE	REV.	DRAWING NO.

EXHIBIT B
4 pages

Analytical Technologies, Inc.

CLIENT : MID-AMERICA PIPELINE
PROJECT # : (NONE)
PROJECT NAME : HYDROSTATIC PIPE TESTING

DATE RECEIVED : 08/11/95
REPORT DATE : 09/06/95

ATI ID: 508373

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	BERNALILLO (779849,779902,779869,384820,887886)	AQUEOUS	08/10/95
02	CABEZON ARTISION (N.772969,N.773054,N.772849, E887906,L.384821)	AQUEOUS	08/10/95
03	TRIP BLANK	AQUEOUS	08/09/95

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	3

ATI 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.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 508745

CLIENT : ANALYTICAL TECHNOLOGIES, INC-NM
PROJECT # : 508373
PROJECT NAME : MAPCO

DATE RECEIVED : 08/15/95
REPORT DATE : 09/06/95

PARAMETER	UNITS	01	02
CARBONATE (CACO3)	MG/L	<1	35
BICARBONATE (CACO3)	MG/L	114	209
HYDROXIDE (CACO3)	MG/L	<1	<1
TOTAL ALKALINITY (AS CACO3)	MG/L	114	244
CHLORIDE (EPA 325.2)	MG/L	7.4	4.0
CONDUCTIVITY, (UMHOS/CM)		363	553
PH (EPA 150.1)	UNITS	8.1	9.1
SULFATE (EPA 375.2)	MG/L	69	50
T. DISSOLVED SOLIDS (160.1)	MG/L	240	330

TOTAL METALS

Analytical Technologies, Inc.

Lab Name: Analytical Technologies, Inc.

Client Name: ATI - NM

Client Project ID: HTD -- 508373

Lab Sample ID: 95-08-118-01

Sample Matrix: Water

Sample ID

BERNALILLO

Date Collected: 08/10/95

Prep Date: 08/18/95

Date Analyzed: 08/18,21/95

Analyte	Modified Method	Concentration mg/L	Detection Limit mg/L
Arsenic	6010	ND	0.01
Barium	6010	ND	0.1
Cadmium	6010	ND	0.005
Calcium	6010	44	1
Iron	6010	0.3	0.1
Lead	6010	ND	0.003
Magnesium	6010	8	1
Manganese	6010	0.10	0.01
Mercury	7470	ND	0.0002
Potassium	6010	4	1
Selenium	6010	ND	0.005
Sodium *	6010	24	1
Zinc	6010	ND	0.02

ND = Not Detected

* Serial dilution results suggest possible physical or chemical interference(s).

GAS CHROMATOGRAPHY RESULTS

Analytical Technologies, Inc.

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : MID-AMERICA PIPELINE ATI I.D.: 508373
PROJECT # : (NONE)
PROJECT NAME : HYDROSTATIC PIPE TESTING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	BERNALILLO	AQUEOUS	08/10/95	NA	08/18/95	1
02	CABEZON ARTISION	AQUEOUS	08/10/95	NA	08/18/95	1
03	TRIP BLANK	AQUEOUS	08/09/95	NA	08/18/95	1

PARAMETER	UNITS	01	02	03
BENZENE	UG/L	<0.5	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2	<0.2	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2	<0.2	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.2	<0.2	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5	<0.5
SURROGATES:				
BROMOCHLOROMETHANE (%)		104	104	115
TRIFLUOROTOLUENE (%)		98	101	95

EXHIBIT C

Nelson Consulting, Inc.
P.O. Box 5556
Farmington, NM 87499

11-15-95

Jim Brooking
Mid-America Pipeline Co.
Albuquerque, NM

RE: Four Corners Pipeline Project
Hydro Static Water Disposal Pond
Sec. 26,T23N,R7W SE,SE,NE Station 6969+00
Sandoval County, NM

Dear Jim,

I spoke to Alyse Gold and Jerry Crockford at the BLM Farmington District office on November 13, 1995. In regards to accessing a section of land to act as a holding pond for the water from the hydrostatic test done on the 12", 10" pipeline project, they have no problem with the disposal pond as long as the disposal is permitted by the state of New Mexico and all stipulations are followed. Once the water is tested and proved to be acceptable, then the water can be unloaded into a straw bale straining dam where it will filter out onto the ground. The pond will be constructed in an existing drainage pond that is adjacent to the pipeline right of way. The pond will remain so that it may provide water for wildlife and livestock in the area. The area was Arched by O.C.A. on 11-16-95 an no sensitive areas were discovered. An O.C.A. Arch monitor will be present during excavation of the pond. I will get written authorization from the BLM after they finish there extended vacation.

BLM Compliance Officer
MAPCO Four Corners Project
Steve Nelson
505-320-0011

cc: Jerry Crockford BLM
Joe Jaramillo BLM

MEMORANDUM OF CONVERSATION

__TELEPHONE __✓__PERSONAL TIME 2:20pm DATE 11-21-95

ORIGINATTING PARTY CHRIS EUSTICE

OTHER PARTIES FILE

DISCUSSION

Mid America pipeline wants to discharge 2,000,000 gallons of test water from the hydro testing of a section of new 12" pipe.

They propose to discharge to a dry pond in Section 26, T27N, R3W, Sandoval Co.

The source water has a TDS concentration of 240 mg/l.

According to the USGS Water Analysis (1980) for a well 2 miles away, local groundwater has 770 mg/l TDS

CONCLUSIONS

Discharge should not degrade local groundwater

CHRIS EUSTICE Chris Eustice

Well Record Information

Location	Owner	Date Drilled	Well depth (ft)	Depth to water (ft)	Date measured	Use	Aquifer	Location number (shown on figure 6)
23.7.10.4331	Lybrook Water User's Assn.	1/9/71	1704	900	12/4/81	public supply	Ojo Alamo Ss	1
23.7.13.3221	Berry, Homer	n/a	n/a	n/a	n/a	stk	Ojo Alamo Ss	2
23.7.14.1	Lybrook Inn	n/a	1700	180	1956	abandoned (?)	Ojo Alamo Ss	
23.7.14.1232	Sunterra Gas Plant	n/a	1650	816	10/16/57	abandoned	Ojo Alamo Ss	3
23.7.14.1232	Sunterra Gas Plant	n/a	1700	899	7/24/75	dom/ind	Ojo Alamo Ss	4
23.7.15.	El Paso Station	n/a	n/a	200	8/56	n/a	Nacimiento Fm.	

The only available Total Dissolved Solid information comes from "Hydrogeology and Water Resources of San Juan Basin, New Mexico", by W.J. Stone, et. al., NMIMT 1983. According to this reference, a well located at Township 23 North, Range 7 West in Section 14 was analyzed on October 24, 1974. Total Dissolved Solids for this well measure 695 mg/l. The specific conductance for water at this well is 1130 µmhos/cm. No other sampling of groundwater quality in the area appears to have been conducted since that time.

The Aquifer Sensitivity Map for Rio Arriba County, New Mexico, which was compiled by Lee Wilson and Associates, Inc. for the New Mexico Environment Department in 1989, locates the facility within a moderately sensitive aquifer sensitivity zone. This zone is defined as a location in which the depth to ground water is between 100 and 300 feet and the ground water contains 10,000 mg/l or less Total Dissolved Solids.

No information is currently available regarding the direction of flow of groundwater in the area. However, it is suspected that the general flow direction of the groundwater would be to the north/northeast following the flow of the Escrito wash.

