GW - 355

GENERAL CORRESPONDENCE

YEAR(S): 2004 -> 1994

NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-355) – Transwestern Pipeline Co., William Kendrick, (713) 646-7644, P.O. Box 4657, Houston, Texas 77210-4657, has submitted a discharge permit application for the Bell Lake Plant remediation project located in the SW/4 NE/4 of Section 1, Township 24 South, Range 33 East, NMPM, Lea County, New Mexico. Approximately 1,000 gallons per day of groundwater will be discharged to an evaporation pond that is double-lined and has leak detection. Ground water most likely to be affected in the event of an accidental discharge at the surface is at a depth of approximately 90 feet. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday.

Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

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

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 17th day of May 2004.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

December 6, 2002

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO. 7001-1940-0004-7923-0605</u>

Mr. Larry Campbell Transwestern Pipeline Company 6381 North Main Roswell, New Mexico88201

RE: CASE #1R74

GROUND WATER REMEDIATION

BELL LAKE PLANT

Dear Mr. Campbell:

The New Mexico Oil Conservation Division has reviewed Transwestern Pipeline Company's (TPC) December 4, 2002 email titled "TW BELL LAKE REMEDIATION SITE – WELL INSTALLATIONS" which was submitted on behalf of TPC by their consultant Cypress Engineering Services, Inc. This document contains a work plan for installation of additional monitoring wells to determine the extent of ground water contamination at TPC's Bell Lake Plant.

The above referenced work plan is approved with the following conditions:

- 1. TPC will develop each well upon completion using EPA approved procedures.
- 2. TPC shall include the new monitor wells in the semi-annual sampling program for the site.
- 3. All wastes will be disposed of at an OCD approved facility or in an OCD approved manner.
- 4. The next semi-annual report on the facility will include a report on implementation of the work plan. The report will contain:
 - a. A description of all activities which occurred during the investigation and remedial activities including conclusions and recommendations.

- b. A summary of the investigations laboratory analytic results of soil and water quality sampling and copies of the laboratory analytical data sheets and associated quality assurance/quality control (QA/QC) data.
- c. A water table elevation map created from the water table elevation of ground water in all site monitor wells.
- d. A geologic log and well completion diagram for each monitoring well.
- 5. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

Please be advised that OCD approval does not relieve TPC of responsibility if contamination exists which is beyond the scope of the plan or if the activities fail to adequately determine the extent of contamination related to TPC's activities. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 476-3491.

Sincerely,

William C. Olson

Hydrologist

Environmental Bureau

cc: Chris Williams, OCD Hobbs District Supervisor George Robinson, Cypress Engineering Services, Inc.

Olson, William

From:

Robinson, George [George.Robinson@ENRON.com]

Sent:

Wednesday, December 04, 2002 5:51 PM

To:

Bill Olson (E-mail)

Cc: Subject: Kendrick, William; Robinson, George; Campbell, Larry TW Bell Lake Remediation Site - Well Installations





TW Bell Lake Bell Lake Monitor Proposed Wells 11... Well Detail....

Transwestern proposes to install three additional monitor wells at the Bell Lake site in an effort to better define the lateral extent of affected groundwater. A detailed report of current site conditions is included in a "Report of Groundwater Remediation Activities" recently submitted to your office for review.

With approval by your office, Transwestern plans to initiate drilling activities on Tuesday, December 10, 2002. A total of three monitor wells are scheduled to be installed. The locations of the wells are indicated in an attached drawing. A "typical" well completion detail for the wells is also attached.

If there are any questions regarding the proposed drilling activities, please contact me at the number shown below.

Thanks, George

<<TW Bell Lake Proposed Wells 110402.pdf>> <<Bell Lake Monitor Well Detail.pdf>>

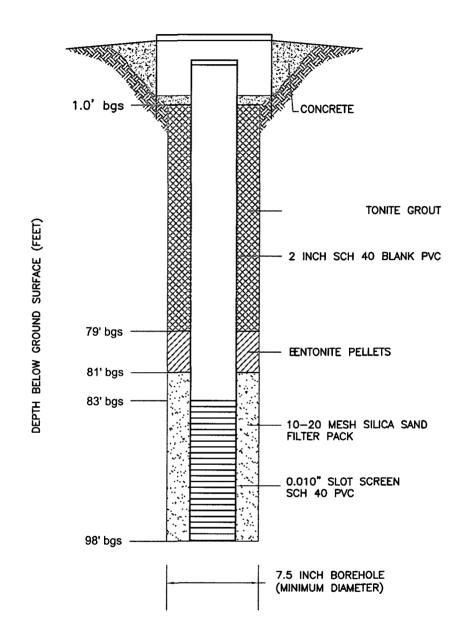
George C. Robinson, PE Contract Environmental Engineer Cypress Engineering

ENRON Office: (713) 345-1537

ENRON email: george.robinson@enron.com

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FIGURE



TW BELL LAKE REMEDIATION SITE

FIGURE 3
CONSTRUCTION DETAIL FOR
GROUNDWATER MONITORING WELL



West Little York Road, Suite 256 Houston, Texas 77040

(713) 856-7980 office (713) 856-7981 fax

December 14, 1999

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505

RE: Report of Ground Water Remediation Activities
Transwestern Pipeline Company
Bell Lake Plant
Lea County, New Mexico

Dear Bill,

The attached report is submitted pursuant to the NMOCD's requirement for reporting of ground water remediation activities at the subject facility.

If you have any questions or comments regarding this report, please contact me at (713) 646-7327 or Larry Campbell at (505) 625-8022.

Sincerely,

George C. Robinson, PE

President/Principal Engineer

xc w/attachment:

Larry Campbell

Chris Williams

18

Johnny Lamb

Transwestern Pipeline Company

NMOCD Hobbs District Office

Duke Energy



Transwestern Pipeline Company P. O. Box 1188

Houston, TX 77251-1188

July 30, 1998

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505

RECEIVED

AUG 2 0 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: Report of Ground Water Remediation Activities Transwestern Pipeline Company Bell Lake Plant Lea County, New Mexico

Dear Bill,

The attached report is submitted pursuant to the NMOCD's requirement for reporting of ground water remediation activities at the subject facility.

If you have any questions or comments regarding this report, please contact me at (505) 625-8022 or George Robinson at (713) 646-7327.

Sincerely,

Larry Campbell

Division Environmental Specialist

LC/gcr

xc w/attachment:

Jerry Sexton

NMOCD Hobbs District Office

Johnny Lamb

Union Pacific Resources Company

George Robinson

Cypress Engineering Services

16300 Katy Freeway, Suite 210 Houston, Texas 77094-1610

(281) 578-3115 office (281) 578-3491 fax

February 19, 1998

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505

> Final Disposition of Investigation Derived Wastes Transwestern Pipeline Company Bell Lake Plant

Lea County, New Mexico

Dear Bill,

During the recent drilling/sampling event at the subject facility, approximately ten and a half cubic yards of soil cuttings were generated and approximately 55 gallons of potentially contaminated water was collected from the monitor well network. The water is currently stored in a drum at the site. The wellbore soil cuttings are stored at each new well location ($\cong 1.5$ cubic yards per wellbore). The source, quantity, and proposed disposition of the soil and water is summarized below in Table 1. The proposed disposition is based on laboratory analysis of soil and ground water samples. A summary of the laboratory analytical results are attached.

Table 1. Source, Quantity, and Proposed Disposition of Investigation Derived Waste Water and Soils

Source	Quantity	Proposed Disposition
MW-10, MW-11 &	≅ 4.5 cubic yards	Due to the nondetection of TPH and BTEX, we are proposing to spread
MW-12		the soil out on the ground surface in the general vicinity of each well.
SVE-4, SVE-5,	≅ 6 cubic yards	Slightly elevated levels of TPH has been identified (TPH = 690 mg/kg).
SVE-6 & SVE-7		BTEX constituents were nondetect. These wells are located near the
		former pit areas. Due to the location, small volume, and nature of the
		soil (well sorted, fine grained, clean sandstone, with little or no fines) in
		question, we are proposing to spread the soil out on the ground surface
		over the former pit areas.
Monitor Well	≅ 55 gallons	We will collect a sample of this water and analyze for BTEX (8020). If
Network		the analytical results indicate the concentration of all BTEX compounds
		to be below WQCC standards, the contents will be emptied to the
		ground. In the event analytical results indicate the concentration of any
		BTEX compound to be above WQCC Standard, the contents will be
Į į		placed into the concrete containment of the condensate storage tank
		where the water will evaporate.

The proposed disposition of investigation derived wastes will be implemented upon review and approval by your office.

5/29/98 0930 hrs.
Verbal Approval to
Coesse Rebinson
Coesse All Main

If you have any questions regarding this proposal, please contact me at (713) 646-7327.

Sincerely,

George C. Robinson, P.E.

President

sls/GR

Attachments

xc w/attachments:

Larry Campbell

Wayne Price

Transwestern Pipeline Co.

NMOCD Hobbs District

Roswell, NM

Hobbs, NM



Client: Address: Cypress Engineering Service

16300 Katy Freeway

Suite 210

Houston, TX 77094

Project:

Bell Lake

Project Number:

Project Manager: George Robinson

Date Collected:

12/29/97

Date Received:

1/2/98

Report Date:

1/5/98

Sample Matrix:

soil

Analysis Date:

1/2/98

Extraction Date:

1/2/98

EPA Method - 418.1

Final volume of Freon-113 used (ml)	20
Sample weight (g)	10

HEAL ID	Client ID	Absorbance	Dilution	TPH (mg/kg)
9801002-1	composite soil borings	0.585	1	690

QA/QC

Ext Blk 1/2

N/A

0.001

1

<20

Sample ID:

BS 1/2

Sample Amount

<20

Spike 100

Recovery % Recovery 100

Sample Amount

<20

Duplicate

100

Sample ID:

9712064-1

<20

RPD NA

Sincerely:

Andy Freeman

Semi-Volatiles Supervisor

Scott Hallenbeck **Laboratory Manager**

4901 Hawkins NE, Suite A, Albuquerque, NM 87109 Voice (505) 345-3975, Fax (505) 345-4107

Hall Environmental Analysis Laboratory, Inc.

Client:

Cypress Engineering

Project:

Bell Lake Sample Matrix: Non-Aqueous

Date Collected: 12/29/97 Date Received: 1/2/98

Date Extracted: 1/2/98

Volatile Organic Compounds EPA Method 8020 Units: PPM (mg/kg)

	Sample Name:	Composite Soil Boring	Extraction Blank
	Lab Code:	9801002-1	EB 1/2
	Date Analyzed:	1/5/98	1/5/97
Compound	MRL	Result	Result
MTBE	0.1	nd	nd
Benzene	0.05	nd	nd
Toluene	0.05	nd	nd
Ethylbenzene	0.05	nd	nd
Total Xylenes	0.05	nd	nd
BFB (Surrogate) Recovery		110	100
Dilution Factor		1	1

Han Environmental Analysis Laborator

Client: Project:

Cypress Engineering Enron/TWP Bell Lake Plant

Sample Matrix: Non-Aqueous

Date Collected: 1/10/98 Date Received: 1/13/98

Date Extracted: 1/13/98

Volatile Organic Compounds Units: PPM (mg/kg)

	Sample Name: Lab Code: Date Analyzed:	MW-10,11,12 9801039-4 1/15/98	Extraction Blank 1/15/98
EPA Method 8021 Compound	MRL	Result	Result
Benzene	0.05	nd	nd
Toluene	0.05	nd	nd
Ethylbenzene	0.05	nd	nd
Total Xylenes	0.05	nd	nd
BFB (Surrogate) Recovery		86	101
Dilution Factor		1	1



Hall Environmental **Analysis Laboratory**

Client:

Cypress Engineering Service

Address:

16300 Katy Freeway

Suite 210

Houston, TX 77094

Project: **Project Number:** Enron/TWP Bell Lake Pla

Project Manager: George Robinson

Date Collected:

1/10/98

Date Received:

1/13/98

Report Date:

1/16/98

Sample Matrix:

soil

Analysis Date:

1/16/98

Extraction Date:

1/15/98

EPA Method - 418.1

Final volume of Freon-113 used (ml)	20
Sample weight (g)	10

HEAL ID	Client ID	Absorbance	Dilution	TPH(mg/kg)
9801039-4	Monitor Wells 10, 11, 12	0.006	1	<20

QA/QC

Ext Blk 1/15

N/A

-0.005

1

<20

Sample ID:

Sample Amount

Spike

Recovery % Recovery

BS 1/15

<20

250

244

98

Sample ID:

Sample Amount

Duplicate

<u>RPD</u>

Ext Blk DUP 1/16

<20

<20

NA

Sincerely:

Andy Freeman

Semi-Volatiles Supervisor

Scott Hallenbeck **Laboratory Manager**

4901 Hawkins NE, Suite A, Albuquerque, NM 87109 Voice (505) 345-3975, Fax (505) 345-4107



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

August 26, 1997

CERTIFIED MAIL RETURN RECEIPT NO. P-410-431-212

Mr. Larry Campbell
Transwestern Pipeline Company
6381 North Main
Roswell, New Mexico
88201

RE: GROUND WATER INVESTIGATION

BELL LAKE PLANT

Dear Mr. Campbell:

The New Mexico Oil Conservation Division has reviewed Transwestern Pipeline Company's (TPC) July 2, 1997 "PROPOSED ASSESSMENT AND REMEDIATION ACTIVITIES, TRANSWESTERN PIPELINE COMPANY BELL LAKE PLANT, LEA COUNTY, NEW MEXICO". This document contains a work plan for installation of additional monitoring wells to determine the extent of ground water contamination at TPC's Bell Lake Plant. The document also contains a proposal for additional soil vapor extraction wells in the source areas.