Geologic Description of Discharge Site

According to the "Draft Soil Survey of Rio Arriba County, New Mexico" (currently in its pre-publication stage), by the United States Department of Agriculture, Soil Conservation Service, there are two soil types in the facility area. A copy of the draft soil survey for the Lybrook facility area is included in appendix 6. Soils along U.S. highway 44 along the southern portion of the facility are part of the Pinavetes-Florita complex, and soils along the northern portion of the facility are part of the Vessilla-Menefee-Orlie complex. Pinavetes-Florita soils are deep and well drained to excessively drained, while

Hydrologic Features

The facility is located near the southwest end of Crow Mesa, a north-south drainage divide. The plant is situated in a gentle eastward-dipping slope in the Escrito Canyon drainage. The arroyo in the Escrito Canyon drains to the north-northeast and is located approximately two miles east of the plant. Three branches of the Escrito wash are located near the plant; one branch is approximately 1200 feet north of the plant, another branch is approximately 300 feet south of the plant, and the third branch is approximately 100 feet east. The branches are normally dry. Other than the watercourses mentioned above, there are no other perennial streams or permanent bodies of water located within a 1 mile radius of the Lybrook facility, aside from the evaporation ponds located on the plant property.

The USGS 7.5 minute map shows three ephemeral ponds located within a mile of the Lybrook plant (see figure 6). One pond located approximately 2500 feet southwest of the plant is about 0.3 acres in area, a second pond located approximately 3500 feet northeast of the plant is approximately 0.5 acres in area. The third pond is approximately 2200 feet southeast of the plant, and is approximately 0.2 acres in area.

A branch of the Escrito wash which passes the evaporation ponds on the eastern side of the facility, also passes through the ephemeral pond located northeast of the plant. If the berms of the evaporation ponds at the facility were eroded and breached during a storm event, it is possible that impact to the wash, and subsequently to the ephemeral pond, could result. However, since berms around the evaporation ponds rise approximately 6 to 8 feet above the wash, and a third evaporation pond has been constructed for emergency overflow, it is unlikely that the ephemeral pond and wash would be affected.

Ground water discharges from Escrito Spring, located approximately 1 mile west of the plant, on the west side of the drainage divide. Discharge is probably from perched bodies of ground water in the San Jose Formation, which is recharged by precipitation on the mesa top.

As discussed in the facility's 1988 discharge plan, several water wells are present in the vicinity of the plant, in addition to a number of oil wells. The locations of nearby water wells are plotted on figure 6. Water well information was obtained from State Engineer's records, "Hydrogeology and Water Resources of San Juan Basin, New Mexico", by W.J. Stone, et. al. (NMIMT 1983), Lybrook gas plant records, and the Lybrook Water User's Association. This information is summarized below:

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

November 2, 1995

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

Subject: Application for individual permit to discharge over 100,000 gallons of hydrostatic test water in Lea County, New Mexico.
Alternate Discharge Site

Dear Mr. Anderson:

Mid-America Pipeline Company is constructing and hydrostatic testing its new 12-inch pipeline loop approximately 400 miles in length adjacent to its existing pipeline system, from a point near Hobbs, New Mexico in Gaines County, Texas to a point approximately 15 miles south of Farmington in San Juan County, New Mexico.

Mid-America Pipeline Company respectfully requests a permit for an alternate site for discharge of water used to test a segment of its pipeline approximately 254 miles in length from a point north of Edgewood to a point east of Hobbs, New Mexico. The test will require approximately 1,800,000 gallons of water. Items included in this permit application are as follows:

a) Map showing location of the pipeline to be tested.

See attached Exhibit A.

b) Description of the test.

The test is an 8-hour hydrostatic test of new 12-inch steel line pipe required to qualify the new pipeline loop for its design operating pressure. The segment to be tested is buried pipe approximately 254 miles in length beginning at the SW corner of S29, T11N, R7E, Santa Fe County, New Mexico and ending at Mid-America Pipeline Company's "Hobbs Station" in the NW 1/4, S 24, Block AX, Gaines County, Texas. The test water will be transported through the

pipeline from north to south as construction and testing progresses. When testing is complete, the water willl be discharged as described herein.

c) Source and analysis of test water.

Source of test water is a potable water service pipeline owned and operated by the Entranosa Water and Wastewater Cooperative, Edgewood, New Mexico. The water hydrant is located at the SW corner of S29, T11N, R7E, Santa Fe County, New Mexico.

Analysis of test water- See attached Exhibit B.

d) Point of discharge of the test water.

NE 1/4, S 21, T 14 S, R 35 E, Lea County, New Mexico
Point of discharge is shown on Exhibit A.

e) Method and location for collection and retention of fluids and solids.

The test water will be disbursed as irrigation water in rural areas. The water will be discharged into a hay bale filtration structure to dissipate the energy of the flow and mitigate surface erosion.

f) Depth of ground water at discharge site.

80 feet.

g) Proposed method of disposal of fluids and solids after test completion including closure of any pits.

The test water will be disbursed as irrigation water in rural areas. No significant solid materials are anticipated and no pits will be used.

h) Identification of land owners at and adjacent to the discharge site.

Land owner at the discharge site is:
John Richard Anderson

Land owners adjacent to the discharge site are as follows:
State of New Mexico (north boundary)
Robert Edsel Ford (east Boundary)
Kinsolving and Kinsolving (west boundary)
John Richard Anderson (south boundary)

l) Written permission from the land owner of the collection/retention site.

See attached Exhibit C.

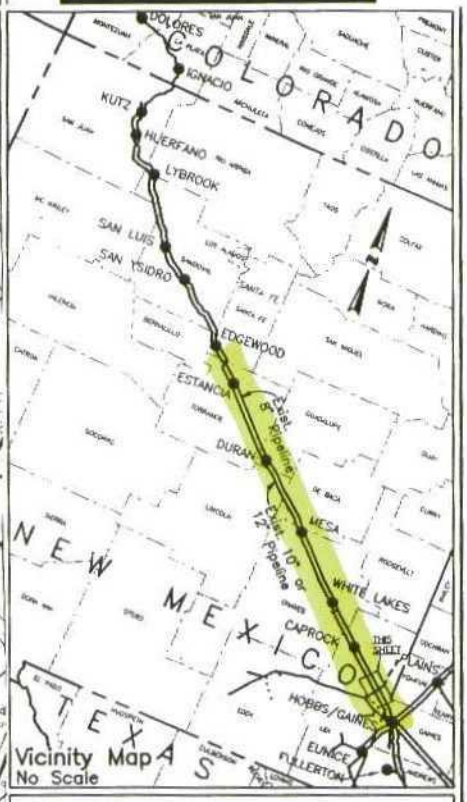
I trust that sufficient information has been provided to allow you to issue the requested permit. Should you have any questions or desire any additional information, please do not hesitate to call me or Jim Brooking at (505) 823-9443.

Very truly yours,

Gary Harkey
Project Manager

attachments

EXHIBIT A



MID-AMERICA PIPELINE COMPANY
TULSA, OKLAHOMA

PROPOSED FOUR CORNERS PIPELINE LOOP

LEA COUNTY, NEW MEXICO

Aerial Marker Location:
A.M. 20 to A.M. 35

DRAWN	SCALE
SER	Miles 1 0 1 2

DATE	REV.	DRAWING NO.
DEC. 7, 1994	NO. ___ DATE ___	SHEET 2 OF 20

REF. DWG.
Hobbs, New Mexico Quadrangle Map

Symbol Legend

- PAVED HIGHWAY
- UNPAVED ROADWAY
- GATE OR CHECK VALVE
- EXIST. PIPELINES
- PROPOSED PIPELINE LOOP
- ALTERNATE ROUTE
- P.S. PROFILE SLOPE
- C.S. CROSS SLOPE
- PUMP STATION
- SCRAPER TRAP
- AERIAL MARKER

Land Ownership

EXHIBIT B
3 PAGES

Analytical Technologies, Inc.

"Method Report Summary"

Accession Number: 509548
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 509357
Project Name: MAPCO
Project Location: FOUR-CORNERS PIPELINE
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
509357-01	ALKALINITY (2320B)	MG/L	530
	CHLORIDE (325.2)	MG/L	28
	CONDUCTIVITY (120.1)	UMH/CM	1100
	PH (150.1)	UNITS	6.7
	SULFATE (375.4)	MG/L	28
	TOTAL DISSOLVED SOLIDS (160.1)	MG/L	570

TOTAL METALS

Analytical Technologies, Inc.

Sample ID

Test Water

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Client Project ID: 4-Corners Pipeline

Date Collected: 09/19/95

Lab Sample ID: 95-09-212-01

Prep Date: 09/25, 27/95

Sample Matrix: Aqueous

Date Analyzed: 09/28/95

Analyte	Modified Method	Concentration mg/L	Detection Limit mg/L
Arsenic	6010	ND	0.01
Barium	6010	0.2	0.1
Cadmium	6010	ND	0.005
Calcium	6010	170	1
Iron	6010	ND	0.1
Lead	6010	ND	0.003
Magnesium	6010	30	1
Manganese	6010	ND	0.01
Mercury	7470	ND	0.0002
Potassium	6010	3	1
Selenium	6010	ND	0.005
Sodium	6010	28	1
Zinc	6010	0.04	0.02

ND = Not Detected

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : MID-AMERICA PIPELINE ATI I.D.: 509357
PROJECT # : (NONE)
PROJECT NAME : 4-CORNERS PIPE TEST

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	TEST WATER	AQUEOUS	09/19/95	NA	09/20/95	1
02	TRIP BLANK	AQUEOUS	08/28/95	NA	09/20/95	1

PARAMETER	UNITS	01	02
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	0.6	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.2	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		100	105
TRIFLUOROTOLUENE (%)		112	105

EXHIBIT C

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

September 13, 1995

John Richard Anderson
P.O. Box 136
Gail, TX 79738

RE: Mid-America Pipeline Company Hydrostatic Tests/480-NM-LEA-45

Dear Mr. Anderson:

Mid-America Pipeline Company is constructing and will soon be hydrostatic testing its new 12-inch pipeline in your area. Hydrostatic testing involves filling the pipeline with water and pressurizing to check for and eliminate any leaks. The pipe that is being tested is new steel pipe, having no oil or hydrocarbon content.

After a hydrostatic test, the test water will be discharged onto the ground at various locations. The test water will be potable water and will be analyzed before and after the hydrostatic test. Copies of the test results will be available upon request. If the water discharge is over 5,000 gallons, the water will be discharged into a hay bale filtration structure to dissipate the energy of the flow and mitigate surface erosion. Smaller discharges will be discharged into the trench or on the ground just outside of the right-of-way.

Mid-America Pipeline Company requests your written permission to discharge the test water onto your property. Thank you for your time and consideration in this matter. Should you have any questions or desire any additional information, please do not hesitate to call.

Sincerely;

Roddy M. Curry
Right-of-Way Supervisor

I hereby agree to allow Mid-America Pipeline Company to discharge test water onto my property.

John R. Anderson
John Richard Anderson

5345 WYOMING BLVD. N.E., SUITE 101 • P.O. BOX 91327, 87199-1327 • ALBUQUERQUE, N.M. 87109 • (505) 823-9443 FAX: (505) 857-9923

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

November 2, 1995

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

Subject: Application for individual permit to discharge over 100,000 gallons of hydrostatic test water in Lea County, New Mexico.

Dear Mr. Anderson:

Mid-America Pipeline Company is constructing and hydrostatic testing its new 12-inch pipeline loop approximately 400 miles in length adjacent to its existing pipeline system, from a point near Hobbs, New Mexico in Gaines County, Texas to a point approximately 15 miles south of Farmington in San Juan County, New Mexico.

Mid-America Pipeline Company respectfully requests a permit for an individual discharge of over 100,000 gallons of water used to test a segment of its pipeline approximately 254 miles in length from a point north of Edgewood to a point east of Hobbs, New Mexico. The test will require approximately 1,800,000 gallons of water. Items included in this permit application are as follows:

a) Map showing location of the pipeline to be tested.

See attached Exhibit A.

b) Description of the test.

The test is an 8-hour hydrostatic test of new 12-inch steel line pipe required to qualify the new pipeline loop for its design operating pressure. The segment to be tested is buried pipe approximately 254 miles in length beginning at the SW corner of S29, T11N, R7E, Santa Fe County, New Mexico and ending at Mid-America Pipeline Company's "Hobbs Station" in the NW 1/4, S 24, Block AX, Gaines County, Texas. The test water will be transported through the pipeline from north to south as construction and testing progresses.

5345 WYOMING BLVD. N.E., SUITE 101 • P.O. BOX 91327, 87199-1327 • ALBUQUERQUE, N.M. 87109 • (505) 823-9443 FAX: (505) 857-9923

When testing is complete, the water willl be discharged as described herein.

c) Source and analysis of test water.

Source of test water is a potable water service pipeline owned and operated by the Entranosa Water and Wastewater Cooperative, Edgewood, New Mexico. The water hydrant is located at the SW corner of S29, T11N, R7E, Santa Fe County, New Mexico.

Analysis of test water- See attached Exhibit B.

d) Point of discharge of the test water.

NW 1/4, S 7, T 16 S, R 38 E, Lea County, New Mexico
Point of discharge is shown on Exhibit A.

e) Method and location for collection and retention of fluids and solids.

The test water will be disbursed as irrigation water in rural areas. The water will be discharged into a hay bale filtration structure to dissipate the energy of the flow and mitigate surface erosion.

f) Depth of ground water at discharge site.

80 feet.

g) Proposed method of disposal of fluids and solids after test completion including closure of any pits.

The test water will be disbursed as irrigation water in rural areas. No significant solid materials are anticipated and no pits will be used.

h) Identification of land owners at and adjacent to the discharge site.

Land owner at the discharge site is:
Emma G. Lawrence

Land owners adjacent to the discharge site are as follows:

State of New Mexico (north and east boundary)
Emma G. Lawrence and Walter V. Lawrence (south boundary)
Pearl Yadon (west boundary)
Frank and Francis Prather (west boundary)

l) Written permission from the land owner of the collection/retention site.

See attached Exhibit C.

I trust that sufficient information has been provided to allow you to issue the requested permit. Should you have any questions or desire any additional information, please do not hesitate to call me or Jim Brooking at (505) 823-9443.

Very truly yours,

Gary Harkey
Project Manager

attachments

EXHIBIT A

MID-AMERICA PIPELINE COMPANY
TULSA, OKLAHOMA

PROPOSED FOUR CORNERS PIPELINE LOOP

LEA COUNTY, NEW MEXICO

Aerial Marker Location:
A.M. 20 to A.M. 35

DRAWN	SCALE
SCR	Miles 1 0 1 2

DATE	REV.	DRAWING NO.
DEC. 7, 1994	NO. ___ DATE ___	SHEET 2 OF 20

REF. DWG.
Hobbs, New Mexico Quadrangle Map

Symbol Legend

- PAVED HIGHWAY
- UNPAVED ROADWAY
- GATE OR CHECK VALVE
- EXIST. PIPELINES
- PROPOSED PIPELINE LOOP
- ALTERNATE ROUTE
- P.S. PROFILE SLOPE
- C.S. CROSS SLOPE
- PUMP STATION
- SCRAPER TRAP
- 30 AERIAL MARKER

Land Ownership

EXHIBIT B
3 PAGES

Analytical Technologies, Inc.

"Method Report Summary"

Accession Number: 509548
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 509357
Project Name: MAPCO
Project Location: FOUR-CORNERS PIPELINE
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
509357-01	ALKALINITY (2320B)	MG/L	530
	CHLORIDE (325.2)	MG/L	28
	CONDUCTIVITY (120.1)	UMH/CM	1100
	PH (150.1)	UNITS	6.7
	SULFATE (375.4)	MG/L	28
	TOTAL DISSOLVED SOLIDS (160.1)	MG/L	570

TOTAL METALS

Analytical Technologies, Inc.