The above referenced work plans are approved with the following conditions:

- 1. TPC will develop each well upon completion using EPA approved procedures.
- 2. All wastes will be disposed of at an OCD approved facility or in an OCD approved manner.
- 3. The next semi-annual report on the facility will include a report on implementation of the above investigation and remediation work plan. The report will contain:
 - a. A description of all activities which occurred during the investigation and remedial activities including conclusions and recommendations.
 - b. A summary of the investigation laboratory analytic results of soil and water quality sampling and copies of the laboratory analytical data sheets and associated quality assurance/quality control (QA/QC) data.

Mr. Larry Campbell August 26, 1997 Page 2

- c. A water table elevation map for each site using the water table elevation of the ground water in all monitor wells.
- d. A geologic log and well completion diagram for each monitoring and vapor extraction well.
- 4. TPC will notify the OCD at least 1 week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.
- 5. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

Please be advised that OCD approval does not relieve TPC of liability if contamination exists which is beyond the scope of the plan; if the activities fail to adequately determine the extent of contamination; or if the remedial actions fail to adequately remediate contamination related to TPC's activities. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely.

William C. Olson Hydrogeologist

Environmental Bureau

xc:

Chris Williams, OCD Hobbs District Supervisor

Wayne Price, OCD Hobbs District Office

George Robinson, Cypress Engineering Services, Inc.

Transwestern Pipeline Company

TECHNICAL OPERATIONS
6381 North Main • Roswell, New Mexico 88201

July 2, 1997

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505

RE: Proposed Assessment and Remediation Activities
Transwestern Pipeline Company Bell Lake Plant
Lea County, New Mexico

Dear Bill.

Transwestern proposes to install three additional ground water monitor wells and two additional soil vapor extraction wells at the subject site.

The proposed locations for the three additional ground water monitor wells is indicated on the attached figures as proposed monitor well locations MW-10, MW-11, and MW-12. The primary objective for the installation of the three additional wells is to delineate the downgradient extent of the contaminant plume in ground water.

The proposed locations for the two additional soil vapor extraction wells is indicated on Figure 3 as proposed SVE well locations SVE-4 and SVE-5. The primary objective for the installation of the two additional SVE wells is to improve the effectiveness of phase separated hydrocarbon (PSH) removal. Transwestern will also install a product only recovery pump in each of the two new SVE wells. Recovered PSH will be accumulated in an AST and sold as natural gas condensate.

All drilling, completion, well development, and sampling methods will follow those outlined in the "Remedial Action Plan" prepared for this site and dated July 26, 1995. This plan had previously been reviewed and approved by your office. The only exceptions to the plan are: 1) the screened interval for the SVE wells will be reduced to 20 feet (screened from approximately 10 feet below to 10 feet above the water table); and 2) the routine ground water sampling frequency, list of analytes, and reporting requirements will follow those outlined in Transwestern's most recent status report for this site dated March 3, 1997 (including the conditions established by the OCD in your June 6, 1997, correspondence).

Transwestern Pipeline Company, will implement the proposed activities upon review and approval by your office. If you have any questions regarding this proposal, please contact me at (505) 625-8022 or George Robinson at (713) 646-7327.

Sincerely.

Larry Campbell

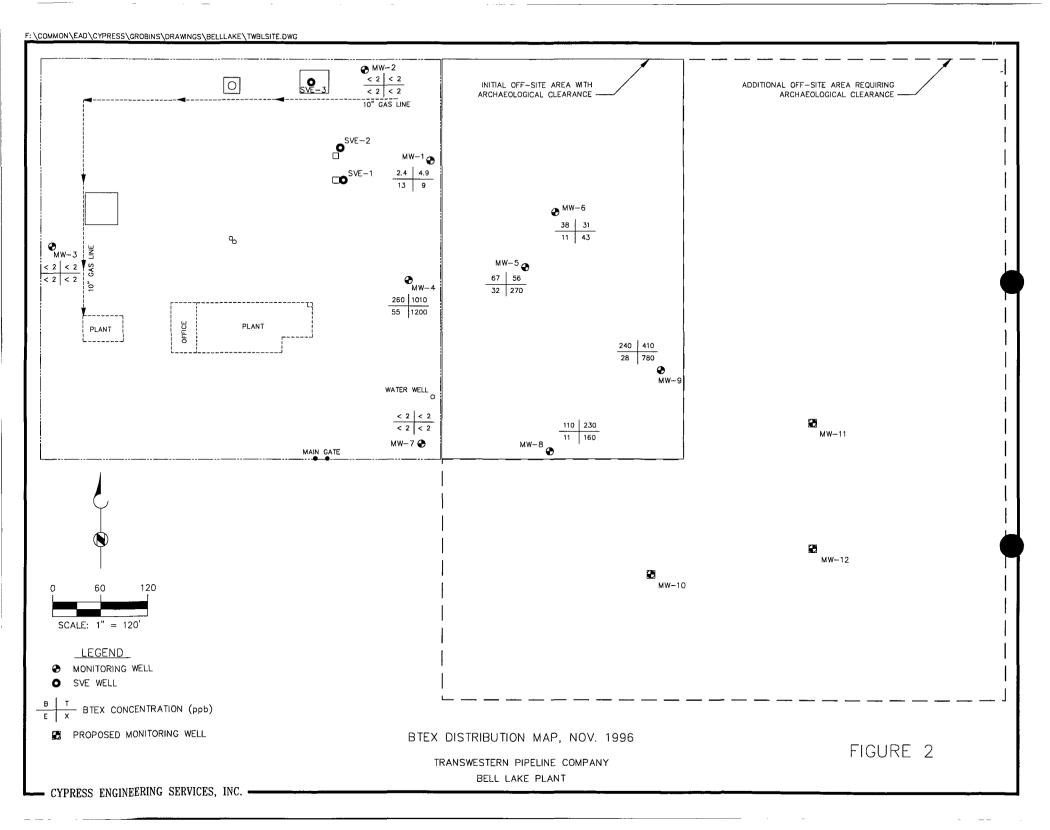
Division Environmental Specialist

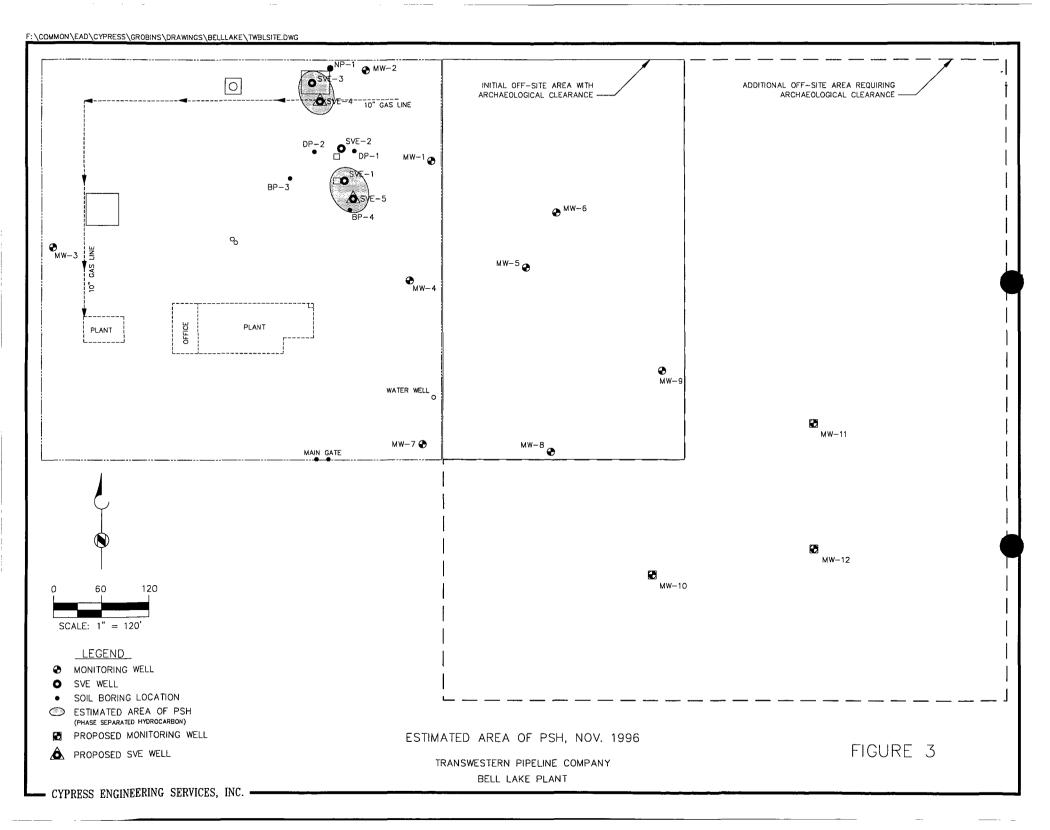
gcr/LC

attachments

xc: George Robinson

Cypress Engineering Services









ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

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

June 6, 1997

CERTIFIED MAIL RETURN RECEIPT NO: P-410-431-180

Mr. Larry Campbell
Transwestern Pipeline Company
P.O. Box 1717
Roswell, New Mexico 88202-1717

RE: TRANSWESTERN PIPELINE CO. BELL LAKE PLANT

Dear Mr. Campbell:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) March 3, 1997 "ANNUAL REPORT OF GROUND WATER REMEDIATION ACTIVITIES, TRANSWESTERN PIPELINE COMPANY BELL LAKE PLANT, LEA COUNTY, NEW MEXICO" which was received by the OCD on March 27, 1997. This document contains the results of TPC's remedial actions at the Bell Lake Plant during 1996. The document also contains TPC's proposal to modify the sampling schedule from quarterly to semi-annually; modify the ground water sampling parameters; report on the remedial actions and monitoring on an annual basis and; dispose on the ground surface contaminated monitor well purge water which is less than New Mexico Water Quality Control Commission standards.

The proposed disposal, sampling and reporting modifications, as contained in the above referenced documents, are approved with the following conditions:

- 1. TPC will sample and analyze ground water from the monitor wells on an annual basis for New Mexico Water Quality Control Commission (WQCC) metals using EPA approved methods.
- 2. TPC will submit a ground water investigation work plan to the OCD by August 23, 1997. The work plan will address further delineation of the full downgradient extent of ground water contamination which is in excess of WQCC ground water standards.

Mr. Larry Campbell June 6, 1997 Page 2

Please be advised that OCD approval does not relieve TPC of liability should contamination exist which is outside the scope of work plan, or if the proposed work plan fails to the adequately remediate and monitor contamination at the site. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson Hydrogeologist

Environmental Bureau

OCD Artesia District Office xc:

George Robinson, Cypress Engineering Services, Inc.

P 410 431 180

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ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

March 19, 1996

CERTIFIED MAIL RETURN RECEIPT NO: P-765-962-560

Mr. Larry Campbell
Transwestern Pipeline Company
P.O. Box 1717
Roswell, New Mexico 88202-1717

RE: DISPOSAL OF INVESTIGATION WASTES BELL LAKE PLANT

Dear Mr. Campbell:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) January 30, 1996 "FINAL DISPOSITION OF INVESTIGATION DERIVED WASTES, TRANSWESTERN PIPELINE COMPANY BELL LAKE PLANT, LEA COUNTY, NEW MEXICO". This document contains request to evaporate the ground water wastes and to thin spread the contaminated soils generated during ground water investigations related to the former unlined surface impoundments at the Bell Lake Plant. The request is based upon the results of laboratory analyses.

The above referenced disposal request is approved.

Please be advised that OCD approval does not relieve TPC of liability if the disposal operations are found to pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely.

William C. Olson Hydrogeologist

Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor Wayne Price, OCD Hobbs District Office

Z 765 962 560



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STATE OF NEW MEXICO FNERGY. NERALS AND NATURAL RESOURCES DEPARTMENT

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

March 13, 1996

CERTIFIED MAIL RETURN RECEIPT NO: 2-765-962-552

Mr. Larry Campbell Transwestern Pipeline Company 6381 North Main Roswell, New Mexico 8820

RE: GROUND WATER MONITORING REPORTS

EUNICE STATION THOREAU STATION WT-1 STATION ATOKA-1 STATION BELL LAKE PLANT

Dear Mr. Campbell:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) January 11, 1996 "REPORTING REQUIREMENTS FOR GROUND WATER REMEDIATION PROJECTS, TRANSWESTERN PIPELINE COMPANY". This document contains TPC's request to change the reporting frequency and ground water monitoring report submission dates for the Eunice Station, Thoreau Station, WT-1 Station, Atoka 1 Station and Bell Lake Plant.

The above referenced request is approved.

Please be advised that OCD approval does not relieve TPC of liability should contamination exist which is outside the scope of work plan, or if the proposed work plan fails to the adequately remediate or monitor contamination at the sites. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson Hydrogeologist

Environmental Bureau

xc: OCD Artesia District Office

George Robinson, Cypress Engineering Services, Inc.

Bill Olson

From:

Wayne Price

Sent:

Friday, February 09, 1996 12:59 PM

To:

Bill Olson

Cc:

Jerry Sexton; Wayne Price

Subject:

Tex NM PL TNMPL #10-95/Saunders Pit

Tony Savoie call yesterday and informed me they decided to repair the tank in place.

He also indicated they were in the process of sampling the water for RCRA hazardous chacteristics. When they obtain the results they will forward to you.

es: JAHY SEXTON

							BILL 82300
INSPECTION	5	FACILITY	H OUR	QUARTER HOURS	Name WAYNE PRICE Time of Departure 7 AM In the space below indicate the performed, listing gells or less signature	Date 2/21/96 M	iles District I 4 PM Car No. G O.
				1	TRHUS WESTERN BE		My SHARP 1833 BUSP.
	1	٨			MW'S 1,2+3 211L 1 CHECKEN 5VE-1 PRADUCT 2/14FA 90,52' 72.12 PHASIS PROJUCT	2 it # Interfu	OF FREE
5VE	No.	200	153 153	Ross		CARBON ODOR	
	TIPE	MSPI			Mileage UIC RFA Other	Other	Hours UIC RFA Other
	PER H = H P = P C = P T = W R = R	rormi lugg: lugg: ell : epai: eteri isha:	reepi ing ing C rest r/wes 10w	ng leanu kover Spill	U = Underground Injection Correlated to injection propressiting from injection injection and production tests, surface injection R = Inspections relating to S ion	pect, facility, or well or into any well. (SMD, Indry wells, water flows or pressur equipment, plugging, etc.) deciamation Fund Activity	operations S = SMD U = Underground Storag G = General Operation P = Facility or locati

E = indicates some form of enforcement action taken in the field (show immediately below the letter U, R or O)

ENRONTranswestern Pipeline Company

P. O. Box 1188 Houston, Texas 77251-1188 (713) 853-6161

January 30, 1996

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505

RE: Final Disposition of Investigation Derived Wastes
Transwestern Pipeline Company Bell Lake Plant

Lea County, New Mexico

Dear Bill,

During the recent drilling/sampling event at the subject facility, approximately nine cubic yards of soil cuttings were generated and approximately 40 gallons of potentially contaminated water was collected from the monitor well network. The water is currently stored in a drum at the site. The wellbore soil cuttings are stored at each new well location ($\cong 1.5$ cubic yards per wellbore). The source, quantity, and proposed disposition of the soil and water is summarized below in Table 1. The proposed disposition is based on laboratory analysis of soil and ground water samples. A summary of the laboratory analytical results are attached.

Table 1. Source, Quantity, and Proposed Disposition of Investigation Derived Waste Water and Soils

Source	Quantity	Proposed Disposition
MW-7, MW-8, MW-9, SVE-2	≅ 6 cubic yards	Due the negligible amounts of TPH and BTEX, we are proposing to spread the soil out on the ground surface in the general vicinity of each well.
SVE-1 & SVE-3	≅ 3 cubic yards	Elevated levels of BTEX and TPH have been identified. These wells are located above the former pit areas. Due to the location, small volume, and nature of the soil (well sorted, fine grained, clean sandstone, with little or no fines) in question, we are proposing to spread the soil out on the ground surface over the former pit areas.
Monitor Well Network	≅ 40 gallons	We suspect some level of BTEX may be present in the water. We are proposing to dispose of the water by placing it in the condensate storage tank concrete containment area where the water will evaporate.

Transwestern Pipeline Company, will implement the proposed disposition of investigation derived wastes upon review and approval by your office.

If you have any questions regarding this proposal, please contact me at (505) 625-8022 or George Robinson at (713) 646-7327.

Sincerely,

Larry Campbell

Division Environmental Specialist

bc: G. Robinson

Cypress Engineering Services

Houston, TX

Transwestern Pipeline Company Bell Lake Plant Summary of Groundwater Analyses

							BT (ug	/L)			•			ajor lons (mg/L)	3			
Well	Sampling Date	TDS (mg/L)	Alk., total (mg/L)	pH (units)	DO (mg/l)	Benzene	Toluene	Ethylbenzene	Total xylenes	Chloride	Sulfate	Sulfite	N-Nitrate	N-Nitrite	Calcium	Magnesium	Potassium	Sodium
NMWQCC S	Standard	1000	none	6-9	none	10	750	750	620	250	600	none	10	none	none	none	none	none
MW-1	10/93 12/94 5/95 12/95	7100 5800 5640	1290 °	8.8 8.8 9.55	<1	24 92 8 <200	29 50 13 366	32 54 9 <200	82 <111 29 204	2620 2500	140 78.3 176	2.0 3.0	.06 ^b 0.37 30	0.04 0.02	62.7 34.3	114 75.8		1400 2400
MW-2	10/93 12/94 5/95 12/95	9200 2600 1500 1420	445 c	7.2 7.4 8.26	2	<5ª 6 3 <2	<5ª 5 <2 <2	<5ª <2 <2 <2 <2	<5ª <4 <2 <2	512 470	51 73.6 89	0.50 <1.0	<0.05 ^b <0.10 10	0.01 0.02	79.8 132	43.1 46.2	5.4 5.89	195 3060
MW-3	10/93 12/94 5/95 12/95	1500 320 380 334	210 c	7.3 7.7 7.79	9	<5ª <2 <2 <2	<5ª <2 <2 <2	<5ª <2 <2 <2	<5 ^a <4 <2 <2	14.5 17.0	31 43.4 35	0.50 <1.0	3.6 ^b 3.3 6.7	<0.01 0.01	54.7 68	17.6 15.8	7.1 6.69	20.5 20.6
MW-4	12/94 5/95 12/95	4700 5200 6600	2180 c	9.7 10.0 10.7	<1	18 300 445	71 1300 1380	4 <2 <200	160 800 970	1700 1900	70 104 90	17.5 21.0	<0.05 ^b <0.10 103	<0.01 <0.01	<0.10 74.2		4.9 6.15	1650 1880
MW-5	12/94 5/95 12/95	9500 7400 7580	1690 c	9.3 9.0 10.4	<1	9 51 27	20 109 26	4 16 16	64 219 107	4070 3650	49 12.4 24	4.5 3.0	<0.05 ^b <0.10 53	0.01 0.06	4 .8 6.13	2.0 1.98	13.8 11.8	2690 2590
MW-6	12/94 5/95 12/95	4700 5400 4770	1070 c	8.5 9.2 9.13	2	<2 28 18	3 26 11	<2 4 3	<6 57 33	2670 2500	150 78.3 92	2.5 2.0	<0.05 ^b 0.59 44.2	0.04 0.03	11.1 68.8	4.6 11.8	14.4 17	1320 1560

a - EPA Method 8240

b - Nitrate + Nitrite

c - Result not available, compound/constituent was not reported by the laboratory

d - No sample, phase separated hydrocarbon present

e - Questionable due to the silty nature of the sample

Transwestern Pipeline Company Bell Lake Plant Summary of Groundwater Analyses

							BTEX (ug/L)				Major Ions (mg/L)										
Well	Sampling Date	TDS (mg/L)	Alk., total (mg/L)	pH (units)	DO (mg/l)	Benzene	Toluene	Ethylbenzene	Total xylenes		Chloride	Sulfate	Sulfite	N-Nitrate	N-Nitrite	Calcium	Magnesium	Potassium	Sodium		
NMWQCC Sta	andard	1000	none	6-9	none	10	750	750	620		250	600	none	10	none	none	none	none	none		
MW-7	12/95	4040	С	7.15	6	<2	<2	<2	<2		2150	88	2.0	17.5	0.023	419	155	31.2	954		
MW-8	12/95	2840	С	8.76	1	227	391	<200	228		1140	71	2.0	24.5	0.07	66.3	13	15.8	979		
MW-9	12/95	11700°	С	7.17	10e	<200	241	<200	383		4500	7	3.0	38.3	<0.01	388	168	32	3030		
SVE-1	12/95	d	d	d	d	d	d	d	d		d	d	d	d	d	d	d	ď	d		
SVE-2	12/95	2670	c	9.5	<1	<200	231	<200	202		1500	43	3.0	31.9	0.03	317	25.2	26.8	1720		
SVE-3	12/95	d	d	d	d	d	d	d	d		d	d	d	d	d	d	d	d	d		
Water Well	5/95 12/95	900 825	144 c	8.2 8.53	8	<2 <2	<2 <2	<2 <2	<2 <2		100 106	356 345	0.50 <1.0	<0.10 1.7	<0.01 <0.01	38.7 38	23.2 22.2	5.3 5.32	194 186		

a - EPA Method 8240

b - Nitrate + Nitrite

c - Result not available, compound/constituent was not reported by the laboratory

d - No sample, phase separated hydrocarbon present

e - Questionable due to the silty nature of the sample

Transwestern Pipeline Company Bell Lake Plant Summary of Soil Analyses

	Total xylenes	7	7	7	142 145	0 0	₽ ?
BTEX (ug/kg)	senelyx letoT		-				107 22
	Ethylbenzene	4	\Diamond	7	59	3 3	4 %
	Toluene	\$	\$	\$	90	\$ \$	2 %
	Benzene	$^{\circ}$	$^{\circ}$	♡	33	%	% %
	(mqq) HqT	<10	13	<10	5750 6570	6 6	1530 14
(5	Sample interval (ft. bgs	90'-100'	90'-100'	90'-100'	50'-52' 86'-88	50'-52' 86'-88	50'-52' 86'-88
Sampling Date		12/95	12/95	12/95	12/95	12/95	12/95
	Well	MW-7	MW-8	6-WW	SVE-1	SVE-2	SVE-3

MOISWIG M.

4E0

Transwestern Pipeline Company 95 JAH IN 617 8 52

TECHNICAL OPERATIONS

6381 North Main • Roswell, New Mexico 88201

January 11, 1996

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505

Reporting Requirements for Ground Water Remediation Projects Transwestern Pipeline Company

Dear Bill,

In the course of the past year, the NMOCD has approved several soil and ground water remediation plans submitted by Transwestern. Each of these plans include reporting requirements with specific dates for submittal of reports. Due to timing considerations, Transwestern proposes to modify the reporting schedule as shown below:

Project Site	Project Objective	Reporting Frequency	Current Reporting Dates	Proposed Reporting Dates
NNG Eunice Station	ground water monitoring	semi-annual	Jan. 1 & Jul. 1	Feb. 1 & Aug. 1
TW Thoreau Station	ground water remediation	semi-annual	Jan. 1 & Jul. 1	Feb. 1 & Aug. 1
TW WT-1 Station (Dehy Area)	ground water remediation	semi-annual	Feb. 1 & Aug. 1	Mar. 1 & Sep. 1
TW Atoka-1 Station	ground water remediation	semi-annual	Mar. 1 & Sep. 1	Mar. 1 & Sep. 1
Highlands Bell Lake Plant (formerly a TW asset)	ground water remediation	annual	Jul. 31	Mar. 1

The primary motivation for these changes is to avoid a January 1st reporting date which is difficult to achieve due to the inevitable end of the year rush and holiday season.

If you have any questions or comments regarding this issue, please contact me at (505) 625-8022 or George Robinson at (713) 646-7327.