Sample ID

Test Water

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Client Project ID: 4-Corners Pipeline

Date Collected: 09/19/95

Lab Sample ID: 95-09-212-01

Prep Date: 09/25, 27/95

Sample Matrix: Aqueous

Date Analyzed: 09/28/95

Analyte	Modified Method	Concentration mg/L	Detection Limit mg/L
Arsenic	6010	ND	0.01
Barium	6010	0.2	0.1
Cadmium	6010	ND	0.005
Calcium	6010	170	1
Iron	6010	ND	0.1
Lead	6010	ND	0.003
Magnesium	6010	30	1
Manganese	6010	ND	0.01
Mercury	7470	ND	0.0002
Potassium	6010	3	1
Selenium	6010	ND	0.005
Sodium	6010	28	1
Zinc	6010	0.04	0.02

ND = Not Detected

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : MID-AMERICA PIPELINE ATI I.D.: 509357
PROJECT # : (NONE)
PROJECT NAME : 4-CORNERS PIPE TEST

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	TEST WATER	AQUEOUS	09/19/95	NA	09/20/95	1
02	TRIP BLANK	AQUEOUS	08/28/95	NA	09/20/95	1

PARAMETER	UNITS	01	02
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	0.6	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.2	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		100	105
TRIFLUOROTOLUENE (%)		112	105

EXHIBIT C

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

September 21, 1995

Emma G. Lawrence, Trustee
P.O. Box 2309
Hobbs, NM 88240

RE: Mid-America Pipeline Company Hydrostatic Tests/480-NM-LEA-13

Dear Mrs. Lawrence:

Mid-America Pipeline Company is constructing and will soon be hydrostatic testing its new 12-inch pipeline in your area. Hydrostatic testing involves filling the pipeline with water and pressurizing to check for and eliminate any leaks. The pipe that is being tested is new steel pipe, having no oil or hydrocarbon content.

After a hydrostatic test, the test water will be discharged onto the ground at various locations. The test water will be potable water and will be analyzed before and after the hydrostatic test. Copies of the test results will be available upon request. If the water discharge is over 5,000 gallons, the water will be discharged into a hay bale filtration structure to dissipate the energy of the flow and mitigate surface erosion. Smaller discharges will be discharged into the trench or on the ground just outside of the right-of-way.

Mid-America Pipeline Company requests your written permission to discharge the test water onto your property. Thank you for your time and consideration in this matter. Should you have any questions or desire any additional information, please do not hesitate to call.

Sincerely;

Roddy M. Curry
Right-of-Way Supervisor

I hereby agree to allow Mid-America Pipeline Company to discharge test water onto my property.

Emma G. Lawrence, Trustee

5345 WYOMING BLVD. N.E., SUITE 101 • P.O. BOX 91327, 87199-1327 • ALBUQUERQUE, N.M. 87109 • (505) 823-9443 FAX: (505) 857-9923

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE LOOP
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

October 16, 1995

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

Subject: Application for individual permit to discharge over 100,000 gallons of hydrostatic test water in Sandoval County, New Mexico.

Dear Mr. Anderson:

Mid-America Pipeline Company is constructing and hydrostatic testing its new 12-inch pipeline loop approximately 400 miles in length adjacent to its existing pipeline system, from a point near Hobbs, New Mexico in Gaines County, Texas to a point approximately 15 miles south of Farmington in San Juan County, New Mexico.

Mid-America Pipeline Company respectfully requests a permit for an individual discharge of over 100,000 gallons of water used to test a segment of its pipeline approximately 26 miles in length from a point north of Edgewood to a point north of Bernalillo, New Mexico. The test will require approximately 850,000 gallons of water. Items included in this permit application are as follows:

a) Map showing location of the pipeline to be tested.

See attached Exhibit A.

b) Description of the test.

The test is an 8-hour hydrostatic test of new 12-inch steel line pipe as required to qualify the new pipeline loop for its design operating pressure. The segment to be tested is buried pipe approximately 26 miles in length beginning at the SW corner of S29, T11N, R7E, Santa Fe County, New Mexico and ending in the SW 1/4, S 15, T 13 N, R 4 E, Sandoval County, New Mexico.

c) Source and analysis of test water.

Source of test water is a potable water service pipeline owned and operated by the Entranosa Water and Wastewater Cooperative, Edgewood, New Mexico. The water hydrant is located at the SW corner of S29, T11N, R7E, Santa Fe County, New Mexico.

Analysis of test water- See attached Exhibit B.

d) Point of discharge of the test water.

SW 1/4, S 15, T 13 N, R 4 E, Sandoval County, New Mexico
Point of discharge is shown on Exhibit A.

e) Method and location for collection and retention of fluids and solids.

The test water will be disbursed as irrigation water in rural areas. The water will be discharged into a hay bale filtration structure to dissipate the energy of the flow and mitigate surface erosion.

f) Depth of ground water at discharge site.

154 feet.

g) Proposed method of disposal of fluids and solids after test completion including closure of any pits.

The test water will be disbursed as irrigation water in rural areas. No significant solid materials are anticipated and no pits will be used.

h) Identification of land owners at and adjacent to the discharge site.

Land owner at the discharge site is:
U. S. A. in trust for the Pueblo of Santa Ana.

Land owners adjacent to the discharge site are as follows:
A. T. & S. F. Railroad (west boundary)
Interstate Highway I-25 (east boundary)

I) Written permission from the land owner of the collection/retention site.

See attached Exhibit C.

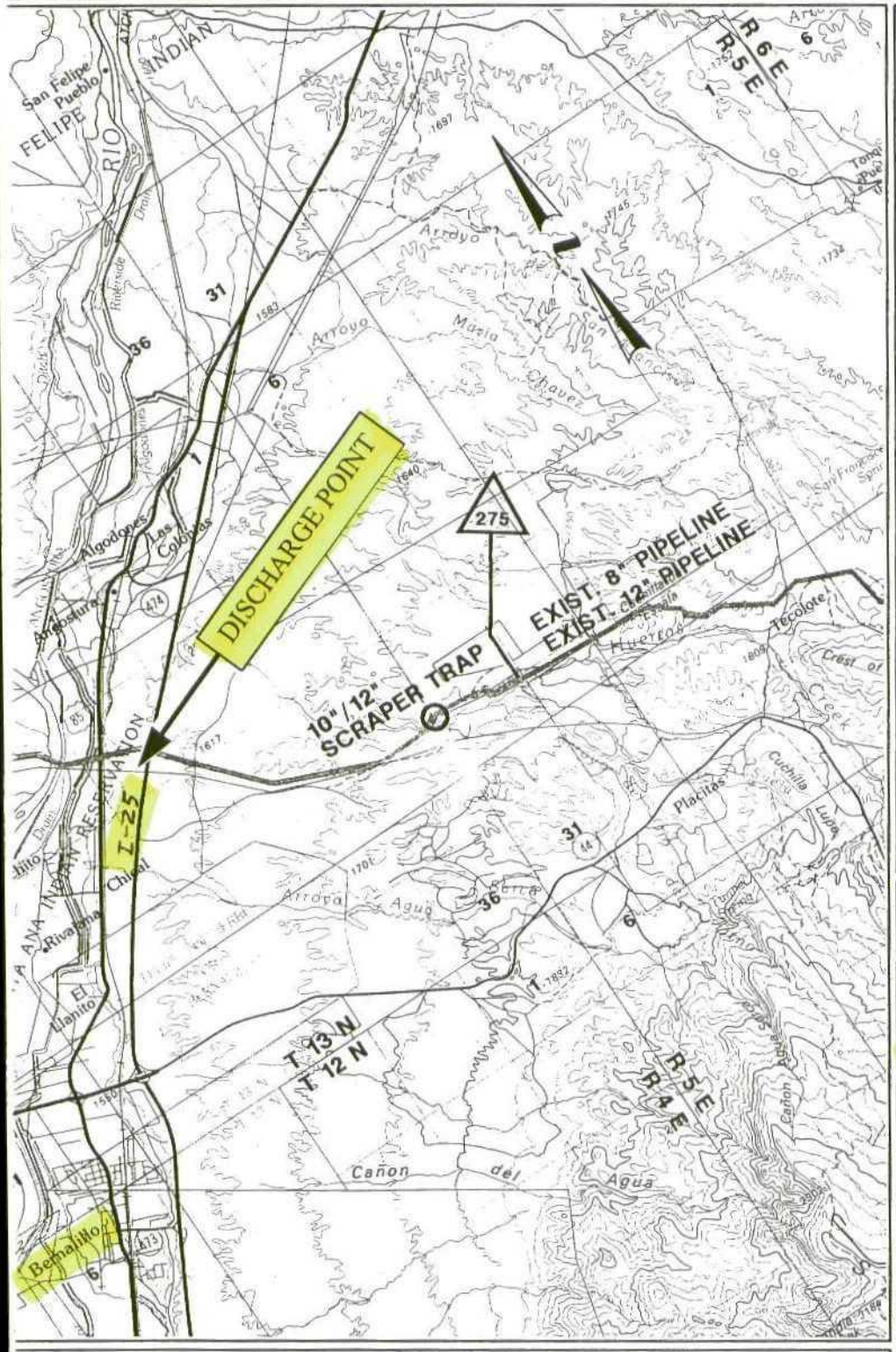
I trust that sufficient information has been provided to allow you to issue the requested permit. Should you have any questions or desire any additional information, please do not hesitate to call me or Jim Brooking at (505) 823-9443.