Sincerely,

Larry Campbell

Division Environmental Specialist

gcr/LC

xc: George Robinson

Cypress Engineering Services, Inc.

NEW MEXICO ENERGY, A NERALS AND NATURAL ICOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. Pacheco Santa Fe, New Mexico 87505

August 30, 1995

CERTIFIED MAIL RETURN RECEIPT NO: Z-765-962-406

Mr. Bill Kendrick
ENRON Operations Corp.
P.O. Box 1188
Houston, Texas 77251-1188

RE: BELL LAKE PLANT

TRANSWESTERN PIPELINE CO.

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division (OCD) has completed a review of the following Transwestern Pipeline Company (TPC) documents which were submitted to the OCD on August 11, 1995:

- August 10, 1995 correspondence.
- July 26, 1995 "REMEDIAL ACTION PLAN FOR SUBSURFACE SOIL & GROUNDWATER, TRANSWESTERN PIPELINE COMPANY, BELL LAKE PLANT, LEA COUNTY, NEW MEXICO".
- July 1995 "TRANSWESTERN PIPELINE COMPANY, BELL LAKE PLANT, LEA COUNTY, NEW MEXICO, FINAL MONITORING WELL INSTALLATION AND INTRINSIC BIOREMEDIATION EVALUATION REPORT".
- April 1994 "SUBSURFACE INVESTIGATION, TRANSWESTERN BELL LAKE PLANT, JAL, NEW MEXICO".

These documents contain the results of TPC's investigation into the extent contaminated ground water and soils related to former unlined pit disposal activities at the Bell Lake Plant. The documents also contain TPC's plan for further investigation of the extent of ground water contamination and a remedial action plan for contaminated soils and ground water.

The proposed investigation and remedial action plan, as contained in the above referenced documents, is approved with the following conditions:

1. All ground water sampling and analysis will be conducted according to EPA methods.

Mr. Bill Kendrick August 30, 1995 Page 2

- 2. The annual reports will be submitted to the OCD on July 31 of each respective year. The reports will contain:
 - a. A description of all activities which occurred during the reporting period including as built construction details of any remediation systems installed and the details of all investigation actions performed.
 - b. A summary of the laboratory analytic results of water quality sampling of the monitor wells and remediation system monitoring. The results for each monitoring point will be presented in tabular form and will show all past and present sampling results.

NOTE: Since there is no ground water standard for total petroleum hydrocarbons (TPH) in the New Mexico Water Quality Control Commission regulations, the OCD does not require that TPC sample and analyze ground water for TPH.

- c. A quarterly water table elevation map using the water table elevation of the ground water in all monitor wells.
- 3. TPC will notify the OCD at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.
- 4. All original documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Hobbs District Office.

Please be advised that OCD approval does not relieve TPC of liability should contamination exist which is outside the scope of work plan, or if the proposed work plan fails to the adequately remediate contamination at the site. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-7154.

Sincerety

William C. Olson Hydrogeologist

Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor
Wayne Price, OCD Hobbs District
Larry Campbell, Transwestern Pipeline Co.
George Robinson, Cypress Engineering Services, Inc.

Z 765 962 406



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ENRONOPERATIONS CORP.

P. O. Box 1188

Houston, Texas 77251-1188

(713) 853-6161

August 10, 1995

Mr. Bill Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505 **RECEIVED**

AUG 1 1 1995

Environmental Bureau
Oil Conservation Division

 $\mathbf{RF} \cdot$

TW Atoka-1 Station Remediation Plan; and

W Kendud

TW WT-1 Station Dehydration Unit Area Remediation Plan; and

(TW Bell Lake Plant Assessment and Remediation Plan

Dear Bill,

Enclosed are copies of the three subject remediation plans. Also enclosed are copies of the following supporting documents for the Bell Lake plan:

- 1. Brown & Caldwell. 1994. Subsurface Investigation, Transwestern Bell Lake Plant, Jal, New Mexico. April 1994.
- 2. Brown & Caldwell. 1995. Final Monitoring Well Installation and Intrinsic Bioremediation Evaluation Report, Transwestern Pipeline Company Bell Lake Plant, Lea County, New Mexico. July 1995.

Transwestern will implement the proposed corrective action activities upon review and approval of your office.

If you have any questions regarding any of the plans, please contact me at (713) 646-7644 or George Robinson at (713) 646-7327.

Sincerely,

Bill Kendrick

EOC Environmental Affairs Manager, Projects Group

gcr/BK

ENRONOPERATIONS CORP.

P. O. Box 1188 Houston, Texas 77251-1188 (713) 853-6161

July 25, 1995

Mr. Bill Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505 Environmental Bureau Oil Conservation Division

JUL 3 1 1995

RECEIVED

RE: TW Atoka-1 Station Remediation Plan &

TW Bell Lake Plant Assessment and Remediation Plan

Dear Bill,

The purpose of this letter is to inform your office that the two subject plans will be submitted to your office for review by August 11, 1995.

Please contact me at (713) 646-7644 or George Robinson at (713) 646-7327 if this schedule presents a problem.

Sincerely

Bill Kendrick

EOC Environmental Affairs Manager, Projects Group

gcr/BK

Cypress Engineering Services, Inc.

(713) 578-3115 fax (713) 578-3491

THE CONSERVE OF DIVISION

June 16, 1995

14 th 8 52

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505

RE: Final Disposition of Purge Water from Ground Water Monitor Wells Transwester Pipeline Company Bell Lake Plant Lea County, New Mexico

Dear Bill,

We recently collected ground water samples from the subject site for analysis for BTEX constituents. In the course of collecting samples, approximately 45 gallons of potentially contaminated ground water was collected from five ground water monitor wells. This water is currently stored in a single 55 gallon drum at the site. The source, quantity, and BTEX concentration for each source is summarized below in Table 1. A copy of the analytical results are attached.

Table 1. Source, Quantity, and BTEX Concentration in Waste Water

-			BTEX	Concentration	ons (ppb)	
Source	Quantity (gallons)	В	Т	E	X	Total BTEX
MW-1	15	8	13	9	29	59
MW-2	15	3	< 2	< 2	< 2	< 9
MW-4	5	300	1300	< 200	800	< 2600
MW-5	5	51	109	16	219	395
MW-6	5	28	26	4	57	115
Total/Ave.	45	46	< 164	< 28	< 130	< 368

The proposed disposition is to pump the purge water into the on-site natural gas condensate tank. Transwestern Pipeline Company will implement the proposed disposition upon review and approval by your office.

In regard to the NMOCD's recent request for a "ground water remediation and delineation work plan" for this site, Transwestern has requested that CES prepare the work plan for submittal to to George Robinson
on 7/25/95 your office by July 28, 1995.

If you have any questions regarding this proposal, please contact me at (713) 646-7327.

Sincerely,

George C. Robinson, P.E.

Environmental Engineer

Cypress Engineering Services, Inc.

c/o: Environmental Affairs Dept.

ENRON Operations Corp.

Room 3AC-3142

P.O. Box 1188

Houston, TX 77251-1188

xc: Larry Campbell Transwestern Pipeline Company Roswell, NM



Dallas Division 1548 Valwood Parkway Suite 118 Carrollton, TX 75006

Tel: (214) 406-8100 Fax: (214) 484-2969

ANALYTICAL AND QUALITY CONTROL REPORT

George Robinson ENRON CORPORATION Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

06/08/1995

NET Job Number: 95.03553

Enclosed is the Analytical and Quality Control report for the following samples submitted to the Dallas Division of NET, Inc. for analysis. Reproduction of this analytical report is permitted only in its entirety.

Sample <u>Number</u>	Sample Description	Date <u>Taken</u>	Date <u>Received</u>
263804	MW-1	05/31/1995	06/02/1995
263805	MW-2	05/31/1995	06/02/1995
263806	MW-3	05/31/1995	06/02/1995
263807	MW-4	05/31/1995	06/02/1995
263808	MW-5	05/31/1995	06/02/1995
263809	MW-6	05/31/1995	06/02/1995
263810	WATER WELL	05/31/1995	06/02/1995

National Environmental Testing, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were within quality control criteria.

Instrument calibration: All calibrations were within method quality
control criteria.

Analysis Comments: No Unusual Comments

Project Coordinator





06/08/1995

Page: 2

Job No.: 95.03553

George Robinson ENRON CORPORATION

Env. Affairs, Rm 3 AC 3142

P.O. Box 1188

Houston, TX 77251

Project Name: TW BELLE LAKE PLANT

Date Received: 06/02/1995

263804

MW-1

Taken: 05/31/1995

Alkalinity, total (CACO3) 1,290 mg/L 2,620 Chloride mg/L 0.37 N-Nitrate mg/L 0.04 N-Nitrite mg/L 8.8 units рН Sulfite 2.0 mg/L Arsenic, Dissolved, ICP Barium, Dissolved, ICP 0.07 mg/L 0.32 mg/L <0.01 Cadmium, Dissolved, ICP mg/L Calcium, Dissolved, ICP Chromium, Dissolved, ICP 62.7 mg/L <0.01 mg/L Copper, Dissolved, ICP Iron, Dissolved, ICP Lead, Dissolved, ICP <0.01 mg/L 0.73 mg/L <0.03 mg/L Magnesium, Dissolved, ICP Manganese, Dissolved, ICP 114 mq/L 0.28 mg/L Mercury, Dissolved, CVAA <0.0002 mq/L Potassium, Dissolved, ICP Selenium, Dissolved, ICP 12.6 mg/L <0.04 mg/L Silver, Dissolved, ICP Sodium, Dissolved, ICP <0.01 mg/L 1400 mg/L Zinc, Dissolved, ICP <0.03 mg/L Total Dissolved Solids 5,800 mg/L EPA 8020-AQ (Preserved) Benzene 8 ug/L Ethylbenzene 9 ug/L Toluene 13 ug/L 29 Xylenes, Total uq/L SURR: a,a,a-TFT 85 % Rec BASE/NEUTRALS - 8270 AQUEOUS <5. Acenaphthene ug/L Acenaphthylene <5. ug/L Anthracene <5. ug/L <5. Benzo(a) anthracene ug/L Benzo(b) fluoranthene <5. ug/L Benzo(k) fluoranthene < 5. ug/L <5. Benzo(g,h,i)perylene ug/L <5. Benzo(a)pyrene ug/L Chrysene < 5. ug/L Dibenzo(a,h)anthracene < 5. ug/L



06/08/1995

Page: 3

Job No.: 95.03553

George Robinson ENRON CORPORATION

Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

Project Name: TW BELLE LAKE PLANT

Date Received: 06/02/1995

263804 MW-1

Taken: 05/31/1995

Fluoranthene	<5.	ug/L
Fluorene	<5.	ug/L
Indeno(1,2,3-cd)pyrene	<5.	${ m ug/L}$
Naphthalene	<5.	ug/L
Phenanthrene	<5.	\mathtt{ug}/\mathtt{L}
Pyrene	<5.	ug/L
SURR: 2-Fluorobiphenyl	81	8
SURR: Nitrobenzene-d5	88	%
SURR: Terphenyl-d14	82	%

263805

MW-2

Alkalinity, total (CACO3)	445	mg/L
Chloride	512	${\tt mg/L}$
N-Nitrate	<0.10	${\tt mg/L}$
N-Nitrite	0.01	mg/L
Нф	7.4	units
Sulfite	0.50	mg/L
Arsenic, Dissolved, ICP	0.06	mg/L
Barium, Dissolved, ICP	0.22	mg/L
Cadmium, Dissolved, ICP	<0.01	mg/L
Calcium, Dissolved, ICP	79.8	mg/L
Chromium, Dissolved, ICP	<0.01	mg/L
Copper, Dissolved, ICP	0.02	mg/L
Iron, Dissolved, ICP	3.7	mg/L
Lead, Dissolved, ICP	<0.03	mg/L
Magnesium, Dissolved, ICP	43.1	mg/L
Manganese, Dissolved, ICP	0.67	mg/L
Mercury, Dissolved, CVAA	<0.0002	mg/L
Potassium, Dissolved, ICP	5.4	mg/L
Selenium, Dissolved, ICP	<0.04	mg/L
Silver, Dissolved, ICP	<0.01	mg/L
Sodium, Dissolved, ICP	195	mg/L
Zinc, Dissolved, ICP	0.04	mg/L
Total Dissolved Solids	1,500	mg/L
EPA 8020-AQ (Preserved)		
Benzene	3	ug/L
Ethylbenzene	<2	ug/L
Toluene	<2	ug/L



06/08/1995

Page: 4

Job No.: 95.03553

George Robinson ENRON CORPORATION Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

Project Name:

Date Received: 06/02/1995

263805

MW-2

Taken: 05/31/1995

TW BELLE LAKE PLANT

Xylenes, Total	<2	ug/L
SURR: a,a,a-TFT	71	% Rec
BASE/NEUTRALS - 8270 AQUEOUS		
Acenaphthene	<6.	ug/L
Acenaphthylene	<6.	ug/L
Anthracene	<6.	ug/L
Benzo(a)anthracene	<6.	ug/L
Benzo(b)fluoranthene	<6.	ug/L
Benzo(k)fluoranthene	<6.	ug/L
Benzo(g,h,i)perylene	<6.	ug/L
Benzo(a)pyrene	<6.	ug/L
Chrysene	<6.	ug/L
Dibenzo(a,h)anthracene	<6.	${ t ug/L}$
Fluoranthene	<6.	${ t ug/L}$
Fluorene	<6.	ug/L
Indeno(1,2,3-cd)pyrene	<6.	ug/L
Naphthalene	<6.	ug/L
Phenanthrene	<6.	ug/L
Pyrene	<6.	ug/L
SURR: 2-Fluorobiphenyl	92	%
SURR: Nitrobenzene-d5	68	o, o o o o
SURR: Terphenyl-d14	128	%

263806

MW-3

Alkalinity, total (CACO3) Chloride N-Nitrate N-Nitrite pH Sulfite Arsenic, Dissolved, ICP Barium, Dissolved, ICP Cadmium, Dissolved, ICP Calcium, Dissolved, ICP Chromium, Dissolved, ICP Chromium, Dissolved, ICP Copper, Dissolved, ICP Iron, Dissolved, ICP	210 14.5 3.3 <0.01 7.7 0.50 <0.03 0.21 <0.01 54.7 <0.01 <0.01	mg/L mg/L mg/L units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L
Iron, Dissolved, ICP Lead, Dissolved, ICP	0.22	mg/L mg/L
•		



George Robinson ENRON CORPORATION Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

06/08/1995 Job No.: 95.03553

Page: 5

Project Name: TW BELLE LAKE PLANT

Date Received: 06/02/1995

263806

MW-3

Taken: 05/31/1995

Magnesium, Dissolved, I Manganese, Dissolved, I Mercury, Dissolved, CVA Potassium, Dissolved, I Selenium, Dissolved, ICP Silver, Dissolved, ICP Sodium, Dissolved, ICP Zinc, Dissolved, ICP Total Dissolved Solids EPA 8020-AQ (Preserved)	CP A CP	17.6 <0.01 <0.0002 7.1 <0.04 <0.01 20.5 <0.03	mg/L mg/L mg/L mg/L mg/L mg/L mg/L
Benzene Ethylbenzene Toluene Xylenes, Total SURR: a,a,a-TFT		<2 <2 <2 <2 <2 103	ug/L ug/L ug/L ug/L % Rec
BASE/NEUTRALS - 8270 AQ Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene Pyrene SURR: 2-Fluorobiphenyl SURR: Nitrobenzene-d5 SURR: Terphenyl-d14	UEOUS	<pre><5. <5. <5. <5. <5. <5. <5. <5. <5. <5.</pre>	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L
263807 MW-4	05/31/1995		

Alkalinity, total (CACO3)

2,180

mg/L



06/08/1995 Job No.: 95.03553

Page: 6

George Robinson ENRON CORPORATION Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

Project Name:

TW BELLE LAKE PLANT

Date Received: 06/02/1995

263807

MW-4

Chloride N-Nitrate N-Nitrite pH Sulfite Arsenic, Dissolved, ICP Barium, Dissolved, ICP Cadmium, Dissolved, ICP Calcium, Dissolved, ICP Chromium, Dissolved, ICP Chromium, Dissolved, ICP Iron, Dissolved, ICP Iron, Dissolved, ICP Lead, Dissolved, ICP Magnesium, Dissolved, ICP Manganese, Dissolved, ICP Mercury, Dissolved, ICP Mercury, Dissolved, ICP Selenium, Dissolved, ICP Silver, Dissolved, ICP Sodium, Dissolved, ICP Zinc, Dissolved, ICP Total Dissolved Solids	1,700 <0.10 <0.01 10.0 17.5 0.33 0.23 <0.01 <0.10 <0.01 <0.03 0.76 0.03 <0.002 4.9 <0.04 <0.01 1650 <0.03 5,200	mg/L mg/L mg/L units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L
EPA 8020-AQ (Preserved) Benzene Ethylbenzene Toluene Xylenes, Total SURR: a,a,a-TFT BASE/NEUTRALS - 8270 AQUEOUS Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)nyrene	300 <200 1,300 800 111 <6. <6. <6. <6. <6. <6. <6.	ug/L ug/L ug/L % Rec ug/L ug/L ug/L ug/L ug/L
Benzo(a)pyrene Chrysene Dibenzo(a,h)anthracene Fluoranthene	<6. <6. <6.	ug/L ug/L ug/L ug/L



06/08/1995

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Job No.: 95.03553

George Robinson ENRON CORPORATION Env. Affairs, Rm 3 AC 3142 P.O. Box 1188

Houston, TX 77251

Project Name: TW BELLE LAKE PLANT

Date Received: 06/02/1995

263807 MW-4

Taken: 05/31/1995

<6. Fluorene ug/L Indeno(1,2,3-cd)pyrene <6. ug/L Naphthalene <6. ug/L Phenanthrene <6. ug/L Pyrene <6. ug/L SURR: 2-Fluorobiphenyl 99 SURR: Nitrobenzene-d5 82 용 % SURR: Terphenyl-d14 92

263808 MW-5

> Taken: 05/31/1995

Alkalinity, total (CACO3) 1,690 mg/L Chloride 4,070 mg/L N-Nitrate <0.10 mg/L N-Nitrite 0.01 mq/L Нq 9.0 units Sulfite 4.5 mg/L Arsenic, Dissolved, ICP Barium, Dissolved, ICP 0.14 mg/L 0.88 mg/L Cadmium, Dissolved, ICP <0.01 mg/L Calcium, Dissolved, ICP 4.8 mq/L Chromium, Dissolved, ICP <0.01 mg/L Copper, Dissolved, ICP mg/L 0.01 Iron, Dissolved, ICP 0.13 mg/L Lead, Dissolved, ICP < 0.03 mg/L Magnesium, Dissolved, ICP Manganese, Dissolved, ICP 2.0 mg/L 0.02 mg/L Mercury, Dissolved, CVAA <0.0002 mg/L Potassium, Dissolved, ICP Selenium, Dissolved, ICP 13.8 mg/L < 0.04 mg/L Silver, Dissolved, ICP Sodium, Dissolved, ICP <0.01 mg/L 2690 mg/L Zinc, Dissolved, ICP Total Dissolved Solids < 0.03 mg/L 7,400 mg/L EPA 8020-AQ (Preserved) Benzene 51 ug/L Ethylbenzene 16 ug/L Toluene 109 ug/L Xylenes, Total 219 ug/L



George Robinson ENRON CORPORATION Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

06/08/1995 Job No.: 95.03553

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Project Name:

TW BELLE LAKE PLANT

Date Received: 06/02/1995

263808

MW-5

Taken: 05/31/1995

SURR: a,a,a-TFT BASE/NEUTRALS - 8270 AQUEOUS	103	% Rec
Acenaphthene	<7.	${\sf ug/L}$
Acenaphthylene	<7.	ug/L
Anthracene	<7.	ug/L
Benzo(a)anthracene	<7.	ug/L
Benzo(b)fluoranthene	<7.	ug/L
Benzo(k) fluoranthene	<7.	ug/L
Benzo(g,h,i)perylene	<7.	ug/L
Benzo(a) pyrene	<7.	ug/L
Chrysene	<7.	ug/L
Dibenzo(a,h)anthracene	<7.	ug/L
Fluoranthene	<7.	ug/L
Fluorene	<7.	${ t ug/L}$
<pre>Indeno(1,2,3-cd)pyrene</pre>	<7.	ug/L
Naphthalene	<7.	ug/L
Phenanthrene	<7.	ug/L
Pyrene	<7.	ug/L
SURR: 2-Fluorobiphenyl	82	ug/L
SURR: Nitrobenzene-d5	97	${ t ug/L}$
SURR: Terphenyl-d14	91	ug/L

263809

MW-6

Alkalinity, total (CACO3) Chloride N-Nitrate N-Nitrite pH	1,070 2,670 0.59 0.04 9.2	mg/L mg/L mg/L mg/L units
Sulfite	2.5	mg/L
Arsenic, Dissolved, ICP	0.33	mg/L
Barium, Dissolved, ICP	0.36	${ t mg/L}$
Cadmium, Dissolved, ICP	<0.01	${ t mg/L}$
Calcium, Dissolved, ICP	11.1	${ t mg/L}$
Chromium, Dissolved, ICP	<0.01	${ t mg/L}$
Copper, Dissolved, ICP	<0.01	${ t mg/L}$
Iron, Dissolved, ICP	0.25	${ t mg/L}$
Lead, Dissolved, ICP	<0.03	mg/L
Magnesium, Dissolved, ICP	4.6	mg/L



06/08/1995

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Job No.: 95.03553

George Robinson ENRON CORPORATION

Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

TW BELLE LAKE PLANT Project Name:

Date Received: 06/02/1995

263809

MW-6

Taken: 05/31/1995		
Manganese, Dissolved, ICP Mercury, Dissolved, CVAA Potassium, Dissolved, ICP Selenium, Dissolved, ICP Silver, Dissolved, ICP Sodium, Dissolved, ICP Zinc, Dissolved, ICP Total Dissolved Solids	0.04 <0.0002 14.4 <0.04 <0.01 1320 <0.03 5,400	mg/L mg/L mg/L mg/L mg/L mg/L mg/L
EPA 8020-AQ (Preserved) Benzene Ethylbenzene Toluene Xylenes, Total SURR: a,a,a-TFT BASE/NEUTRALS - 8270 AQUEOUS	28 4 26 57 83	ug/L ug/L ug/L ug/L % Rec
Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene Pyrene SURR: 2-Fluorobiphenyl SURR: Nitrobenzene-d5 SURR: Terphenyl-d14	<7. <7. <7. <7. <7. <7. <7. <7. <7. <7.	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L
263810 WATER WELL Taken: 05/31/1995		
Alkalinity, total (CACO3) Chloride	144 100	mg/L



06/08/1995 Job No.: 95.03553

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George Robinson ENRON CORPORATION Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

Project Name:

TW BELLE LAKE PLANT

Date Received: 06/02/1995

263810

WATER WELL

N-Nitrate N-Nitrite pH Sulfite Arsenic, Dissolved, ICP Barium, Dissolved, ICP Cadmium, Dissolved, ICP Calcium, Dissolved, ICP Chromium, Dissolved, ICP Chromium, Dissolved, ICP Iron, Dissolved, ICP Iron, Dissolved, ICP Magnesium, Dissolved, ICP Magnesium, Dissolved, ICP Mercury, Dissolved, ICP Mercury, Dissolved, ICP Selenium, Dissolved, ICP Selenium, Dissolved, ICP Sodium, Dissolved, ICP Sodium, Dissolved, ICP Total Dissolved, ICP Total Dissolved Solids EPA 8020-AQ (Preserved)	<0.10 <0.01 8.2 0.50 <0.03 0.02 <0.01 38.7 <0.01 <0.01 0.39 <0.03 23.2 0.01 <0.0002 5.3 <0.04 <0.01 194 <0.03 900	mg/L mg/L units mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L
Benzene Ethylbenzene Toluene Xylenes, Total SURR: a,a,a-TFT	<2 <2 <2 <2 105	ug/L ug/L ug/L ug/L % Rec
BASE/NEUTRALS - 8270 AQUEOUS Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenzo(a,h)anthracene Fluoranthene Fluorene	<5 <5 <5 <5 <5 <5 <5 <5 <5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L



George Robinson ENRON CORPORATION

Env. Affairs, Rm 3 AC 3142 P.O. Box 1188 Houston, TX 77251

06/08/1995

Job No.: 95.03553

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Project Name:

TW BELLE LAKE PLANT

Date Received: 06/02/1995

263810

WATER WELL

Taken:

05/31/1995

Indeno(1,2,3-cd)pyrene	<5	ug/L
Naphthalene	<5	ug/L
Phenanthrene	<5	${ m ug/L}$
Pyrene	<5	ug/L
SURR: 2-Fluorobiphenyl	59	8
SURR: Nitrobenzene-d5	53	8
SURR: Terphenyl-d14	111	%



JOB NUMBER:

95.03553

					CCV		
		DATE		CCV	TRUE		
PARAMETER	ANALYST	ANALYZED	METHOD	RESULT	CONCENTRATION	% REC.	FLAG
Alkalinity, total (CACO3)	ham	06/05/1995	SM-2320B	2,575	2,500	103	NA
Chloride	bwb	06/05/1995	SM-4500Cl	500	500	100	NA
N-Nitrate	bwb	06/03/1995	E-352.1	0.52	0.50	104	NA
N-Nitrite	bwb	06/03/1995	E-354.1	0.05	0.050	100	NA
рН	rsd	06/02/1995	SM-4500H.	8.77	9.18	96	NA
Arsenic, Dissolved, ICP	сЬм	06/05/1995	S-6010	1.00	1.00	100	NA
Barium, Dissolved, ICP	сЬм	06/05/1995	s-6010	1.02	1.00	102	NA
Cadmium, Dissolved, ICP	сьм	06/05/1995	s-6010	1.01	1.00	101	NA
Calcium, ICP	сЬм	06/05/1995	E-200.7	11.1	11.0	101	NA
Chromium, Dissolved, ICP	сЬм	06/05/1995	s-6010	1.01	1.00	101	NA
Copper, Dissolved, ICP	cbw	06/05/1995	S-6010	1.01	1.00	101	NA
Iron, Dissolved, ICP	cbw	06/05/1995	S-6010	1.01	1.00	101	NA
Lead, Dissolved, ICP	сЬм	06/05/1995	s-6010	1.03	1.00	103	NA
Magnesium, ICP	cbw	06/05/1995	E-200.7	10.1	10.0	101	NA
Manganese, Dissolved, ICP	сьм	06/05/1995	s-6010	1.01	1.00	101	NA
Mercury, Dissolved, CVAA	jmd	06/06/1995	E-245.1	0.53	0.50	106	NA
Potassium, ICP	cbw	06/05/1995	E-200.7	10.3	10.0	103	NA
Selenium, Dissolved, ICP	cbw	06/05/1995	s-6010	0.99	1.00	99	NA
Silver, Dissolved, ICP	cbw	06/05/1995	s-6010	1.01	1.00	101	NA
Sodium, ICP	cbw	06/05/1995	E-200.7	10.1	10.0	101	NA
Zinc, Dissolved, ICP	cbw	06/05/1995	S-6010	1.00	1.00	100	NA
Total Dissolved Solids	ham	06/06/1995	E-160.1	NA	2000	NA	NA

Method References and Codes

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

E-100 through 493:

"Methods for Chemical Analysis of Water & Wastes",

U.S. EPA, 600/4-79-020, rev. 1983.

E-601 through 625:

"Guidelines Establishing Test Procedures for the Analysis of Pollutants", U.S. EPA, 40CFR, Part 136,

rev. 1990.

S-1000 through 9999:

"Test Methods for Evaluating Solid Waste", U.S. EPA

SW-846, 3rd Edition, 1986.

A: "Standard Methods for the Examination of Water and

Wastewater", 16th Edition, APHA, 1985.

SM: "Standard Methods for the Examination of Water and Wastewater", 18th Edition, APHA, 1992.

D: ASTM Method

M: Method has been modified



JOB NUMBER:

95.03553

					CCV		
		DATE		CCV	TRUE		
PARAMETER	ANALYST	ANALYZED	METHOD	RESULT	CONCENTRATION	% REC.	FLAG
EPA 8020-A0 (Preserved)			s-8020M				
Benzene	dwr	06/01/1995	s-8020M	18	20	90	NA
Ethylbenzene	dwr	06/01/1995	s-8020M	20	20	100	NA
Toluene	dwr	06/01/1995	S-8020M	20	20	100	NA
Xylenes, Total	dwr	06/01/1995	S-8020M	64	60	107	NA
EPA 8020-AQ (Preserved)			S-8020M				
Benzene	dwr	06/02/1995	s-8020M	20	20	100	NA
Ethylbenzene	dwr	06/02/1995	S-8020M	20	20	100	NA
Toluene	dwr	06/02/1995	S-8020M	19	20	95	NA
Xylenes, Total	dwr	06/02/1995	S-8020M	64	60	107	NA
EPA 8020-AQ (Preserved)			S-8020M				
Benzene	dwr	06/05/1995	S-8020M	21	20	105	NA
Ethylbenzene	dwr	06/05/1995	S-8020M	21	20	105	NA
Toluene	dwr	06/05/1995	S-8020M	20	20	100	NA.
Xylenes, Total	dwr	06/05/1995	S-8020M	68	60	113	NA
EPA 8020-A0 (Preserved)			S-8020M				
Benzene	dwr	06/06/1995	S-8020M	21	20	105	NA
Ethylbenzene	dwr	06/06/1995	S-8020M	21	20	105	NA
Toluene	dwr	06/06/1995	s-8020M	21	20	105	NA
Xylenes, Total	dwr	06/06/1995	S-8020M	67	60	112	NA
EPA 8020-AQ (Preserved)			S-8020M				
Benzene	dwr	06/06/1995	S-8020M	21	20	105	NA

Method References and Codes

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E-100 through 493:

"Methods for Chemical Analysis of Water & Wastes",

U.S. EPA, 600/4-79-020, rev. 1983.

E-601 through 625:

"Guidelines Establishing Test Procedures for the

Analysis of Pollutants", U.S. EPA, 40CFR, Part 136,

rev. 1990.

S-1000 through 9999:

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Wastewater", 18th Edition, APHA, 1992.

D: ASTM Method

4: Method has been modified



JOB NUMBER:

95.03553

					CCV		
		DATE		CCA	TRUE		
PARAMETER	ANALYST	ANALYZED	METHOD	RESJLT	CONCENTRATION	% REC.	FLAG
Ethylbenzene	dwr	06/06/1995	s-8020M	21	20	105	NA
Toluene	dwr	06/06/1995	S-8020M	20	20	100	NA
Xylenes, Total	dwr	06/06/1995	s-8020M	68	60	113	NA
EPA 8020-AQ (Preserved)			S-8020M				
Benzene	dwr	06/06/1995	S-8020M	21	20	105	NA
Ethylbenzene	dwr	06/06/1995	S-8020M	21	20	105	NA
Toluene	dwr	06/06/1995	S-8020M	21	20	105	NA
Xylenes, Total	dwr	06/06/1995	S-8020M	67	60	112	NA
EPA 8020-AQ (Preserved)			S-8020M				
Benzene	dwr	06/07/1995	S-8020M	23	20	115	NA
Ethylbenzene	dwr	06/07/1995	S-8020M	19	20	95	NA
Toluene	dwr	06/07/1995	S-8020M	20	20	100	NA
Xylenes, Total	dwr	06/07/1995	S-8020M	62	60	103	NA
BASE/NEUTRALS - 8270 AQUEOUS			s-8270				
Acenaphthene	slw	06/06/1995	s-8270	52.7	50.0	105	NA
Acenaphthylene	slw	06/06/1995	s-8270	52.3	50.0	105	NA
Anthracene	slw	06/06/1995	s-8270	51.1	50.0	102	NA
Benzo(a)anthracene	slw	06/06/1995	s-8270	49.5	50.0	99	NA
Benzo(a)pyrene	slw	06/06/1995	s-8270	52.7	50.0	105	NA
Benzo(b)fluoranthene	slw	06/06/1995	s-8270	56.8	50.0	114	NA
Benzo(k)fluoranthene	slw	06/06/1995	s-8270	53.0	50.0	106	NA
Benzo(g,h,i)perylene	slw	06/06/1995	s-8270	40.4	50.0	81	NA

Method References and Codes

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E-100 through 493:

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M: Method has been modified



JOB NUMBER:

95.03553

		DATE		ccv	CCV TRUE		
PARAMETER	ANALYST	ANALYZED	METHOD	RESULT	CONCENTRATION	% REC.	FLÀG
Chrysene	slw	06/06/1995	s-8270	50.8	50.0	102	NA
Dibenzo(a,h)anthracene	slw	06/06/1995	s-8270	42.6	50.0	85	NA
Fluoranthene	รโพ	06/06/1995	s-8270	58.6	50.0	117	NA
Fluorene	slw	06/06/1995	s-8270	48.0	50.0	96	NA
Indeno(1,2,3-cd)pyrene	slw	06/06/1995	s-8270	41.3	50.0	83	NA
Naphthalene	รเพ	06/06/1995	s-8270	51.8	50.0	104	NA
Phenanthrene	รโพ	06/06/1995	s-8270	52.0	50.0	104	NA
Pyrene	slw	06/06/1995	s-8270	44.6	50.0	89	NA
BASE/NEUTRALS - 8270 AQUEOUS			s-8270				
Acenaphthene	sla	06/07/1995	s-8270	47.7	50.0	95	NA
Acenaphthylene	sla	06/07/1995	s-8270	47.6	50.0	95	NA
Anthracene	slh	06/07/1995	s-8270	51.4	50.0	103	NA
Benzo(a)anthracene	รเพ	06/07/1995	s-8270	51.0	50.0	102	NA
Benzo(a)pyrene	slw	06/07/1995	s-8270	49.5	50.0	99	NA
Benzo(b)fluoranthene	slw	06/07/1995	s-8270	57.6	50.0	115	NA
Benzo(k)fluoranthene	sl₩	06/07/1995	s-8270	40.8	50.0	82	NA
Benzo(g,h,i)perylene	slw	06/07/1995	s-8270	57.4	50.0	115	NA
Chrysene	slw	06/07/1995	s-8270	50.8	50.0	102	NA
Dibenzo(a,h)anthracene	stw	06/07/1995	\$-8270	57.6	50.0	115	NA
Fluoranthene	slw	06/07/1995	s-8270	57.4	50.0	115	NA
Fluorene	stw	06/07/1995	s-8270	46.1	50.0	92	NA
Indeno(1,2,3-cd)pyrene	slw	06/07/1995	s-8270	57.4	50.0	115	NA

Method References and Codes

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

E-100 through 493:

"Methods for Chemical Analysis of Water & Wastes",

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E-601 through 625:

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rev. 1990.

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"Test Methods for Evaluating Solid Waste", U.S. EPA

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"Standard Methods for the Examination of Water and

Wastewater", 16th Edition, APHA, 1985.

SM:

"Standard Methods for the Examination of Water and

Wastewater", 18th Edition, APHA, 1992.

D: ASTM Method

M: Method has been modified



JOB NUMBER:

95.03553

					CCV		
		DATE		CCV	TRUE		
PARAMETER	ANALYST	ANALYZED	METHOD	RESULT	CONCENTRATION	% REC.	FLAG
		0/ /07 /4005	0.0270	50 /	50.0	101	
Naphthalene	slw	06/07/1995	s-8270	50.4	50.0	101	NA
Phenanthrene	slw	06/07/1995	s-8270	52.3	50.0	105	NA
Pyrene	slw	06/07/1995	s-8270	54.7	50.0	109	NA

Method References and Codes

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

E-100 through 493:

"Methods for Chemical Analysis of Water & Wastes",

U.S. EPA, 600/4-79-020, rev. 1983.

E-601 through 625:

"Guidelines Establishing Test Procedures for the

Analysis of Pollutants", U.S. EPA, 40CFR, Part 136,

rev. 1990.

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SM:

"Standard Methods for the Examination of Water and

Wastewater", 18th Edition, APHA, 1992.