Very truly yours,

Gary Harkey
Project Manager

attachments

EXHIBIT A



MID-AMERICA PIPELINE COMPANY
TULSA, OKLAHOMA

PROPOSED FOUR CORNERS PIPELINE LOOP

SANDOVAL COUNTY, NEW MEXICO

Aerial Marker Location:
A.M. 275 to A.M. 290

DRAWN	SCALE
SER	Miles 1 0 1 2

DATE	REV.	DRAWING NO.
DEC. 7, 1994	NO. ___ DATE ___	SHEET 15 OF 20

REF. DWG.
Albuquerque and Los Alamos, New Mexico Quadrangle Maps

Symbol Legend

- PAVED HIGHWAY
- UNPAVED ROADWAY
- GATE OR CHECK VALVE
- EXIST. PIPELINES
- PROPOSED PIPELINE LOOP
- ALTERNATE ROUTE
- P.S. PROFILE SLOPE
- C.S. CROSS SLOPE
- PUMP STATION
- SCRAPER TRAP
- 30 AERIAL MARKER

Land Ownership

EXHIBIT B
3 PAGES

Analytical**Technologies,**Inc.

"Method Report Summary"

Accession Number: 509548
Client: ANALYTICAL TECHNOLOGIES, INC.
Project Number: 509357
Project Name: MAPCO
Project Location: FOUR-CORNERS PIPELINE
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
509357-01	ALKALINITY (2320B)	MG/L	530
	CHLORIDE (325.2)	MG/L	28
	CONDUCTIVITY (120.1)	UMH/CM	1100
	PH (150.1)	UNITS	6.7
	SULFATE (375.4)	MG/L	28
	TOTAL DISSOLVED SOLIDS (160.1)	MG/L	570

TOTAL METALS

Analytical**Technologies,**Inc.

Lab Name: Analytical Technologies, Inc.

Client Name: ATI-NM

Client Project ID: 4-Corners Pipeline

Lab Sample ID: 95-09-212-01

Sample Matrix: Aqueous

Sample ID

Test Water

Date Collected: 09/19/95

Prep Date: 09/25, 27/95

Date Analyzed: 09/28/95

Analyte	Modified Method	Concentration mg/L	Detection Limit mg/L
Arsenic	6010	ND	0.01
Barium	6010	0.2	0.1
Cadmium	6010	ND	0.005
Calcium	6010	170	1
Iron	6010	ND	0.1
Lead	6010	ND	0.003
Magnesium	6010	30	1
Manganese	6010	ND	0.01
Mercury	7470	ND	0.0002
Potassium	6010	3	1
Selenium	6010	ND	0.005
Sodium	6010	28	1
Zinc	6010	0.04	0.02

ND = Not Detected

Analytical**Technologies**, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS/AROMATICS (EPA 8010/8020)
CLIENT : MID-AMERICA PIPELINE ATI I.D.: 509357
PROJECT # : (NONE)
PROJECT NAME : 4-CORNERS PIPE TEST

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	TEST WATER	AQUEOUS	09/19/95	NA	09/20/95	1
02	TRIP BLANK	AQUEOUS	08/28/95	NA	09/20/95	1

PARAMETER	UNITS	01	02
BENZENE	UG/L	<0.5	<0.5
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	0.6	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.2	<0.2
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
ETHYLBENZENE	UG/L	<0.5	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5	<2.5
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.2	<0.2
TETRACHLOROETHENE	UG/L	<0.5	<0.5
TOLUENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.2	<0.2
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
TOTAL XYLENES	UG/L	<0.5	<0.5
SURROGATES:			
BROMOCHLOROMETHANE (%)		100	105
TRIFLUOROTOLUENE (%)		112	105

MID-AMERICA PIPELINE COMPANY
FOUR CORNERS PIPELINE
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

EXHIBIT C

October 11, 1995

Mr. Roy Montoya
Tribal Administrator
Santa Ana Pueblo
02 Dove Road
Bernalillo, New Mexico 87004

Re: Mid America Pipeline Company Hydrostatic Tests/Santa Ana Pueblo Tribal Lands

Dear Mr. Montoya:

Mid America Pipeline Company is constructing and will soon be hydrostatic testing its new 12-inch pipeline within the Reservation. Hydrostatic testing involves filling the pipeline with water and pressurizing to check for and eliminate any leaks. The pipe that is being tested is new steel pipe, having no oil or hydrocarbon content.

After a hydrostatic test, the test water will be discharged onto the ground at various locations. The test water will be potable and will be analyzed before and after the hydrostatic test. Copies of the test results can be provided to you upon request. If the water discharge is over 5,000 gallons, the water will be discharged into a hay bale filtration structure to dissipate the energy of the flow and mitigate surface erosion. Smaller discharges will be discharged into the trench or on the ground just outside the right-of-way.

Mid-America Pipeline requests your written permission to discharge the test water onto the lands of the Santa Ana Pueblo. Thank you for your time and consideration in this matter. Should you have any questions or desire any additional information, please do not hesitate to call.

Sincerely,

Edwin R. Peck Jr.

Permission is hereby granted to discharge onto the lands of the Santa Ana Pueblo.

Roy Montoya, Tribal Administrator, Santa Ana Pueblo

5345 WYOMING BLVD. N.E., SUITE 101 · P.O. BOX 91327, 87199-1327 · ALBUQUERQUE, N.M. 87109 · (505) 823-9443 FAX: (505) 857-9923

MID-AMERICA PIPELINE COMPANY
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

August 25, 1994

Mr. Chris Eustice
Environmental Geologist
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

RE: Notice of Intent to Discharge Hydrostatic Test Water
Lea County, New Mexico

Dear Mr. Eustice:

Mid-America Pipeline Company is planning a hydrostatic test of approximately 1.5 miles of 4 1/2" O.D. pipeline starting on September 28, 1994. The planned location for discharge of hydrostatic test waters is in Section 31, Township 18, South Range 37 East, as shown on the enclosed map. The pipeline will be new and clean. Permission will be obtained from all landowners before discharging water on their properties. The water will be obtained from the Hobbs city water supply. After the hydrostatic test is complete, approximately 7,000 gallons will be discharged on the ground at a rate of approximately 100 gpm. Representative samples will be taken at the beginning, middle, and end of the discharge and analyzed for contaminants. The discharge point will be at the East end of the line as shown on the enclosed map. The water will be filtered through hay bales when discharged to prevent erosion and encourage re-aeration. No chemicals will be added to the hydrostatic test waters, and no water with a visible oil sheen will be discharged. It is estimated that contaminants from this test will be negligible. The ground water was 45 feet deep in 1991, but much pumping down of these areas recently may have reduced them to 55 feet according to the State Engineer's Office. The subsurface is Ogallala Formation.