D: ASTM Method

M: Method has been modified



QUALITY CONTROL REPORT BLANKS

JOB NUMBER:

95.03553

	DATE			REPORTING	
PARAMETER	ANALYZED	BLANK	UNITS	LIMIT	FLAG
Alkalinity total (CACOZ)	04 (05 (1005	د <u>د</u> 0	()	F 0	МА
Alkalinity, total (CACO3) Chloride	06/05/1995	<5.0 <5.0	mg/L	5.0 5.0	NA NA
N-Nitrate	06/05/1995		mg/L	0.10	NA NA
N-Nitrite	06/03/1995	<0.10	mg/L	0.10	NA NA
	06/03/1995	<0.01	mg/L		
рН Sulfite	06/05/1995	N/A <0.50	units	N/A 0.50	NA NA
	06/08/1995		mg/L		
Arsenic, Dissolved, ICP	09/01/1992	<0.04	mg/L	0.04	NA NA
Barium, Dissolved, ICP Cadmium, Dissolved, ICP	09/01/1992	<0.05	mg/L	0.05	NA NA
•	09/01/1992	<0.01	mg/L	0.01	NA
Calcium, ICP	06/05/1995	<0.10	mg/L	0.10	NA
Chromium, Dissolved, ICP	09/01/1992	<0.01	mg/L	0.01	NA
Copper, Dissolved, ICP	09/01/1992	<0.02	mg/L	0.02	NA
Iron, Dissolved, ICP	09/01/1992	<0.05	mg/L	0.05	NA
Lead, Dissolved, ICP	09/01/1992	<0.03	mg/L	0.03	NA
Magnesium, ICP	06/05/1995	<0.10	mg/L	0.10	NA
Manganese, Dissolved, ICP	09/01/1992	<0.01	mg/L	0.01	NA
Mercury, Dissolved, CVAA	06/06/1995	<0.0002	mg/L	0.0002	NA
Potassium, ICP	06/05/1995	<0.50	mg/L	0.50	NA
Selenium, Dissolved, ICP	09/01/1992	<0.04	mg/L	0.04	NA
Silver, Dissolved, ICP	09/01/1992	<0.01	mg/L	0.01	NA
Sodium, ICP	06/05/1995	<0.50	mg/L	0.50	NA
Zinc, Dissolved, ICP	09/01/1992	<0.03	mg/L	0.01	NA
Total Dissolved Solids	06/06/1995	<10.0	mg/L	10	NA
EPA 8020-AQ (Preserved)					
Benzene	06/01/1995	<2	ug/L	2	NA
Ethylbenzene	06/01/1995	<2	ug/L	2	NA
Toluene	06/01/1995	<2	ug/L	2	NA
Xylenes, Total	06/01/1995	<2	ug/L	2	NA
EPA 8020-AQ (Preserved)					
Benzene	06/02/1995	<2	ug/L	2	NA
Ethylbenzene	06/02/1995	<2	ug/L	2	NA
Toluene	06/02/1995	<2	ug/L	2	NA
Xylenes, Total	06/02/1995	<2	ug/L	2	NA
EPA 8020-AQ (Preserved)			-		
Benzene	06/05/1995	<2	ug/L	2	NA
Ethylbenzene	06/05/1995	<2	ug/L	2	NA
Toluene			=		
	06/05/1995	<2	ug/L	2	NA

Advisory Control Limits for Blanks

Metals/Wet Chemistry/Conventionals/GC - All compounds should be less than the Reporting Limit.

GC/MS Semi-Volatiles - All compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the Reporting Limit.

GC/MS Volatiles - Toluene, Methylene chloride, Acetone and Chloroform should be less than 5 times the Reporting Limit. All other volatile compounds should be less than the Reporting Limit.



QUALITY CONTROL REPORT BLANKS

JOB NUMBER:

95.03553

	DATE			REPORTING	
PARAMETER	ANALYZED	BLANK	UNITS	LIMIT	FLAG
EPA 8020-AQ (Preserved)					
Benzene	06/06/1995	<2	ug/L	2	NA
Ethylbenzene	06/06/1995	<2	ug/L	2	NA
Toluene	06/06/1995	<2	ug/L	2	NA
Xylenes, Total	06/06/1995	<2	ug/L	2	NA
EPA 8020-AQ (Preserved)					
Benzene	06/06/1995	<2	ug/L	2	NA
Ethylbenzene	06/06/1995	<2	ug/L	2	NA
Toluene	06/06/1995	<2 .	ug/L	2	NA
Xylenes, Total	06/06/1995	<2	ug/L	2	NA
EPA 8020-AQ (Preserved)					
Benzene	06/06/1995	<2	ug/L	2	NA
Ethylbenzene	06/06/1995	<2	ug/L	2	NA
Toluene	06/06/1995	<2	ug/L	2	NA
Xylenes, Total	06/06/1995	<2	ug/L	2	NA
EPA 8020-AQ (Preserved)					
Benzene	06/07/1995	<2	ug/L	2	NA
Ethylbenzene	06/07/1995	<2	ug/L	2	NA
Toluene	06/07/1995	<2	ug/L	2	NA
Xylenes, Total	06/07/1995	<2	ug/L	2	NA
BASE/NEUTRALS - 8270 AQUEOUS					
Acenaphthene	06/06/1995	<5	ug/L	5	NA
Acenaphthylene	06/06/1995	<5	ug/L	5	NA
Anthracene	06/06/1995	<5	ug/L	5	NA
Benzo(a)anthracene	06/06/1995	<5	ug/L	5	NA
Benzo(b)fluoranthene	06/06/1995	<5	ug/L	5	NA
Benzo(k)fluoranthene	06/06/1995	< 5	ug/L	5	NA
Benzo(g,h,i)perylene	06/06/1995	<5	ug/L	5	NA
Benzo(a)pyrene	06/06/1995	<5	ug/L	5	NA
Chrysene	06/06/1995	<5	ug/L	5	NA
Dibenzo(a,h)anthracene	06/06/1995	< 5	ug/L	5	NA
Fluoranthene	06/06/1995	<5	ug/L	5	NA
Fluorene	06/06/1995	<5	ug/L	5	NA.
Indeno(1,2,3-cd)pyrene	06/06/1995	<5	ug/L	5	NA.
Naphthalene	06/06/1995	<5	ug/L	5	NA.
Phenanthrene	06/06/1995	<5	ug/L	5	NA
Pyrene	06/06/1995	<5	ug/L	5	NA.
. /	40,00,1773		~g/ =	-	••••

Advisory Control Limits for Blanks

Metals/Wet Chemistry/Conventionals/GC - All compounds should be less than the Reporting Limit.

GC/MS Semi-Volatiles - All compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the Reporting Limit.

GC/MS Volatiles - Toluene, Methylene chloride, Acetone and Chloroform should be less than 5 times the Reporting Limit. All other volatile compounds should be less than the Reporting Limit.

		NATIONAL ENVIRONMENTAL TESTING, INC.	CHA COMP ADDRI PHON PROJE PROJE	ECT.	NUI	MBFF	₹										A Ho 72	4 1	a, y	x 7.	7 2 5	P.O. NO NET QUOTE NO
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(PRINT NAME)		SIGNA	TURE								\exists	×	7	#								to this county is single and desired for any delayer.
,								# an Co	id Typ intain	ers		87E	12							1		enforcement action? Yes No
				Ų							_	V		1		({{\bar{\}}		1/2 X		Which regulations apply: RCRA NPDES Wastewater UST Drinking Water
DATE T	IME	SAMPLE ID/DESCRIPTION		MATRIX	GRAB	COMP	모	NaOH	နို	H ₂ SO ₄	OTHER	8020	8270	10		18	₩ (~	4	19,			Other XI None
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METHOD		SHIPMENT CONTRACT	REMAF	RKS:	-																~~	PM WANTED

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO

SANTA FE, NEW MEXICO 87505 (505) 827-7131

May 8, 1995

CERTIFIED MAIL RETURN RECEIPT NO: P-667-242-256

Mr. Larry Campbell
Transwestern Pipeline Company
Technical Operations
P.O. Box 1717
Roswell, New Mexico 88202-1717

RE: REMEDIATION OF SURFACE IMPOUNDMENTS

BELL LAKE PLANT

Dear Mr. Campbell:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) March 17, 1995 "ENVIRONMENTAL CLOSURE OF THE SURFACE IMPOUNDMENTS AT THE BELL LAKE PLANT". This document contains the results of TPC's remediation of soils related to the former unlined surface impoundments at the Bell Lake Plant.

The pit remediation actions as contained in the above document are approved with the following condition:

1. TPC will submit the ground water remediation and delineation work plan to the OCD by July 28, 1995.

Please be advised that OCD approval does not relieve TPC of liability if remaining contaminants are found to pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely

William C. Olson Hydrogeologist

Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor Wayne Price, OCD Hobbs District Office

P LL7 242 25L
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No Insurance Coverage Provided
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(See Reverse)

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Fold at line over top of envelope to the right of the return address.

Bill Olson

From:

Bill Olson

To:

Jerry Sexton

Cc: Subject: Wayne Price

Date:

ENRON Bell Lake Plant

Thursday, May 04, 1995 1:21PM

Priority:

Atached is a draft approval letter for recent pit closure actions at ENRON's Bell Lake Plant. Please provide me with any comments by 1:30pm on 5/8/95. Thanks!

< < File Attachment: REMEDY2.APR>>

Bill Olson

From:

POSTOFFICE

To:

Bill Olson

Subject:

Registered: Wayne Price

Date:

Thursday, May 04, 1995 1:56PM

[013]

***** CONFIRMATION OF REGISTERED MAIL *****

Your message:

TO: Wayne Price

DATE: 05-04-95

SUBJECT: ENRON Bell Lake Plant

TIME: 13:23

Was accessed on 05-04-95 13:56

Bill Olson

From:

Jerry Sexton

Date sent:

Thursday, May 04, 1995 3:32PM

To:

Bill Olson

Subject:

Registered: Jerry Sexton

Your message

To:

Jerry Sexton

Subject:

ENRON Bell Lake Plant

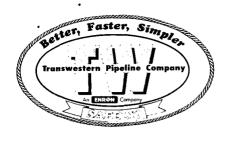
Date:

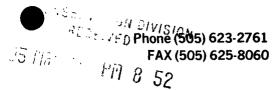
Thursday, May 04, 1995 1:21PM

was accessed on

Date:

Thursday, May 04, 1995 3:32PM





Transwestern Pipeline Company

TECHNICAL OPERATIONS
P. O. Box 1717 • Roswell, New Mexico 88202-1717

March 17, 1995

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

Re: Environmental Closure of the Surface Impoundment's at the Bell Lake Plant

Dear Mr. Olson:

Transwestern Pipeline Company (Transwestern), owner and operator of the Bell Lake Plant, provides notification by this letter to the Oil Conservation Division (OCD) of the completed excavation and remediation activities associated with closure of the features at the above referenced facility. The remediation activities conducted to the onsite impoundments and discussed in this letter address only surface and subsurface soil contamination and were developed during your visit to the facility in October of 1994. Groundwater remediation, resulting from activities at the facility, will be addressed in a work plan to be submitted in the near future.

Transwestern's approach to mitigating the soil contamination at the site, involved removing the contaminated soil materials to the depth of the underlying consolidated bedrock. This depth was considered to be the limits of soil and subsoil removal, as additional excavation activities were considered to be economically unfeasible. Contaminated soil and overburden materials were stockpiled adjacent to the excavated impoundment areas. Presented with this letter report are the remediation levels for BTEX and TPH which were achieved for the sidewalls and floor bottoms of the impoundments at the site, and are described below:

Attachment A- Final analytical results of the soils materials underlying the concrete lined impoundment.

Attachment B- Final analytical results of the in place soil materials of the sidewalls and floor for the unlined impoundments.

When approval had been granted from the OCD, Transwestern Pipeline Company performed a "shredding" operation to the stockpiled materials to enhance aeration and volatilization of the contaminants in the soil materials. As an additional measure of contaminant remediation, liquid fertilizer was mixed and incorporated into the soils which had been shredded. The shredded and fertilized soils were then placed back into the excavation and additional liquid fertilizer was placed into the excavation areas. The soil materials were mounded at the surface to inhibit surface erosion.

At your convenience, Transwestern requests written closure of the surface impoundment remediation activities at this site. Transwestern is confident that the activities performed in investigation and remediation are consistent with the closure guidelines of the OCD, and in an environmentally sound and prudent manner.

Should you require any additional information concerning this project, contact our Roswell Technical Operations at (505) 625-8022.