Please advise if any further measures need to be taken.

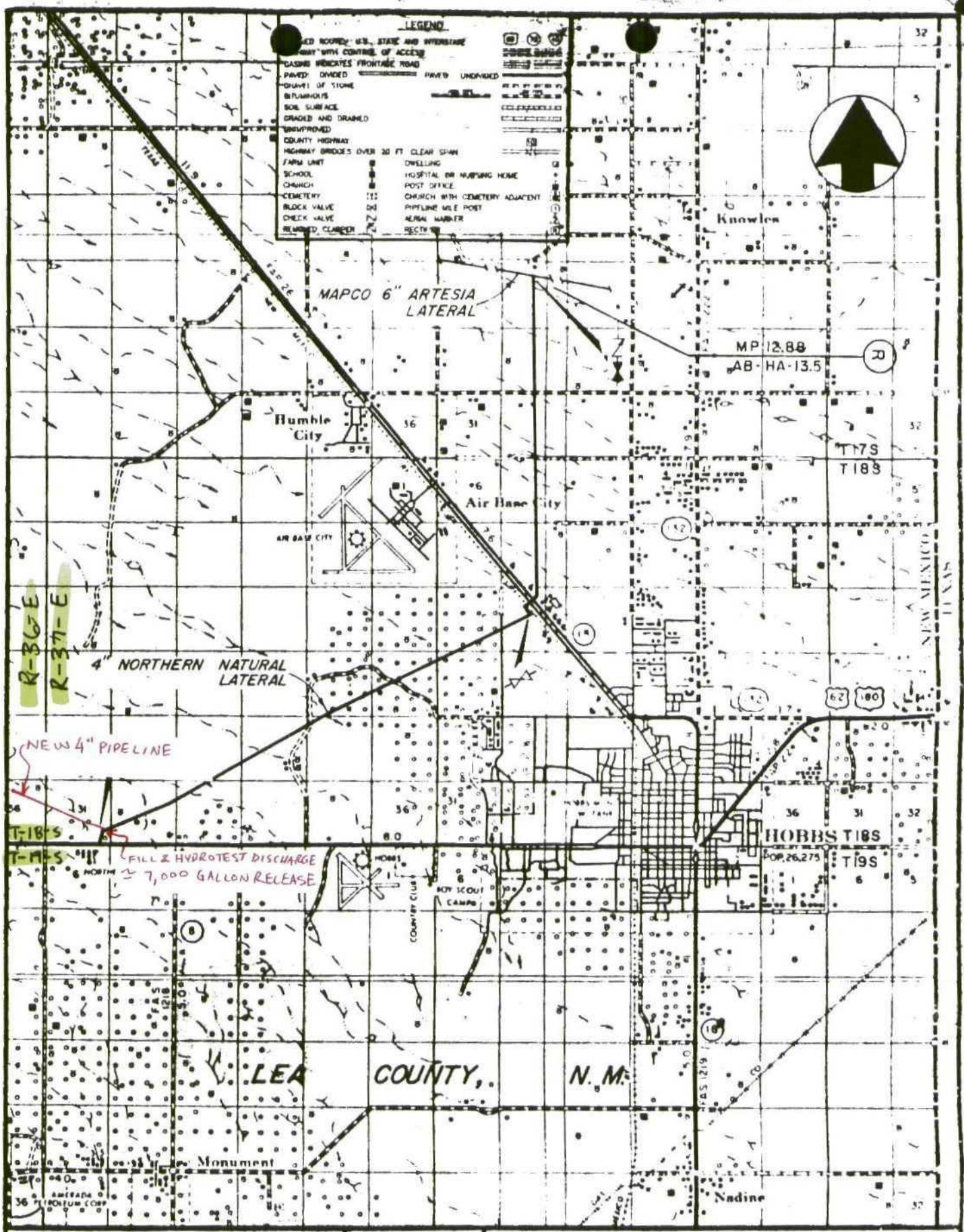
If you have any questions, please contact me at (918) 599-6010 or by fax at (918) 560-9199.

Sincerely,

Joseph L. Cheek
Project Engineer

JLC:pb
Enclosure

cc: Ray Penderson, Ron Ledingham, Ronnie Hobbs, Kevin Bodenhamer, Jerry Barnett, Howard Patterson, Larry Davied, Larry Smith, AFE PPL-40312



MID-AMERICA PIPELINE SYSTEM

a division of mapco inc.

TULSA, OKLAHOMA

4" NORTHERN NATURAL LATERAL

NORTHERN NATURAL-HOBBS PLANT TO ARTESIA LATERA..

SCALE 1" = 2 MILES	DATE 7-10-72	DRAWN Lindsey	REV. 1
		APPROVED	685-S-1

H	4-3-89	ADDED LEGEND	KDD	5-4-90	POSTED RECTIFIER	RH

MID-AMERICA PIPELINE COMPANY
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

October 5, 1994

Mr. Tom Trujillo
El Paso Natural Gas Company
100 North Stanton
El Paso, Texas 79901

RE: Approval for Discharge of Hydrostatic Test Water
Lea County, New Mexico

Dear Mr. Trujillo:

Mid-America Pipeline Company is planning a hydrostatic test of approximately 1.5 miles of 4 1/2" O.D. pipeline starting on or about October 10, 1994. The planned location for discharge of hydrostatic test waters is in Section 36 Township 18 South Range 36 East, as shown on the enclosed map. The pipeline will be new and clean, and the water will be obtained from the Hobbs city water supply. The tenant, Mr. Larry Squires, will be contacted prior to any discharges. After the hydrostatic test is complete, approximately 7,000 gallons of water will be discharged on the ground at a rate of approximately 100 gpm. The water will be filtered through hay bales when discharged to reduce chances of erosion and encourage re-aeration. If any erosion does occur due to the discharge, it will be corrected. The hay bales will be hauled off and properly disposed of after the discharge is complete. No chemicals will be added to the hydrostatic test waters, and no water with a visible oil sheen will be discharged. It is estimated that contaminants from this test will be negligible.

Please show your acceptance by signing at the right below and returning this letter to me. If you have any questions, please contact me at (918) 599-6010 or by fax at (918) 560-9199.

Sincerely,

Joseph L. Cheek
Project Engineer

Agreed to and Accepted by:
EL PASO NATURAL GAS COMPANY

Thomas D. Hutchins
Thomas D. Hutchins

JLC:pb
Enclosure

cc: Ray Penderson, Kevin Bodenhamer, Larry Smith, Ron Ledingham, Wiley Lorett, Ronnie Hobbs, Howard Patterson, AFE PPL-40312

MID-AMERICA PIPELINE COMPANY
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

August 22, 1994

Mr. Roger Anderson
Oil Conservation Commission
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

RE: Notice of Intent to Discharge Hydrostatic Test Water
Lea County, New Mexico

Dear Mr. Anderson:

Mid-America Pipeline Company is planning a hydrostatic test of approximately 13 miles of 4 1/2" O.D. pipeline starting on September 1, 1994. Enclosed is a map showing the planned location for discharge of hydrostatic test waters. The pipeline was in Natural Gas Liquids service. Several years ago the line was removed from service, cleaned by emptying with a series of pigs, and laid down in low pressure nitrogen. Due to the age of the pipeline, it is possible that leaks will be found. Permission will be obtained from all landowners before testing the pipeline or discharging water on their properties. The water will be obtained from a clean water supply source. Analysis of test water will be forwarded as soon as available. Prior to filling the line for testing, the pipeline will be flushed. Approximately 50 barrels of water will be put into the pipeline to flush out any possible residual contaminants. This rinse water will be contained and removed for proper disposal. Prior to disposal, representative samples will be taken at the beginning, middle, and end of the discharge and analyzed for contaminants - ei. major anions and cations, heavy metals, aromatic and halogenated hydrocarbons, ph, and conductivity. Following a satisfactory flushing of the line, the hydrostatic test will begin. The line will be filled and then cut into three test sections. At each of the two break points, approximately 4,000 gallons of water will be released. Locations of the points where the line is divided are shown on the enclosed map. After the hydrostatic test is complete, the line fill of test water, approximately 56,000 gallons, will be discharged on the ground at a rate of approximately 100 gpm. The discharge point will be at the south end of the line as shown on the enclosed map. The water will be filtered through hay bales when discharged to prevent erosion and encourage re-aeration. Samples will be taken at the beginning, middle and end of the discharge and analyzed for contaminants. No chemicals will be added to the hydrostatic test

waters, and no water with a visible oil sheen will be discharged. Water examined from a similar line tested recently was analyzed for contaminants. Samples contained no measurable benzene, and oil and grease was less than one milligram per liter. It is estimated that contaminants from this test will also be negligible. The ground water was 45 feet deep in 1991, but much pumping down of these areas recently may have reduced them to 55 feet according to the State Engineer's Office. The subsurface is Ogallala Formation.

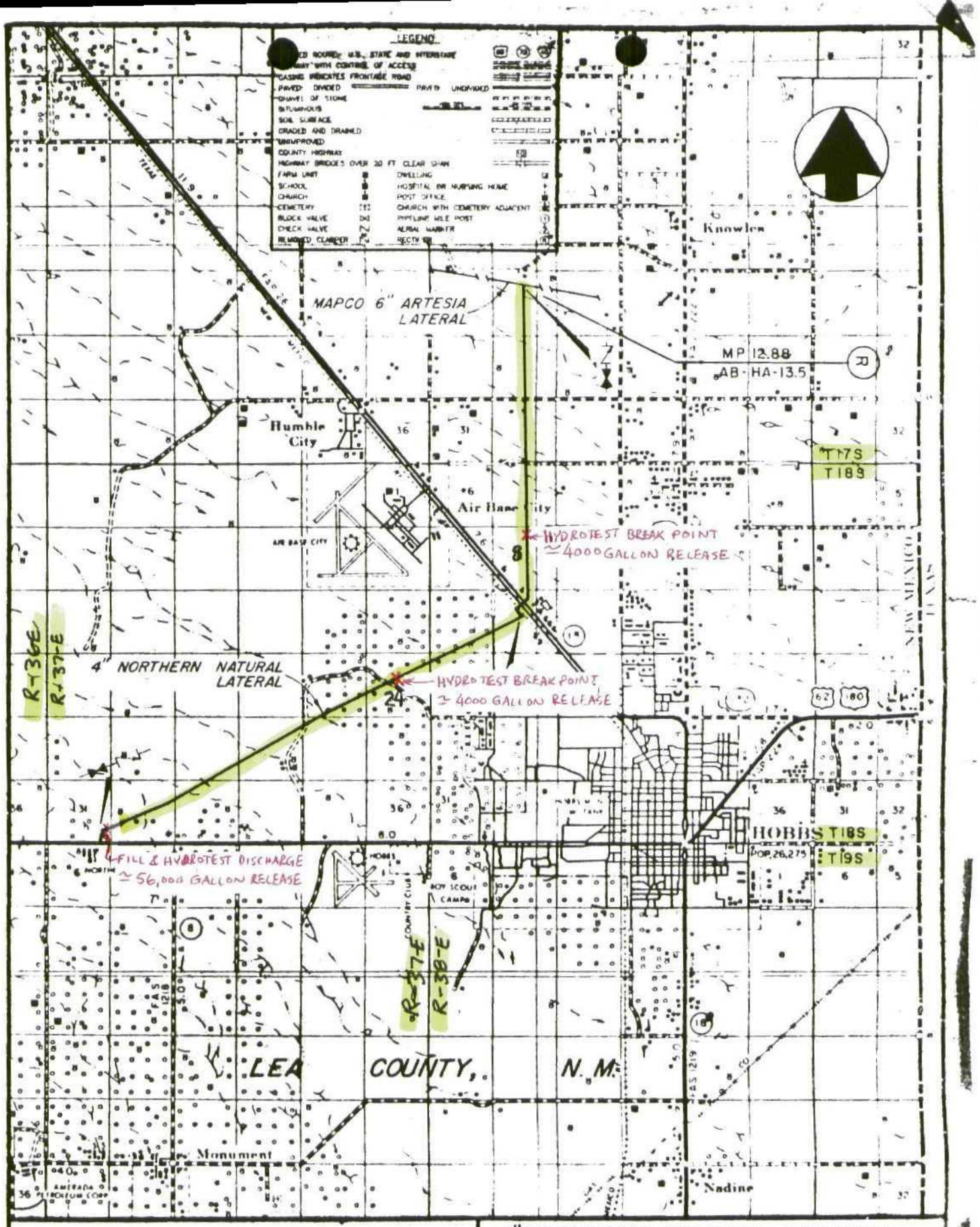
Please advise if any further measures need to be taken. If you have any questions, please call me at (918) 599-6010 or by fax at (918) 560-9199.

Sincerely,

Joseph L. Cheek
Project Engineer

JLC:pb
Enclosure

cc: Kevin Bodenhamer
Larry Davied
Ron Ledingham
Jerry Barnett
Ray Penderson
Larry Smith
Ronnie Hobbs
Vanessa Lee
Howard Patterson
AFE PPL-40312



MID-AMERICA PIPELINE SYSTEM

a division of mapco inc.

TULSA, OKLAHOMA

4" NORTHERN NATURAL LATERAL

NORTHERN NATURAL-HOBBS PLANT TO ARTESIA LATERA

SCALE 1" = 2 MILES	DATE 7-10-72	DRAWN Lindsey	REV. 1
		APPROVED	685-S-1

4-3-89	ADDED LEGEND	KDD	5-4-90	POSTED RECTIFIER	RH

MID-AMERICA PIPELINE COMPANY
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

August 25, 1994

Mr. Chris Eustice
Environmental Geologist
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

RE: Notice of Hydrostatic Test on Existing NGL Pipeline
Lea County, New Mexico

Dear Mr. Eustice:

Per our conversation this morning, we are approved to commence hydrostatic testing based on the following revision to the plan in the letter to Roger Anderson dated August 22, 1994.

Mid-America Pipeline Company is planning a hydrostatic test of approximately 13 miles of 4 1/2" O.D. pipeline starting on September 1, 1994. The pipeline was in Natural Gas Liquids service. Several years ago, the line was removed from service, cleaned by emptying with a series of pigs, and laid down in low pressure nitrogen. Due to the age of the pipeline, it is possible that leaks will be found. All landowners have been notified of the upcoming test, and permission will be obtained from landowners where there are planned discharges. The water will be obtained from the Hobbs city water supply. Prior to filling the line for the test, the pipeline will be flushed. Approximately 50 barrels of water will be flushed through the pipeline to get rid of any possible residual contaminants. This rinse water will be contained and removed for disposal at an OCD approved facility. Prior to disposal, representative samples will be taken from the beginning, middle, and end of the discharge and analyzed for contaminants. The entire line will be filled with water and then cut into three test sections. At each of the two break points, approximately 4,000 gallons will be discharged. This water, as well as water discharged at any leak sites, will be recovered as much as practical into a vacuum truck and disposed of at an OCD approved facility. After the hydrostatic test is complete, the line fill of water will be discharged into frac tanks and hauled off for disposal at an OCD approved facility. Representative samples will be taken at the beginning, middle, and end of the discharge and analyzed for contaminants. No chemicals will be added to the hydrostatic test waters. It is

estimated that contaminants from this test will be negligible. The ground water was 45 feet deep in 1991, but much pumping down of these areas recently may have reduced them to 55 feet according to the State Engineer's Office. The subsurface is Ogallala Formation.

Please advise if any further measures need to be taken.

If you have any questions, please contact me at (918) 599-6010 or by fax at (918) 560-9199.

Sincerely,

Joseph L. Cheek
Project Engineer

JLC:pb

cc: Ray Penderson
Kevin Bodenhamer
Larry Davied
Ron Ledingham
Jerry Barnett
Larry Smith
Ronnie Hobbs
Howard Patterson
AFE PPL-40312

MID-AMERICA PIPELINE COMPANY
A SUBSIDIARY OF MAPCO NATURAL GAS LIQUIDS INC.

September 21, 1994

Mr. Chris Eustice
Environmental Geologist
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

RE: Spill Report
Hydrostatic Test on Existing NGL Pipeline
Lea County, New Mexico

Dear Mr. Eustice:

During the subject hydrostatic test, four leaks occurred with a loss of approximately four barrels of water at the first leak and less than one barrel at each of the other leaks. As much of the water as practical was recovered by a vacuum truck. Test samples of the water have been sent to a lab for analysis, and the results will be forwarded to you as soon as they are available. The approximate location of the leaks is shown on the attached map. The test results will also be sent to Per Abo for their approval. If approval is received from Per Abo, their approval will be forwarded to you. The water is being stored in frac tanks until approval to discharge is received from your office.

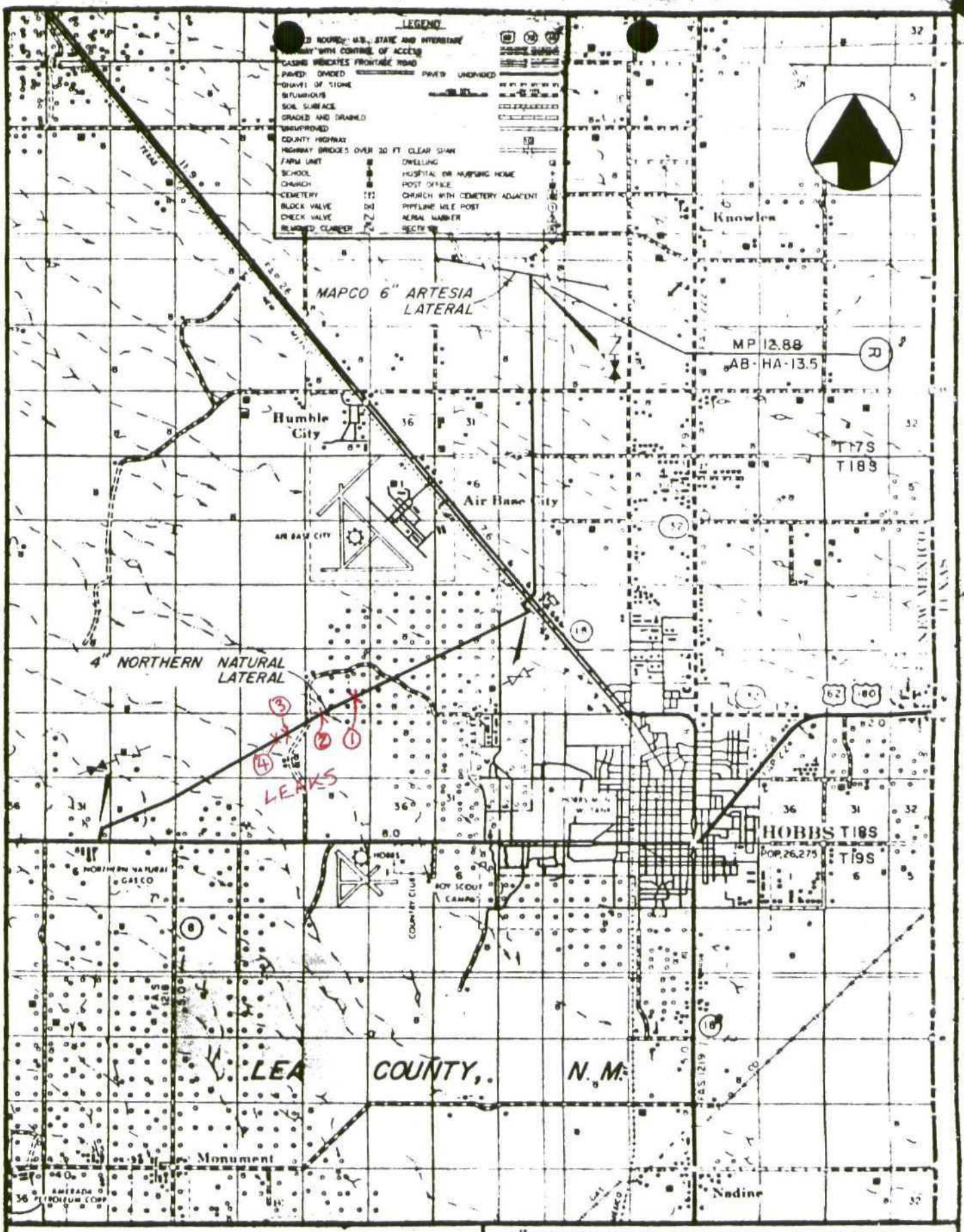
If you have need of any further information, please call me at (918) 599-6010.

Sincerely,

Joseph L. Cheek
Project Engineer

JLC:pb
Enclosures

cc: Ray Penderson
Ron Ledingham
Larry Smith
AFE PPL-40312
Kevin Bodenhamer
Jerry Barnett
Howard Patterson



MID-AMERICA PIPELINE SYSTEM

a division of mapco inc.

TULSA, OKLAHOMA

4" NORTHERN NATURAL LATERAL

NORTHERN NATURAL-HOBBS PLANT TO ARTESIA LATERAL

SCALE 1" = 2 MILES	DATE 7-16-72	DRAWN Lindsey	REV. 1
		APPROVED	685-S-1

H	4-3-89	ADDED LEGEND	KDD	5-4-90	POSTED RECTIFIER RH

NEW MEXICO ENVIRONMENT DEPARTMENT
MEMORANDUM OF COMPLAINT

FIELD OFFICE: Farmington

COMPLAINANT'S NAME: Anonymous TELEPHONE:

ADDRESS: CITY:

SOURCE\RESPONSIBLE PARTY: Enertek TELEPHONE: [redacted]

ADDRESS: 4901 E. Main CITY: Farmington

PROGRAM: *(Circle Appropriate Program)*
Air Quality, Food, Vector, (Hazardous Waste,) Noise, OHS,
Radiation, Solid Waste, Swimming Pool, (Water Pollution,) Water Supply

OCD

NATURE OF COMPLAINT: Enertek is dumping liquids (oil, glycol, parafins, etc) into Farmington storm drain which goes to the Animas River. Storm drain located at Steams Lab with possible evidence at Rig Out (south of Steams Lab). .Glycol contamination flowing into irrigation ditch. They have open top tanks located in a pit on dirt bottom. The tank is leaning, has a single wall bottom and is open to birds and other animals.

COMPLAINT TAKEN BY: ~~Tom Welts~~ DATE: 8/22/94

INVESTIGATION REPORT:

RECEIVED
AUG 23 1994
OIL CONS. DIV.
DIST. 3

BY: DATE:

ACTION TAKEN:

BY: DATE:

FOLLOW UP:

SATISFACTORY CORRECTION
OF PROBLEM VERIFIED BY: DATE:

PLEASE ENSURE THAT APPROPRIATE CENTRAL OFFICE PERSONNEL ARE KEPT INFORMED OF COMPLAINTS RELATED TO THEIR PROGRAMS.