Sincerely,

Larry Campbell

Division Environmental Specialist

Larry Campbell

xc: Greg McIlwain Ronnie Robbins Laura Kunkel Charles Payne

file

ATTACHMENT A



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

REPORT FINAL ANALYSIS

Company: Address:

Transwestern Pipeline Co. P.O. Box 1717 Roswell, NM 88202

City, State:

Date: 11/16/94 Lab #: H1860

Project Name:
Location:
Sampled by:
Analyzed by:
Sample Type:

Bell Lake

Time: not given

BM MF Soil

Date: 11/1/94 Time: not give Date: 11/16/94 Time: Sample Condition: Intact

Units: mg/kg

*** Sam	*************** p	TRPHC	BENZENE	TOLUENE	******* ETHYL BENZENE	PARA- XYLENE	******** META- XYLENE	******** ORTHO- XYLENE	*****
1	N.Side Bottom of North Pit Comp.	1262.6	0.380	0.205	0.259	0.131	0.084	0.164	

QC Recovery QC Spike	410.3 405.9			0.931 0.860	0.971 0.886
Āccuracy Air Blank		110.4%	109.2%	108.3%	109.6% <0.001

Methods - GAS CHROMOTOGRAPHY; INFRARED SPECTROSCOPY - EPA SW-846; 8020, 418.1, 3540 OR 3510

Michael R. Fowler

Date

1/12/94



LABORATORIES IN ODESSA, GIDDINGS & STACY DAM WEST UNIVERSITY AND WESTOVER STREET P.O. BOX 69210 ODESSA, TEXAS 79769-0210 PHONE 337-4744

FAX 337-8781

DECEMBER 6, 1994

MR. LARRY CAMPBELL ENRON TRANSWESTERN PIPELINE P.O. BOX 1717 ROSWELL, NEW MEXICO 88202-1717

DEAR MR. CAMPBELL:

THE FOLLOWING ARE THE RESULTS OF THE SOIL SAMPLES FOR TPH AND BTEX ANALYSIS, RECEIVED 12-05-94, LAB NOS. 2133-2135:

	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES	TPH
LAB 2133 N. CRAWAR #1 FILL DIRT WO # R34328	ND	ND	ND	ND	ND
LAB 2134 N. CRAWAR #2 FILL DIRT WO # R34328	ND	ND	ND	ND	ND
LAB 2135 BELL LAKE CEMENT LINED PIT COMPOSITE WO # R34328	ND	ND	ND	ND	6 ppm

NOTE: ND = NONE DETECTED

BTEX METHOD - EPA SW 846-8020/5030 TPH METHOD - EPA 418.1

WE APPRECIATE THE OPPORTUNITY TO WORK WITH YOU ON THESE TESTS. IF YOU HAVE ANY QUESTIONS OR REQUIRE ANY FURTHER INFORMATION, PLEASE FEEL FREE TO CONTACT ME AT ANY TIME.

SINCERELY, tephen of 1

STEPHEN REID

SR/md

ATTACHMENT B



LABORATORIES IN ODESSA, GIDDINGS & STACY DAM WEST UNIVERSITY AND WESTOVER STREET

P.O. BOX 69210

ODESSA, TEXAS 79769-0210

PHONE 337-4744

DECEMBER 9, 1994

MR. LARRY CAMPBELL ENRON TRANSWESTERN PIPELINE P.O. BOX 1717 ROSWELL, NEW MEXICO 88202-1717 BELL LAKE PLANT

DEAR MR. CAMPBELL:

THE FOLLOWING ARE THE RESULTS OF THE SOIL SAMPLES FOR TPH AND BTEX ANALYSIS, RECEIVED 12-08-94, LAB NOS. 2158-2172:

	E	ENZENE	TOLUENE	ETHYL BENZENE	XYLENES	TPH
LAB 2158-SECTION A NORTH WALL	NP-1	ND	ND	ND	ND	216 ppm
LAB 2159 SECTION A EAST WALL	NP-2	ND	ND	ND	2.5 ppm	445 ppm
LAB 2160 SECTION A WEST WALL	NP-3	ND	ND	ND	1.5 ppm	840 ppm
LAB 2161 SECTION A BOTTOM	NP-4	ND	ND	ND	5.3 ppm	820 ppm
LAB 2162 SECTION A UNDER 10" C. LINE	NP-5	ND	ND	ND	6.6 ppm	248 ppm
LAB 2163 SECTION B EAST WALL	NP-6	ND	ND	ND	1.8 ppm	252 ppm
LAB 2164 SECTION B UNDER 10" LINE	NP-7	ND	ND	ND	1.2 ppm	996 ppm
LAB 2165 SECTION B UNDER 10" BOTTOM	NP-8	ND	ND	1.9 ppm	29.8 ppm	640 ppm
LAB 2166 SECTION B SOUTH WALL	NP-9	ND	ND	ND	ND	32 ppm
LAB 2167 SECTION C NORTH ½ EAST WALL	BCT-11	ND	ND	ND	14.3 ppm	1484 ppm
LAB 2168 SECTION C SOUTH ½ EAST WALL	BCT-10	ND	ND	ND	ND	20 ppm
LAB 2169 SECTION C SOUTH WALL	BCT-12	ND	ND	ND	ND	188 ppm



LABORATORIES IN ODESSA, GIDDINGS & STACY DAM
WEST UNIVERSITY AND WESTOVER STREET
P.O. BOX 69210
ODESSA, TEXAS 79769-0210
PHONE 337-4744
FAX 337-8781

	BENZENE	TOLUENE	BENZENE	XYLENES	TPH
LAB 2170 SECTION C BCT-13 WEST WALL	ND	ND	ND	2.8 ppm	1056 ppm
LAB 2171 SECTION C BCT-14 SW TO NE CORNER	ND	ND	ND	15.6 ppm	1064 ppm
LAB 2172 SECTION C BCT-15 NW TO SE	ND	ND	ND	17.6 ppm	2420 ppm

NOTE: ND = NONE DETECTED

BTEX METHOD - EPA SW 846-8020/5030

TPH METHOD - EPA 418.1

WE APPRECIATE THE OPPORTUNITY TO WORK WITH YOU ON THESE TESTS. IF YOU HAVE ANY QUESTIONS OR REQUIRE ANY FURTHER INFORMATION, PLEASE FEEL FREE TO CONTACT ME AT ANY TIME.

SINCERELY,

STEPHEN REID

SR/md

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR 2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

December 8, 1994

CERTIFIED MAIL RETURN RECEIPT NO: P-667-242-183

Mr. Larry Campbell
Transwestern Pipeline Company
Technical Operations
P.O. Box 1717
Roswell, New Mexico 88202-1717

RE: WORK PLAN FOR REMEDIATION OF EXCAVATED SOILS TRANSWESTERN PIPELINE CO. BELL LAKE PLANT

Dear Mr. Campbell:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) November 30, 1994 "TREATMENT OF EXCAVATED SOIL AT THE BELL LAKE PLANT". This document contains TPC's proposed work plan for onsite treatment of contaminated soils generated during remedial actions at TPC's Bell Lake Plant.

The above referenced work plan is approved with the following conditions:

- 1. Upon completion of the remedial actions, TPC will:
 - a. analyze the remediated soils for benzene, toluene, ethylbenzene, xylene and total petroleum hydrocarbons concentrations to determine the final remediation level achieved.
 - b. submit to the OCD a report containing the results of the remedial actions.
- 2. TPC will notify the OCD at least one week in advance of scheduled activities such that the OCD has the opportunity to witness the events and/or split samples.

Mr. Larry Campbell December 8, 1994 Page 2

3. All original documents will be sent to the OCD Santa Fe Office with copies sent to the OCD Hobbs Office.

Please be advised that OCD approval does not relieve TPC of liability should their actions fail to adequately remediate contaminants related to TPC's activities. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

William C. Olson Hydrogeologist

Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor

Wayne Price, OCD Hobbs District Office

P 667 248	
Certified N No Insurance Co Do not use for In STATE (See Reverse)	overage Provide
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P.O., State & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	

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OCD COMPANY INSPECTION

NAME OF COMPANY: EXRON	_
LOCATION: Be Lake Station	_
INSPECTION DATE: 12/6/94	
REPORT:	-
	-
The parted excavation at torner pit area	_
Approx. 1000 TPH on North Wall	• :/ .
3000 TPH I limiter area around piping on	south wil
Excepted approx 10 fat hos caliche	•
No visual evidence et strugens in ese caustion	
Case verbal approval to cose exerción	
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Bill Offin	
En Withhaute Burens	

Meeting w/fc 7-29-9

Meeting w/fc 7-29-9

CHRIS E. EUSTICE

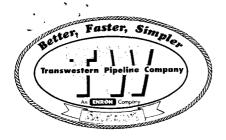
Geologist

Bell Falxe

Il Wonts more time will do additional sampling, in the meantime, to determine if this is protectable GW.

Mot again 10-24-94

IC proposed to install 3 more monitor wells 2. will excavate 10° down and latteral extent



Transwestern Pipeline Company

TECHNICAL OPERATIONS
P. O. Box 1717 • Roswell, New Mexico 88202-1717

November 30, 1994

Mr. Bill Olson
Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RECEIVED

DEC 0 5 1994

OIL CONSERVATION DIV.

Re: Treatment of Excavated Soil at the Bell Lake Plant

Dear Mr. Olson:

On May 12, 1994, Transwestern Pipeline Company (Transwestern), submitted to the Oil Conservation Division (OCD) a copy of a report entitled, "Subsurface Investigation Transwestern Bell Lake Plant, Jal, New Mexico". The results of this drilling program showed that the contaminates present in the soils are exempt under Subtitle C of RCRA but are regulated by the OCD as processing wastes associated with the exploration and production of natural gas. Refer to the above report, which is presently on file at the OCD, for the list of contaminates which were identified during the investigation. At this meeting, it was verbally agreed by both parties that Transwestern would begin excavation activities of the contaminated soil underlying the unlined surface impoundments at the facility. This material was to be transported to a commercial landfarm in Monument, New Mexico.

During the excavation activities, it was soon discovered that the volume of contaminated soil to be removed from the pit areas, greatly exceeded Transwestern's original calculations. In consideration of the economic burden of transporting and disposing of the contaminated soil into the landfarm, Transwestern requests approval from the OCD to process the excavated soils through a commercial soil shredder. A brochure from the contractor which will be providing this service is attached. During the shredding process, a water based nutrient solution will be sprayed on the soil as it exits the shredding equipment and is placed back into the excavation area. The nutrient solution will consist of a mixture of a commonly available fertilizer such as 36-6-6 or 18-24-16. Prior experience with this method of processing contaminated soil has shown that within a period of two or three months after processing, BTEX concentrations can be reduced to below detection levels and TPH concentrations can reasonably be expected to be reduced to approximately 50 % of the original concentration.

A monitoring program will be developed and presented to the OCD at a later date, to monitor the progress of the remediation activities at the site.

The OCD has given approval of this remediation technique at the Transwestern Pipeline Company Atoka No. 1 Compressor Station, where similar contaminates and concentrations are present. Due

to the limited time remaining to complete this project, Transwestern requests your favorable consideration of this remediation technology at your earliest convenience.

Should you require any additional information concerning this project, contact our Roswell Technical Operations at (505) 625-8022.

Sincerely,

Larry Campbell

Division Environmental Specialist

xc: Greg McIlwain Laura Kunkel Bob Bandel Charles Payne

file



MODEL 271 SHREDDER SCREENING PLANT

30" x40' CONVEYOR @ 4'x8' 2-DECK SCREEN



MULTIPLE APPLICATIONS

TOP SOIL

MURSERY

AGLIME

COMPOST

- REMEDIATION
- SAND & GRAVEL

- SLUDGE PROCESS
 ® RECYCLED ASPHALT
- LANDFILLS

CLAY

PEAT

COAL

ASH

SCREENING PLANTS WITH FLEXIBILITY



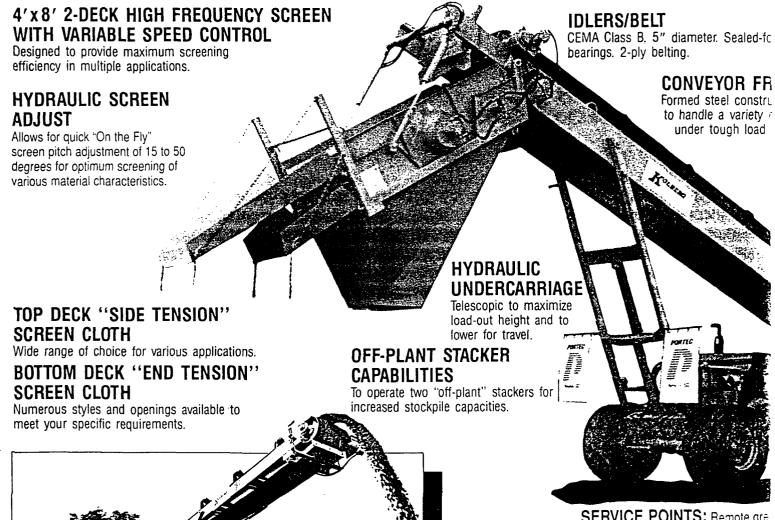


MODEL 271 SHREDDEF

30"x40' CONVE\

ADJUSTABLE MATERIAL SPREADER

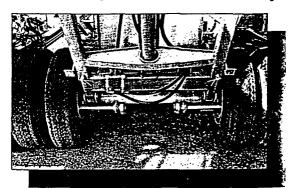
Evenly spreads material onto the screen cloth for maximum screening capability.



SERIES 2 PORTABLE STACKING CONVEYOR

These optional stacking conveyors are ideally suited as companion stackers for the Model 271 screening plant. Available in 24" widths, 40' and 50' lengths and 30" width x 50' length. Reference the Kolberg Series 2 brochure for more detailed information.





HIGHWAY PORTABLE

Heavy-duty chassis, featuring single axle, dual wheels, air brakes, mud flaps, brake, tail and turn lights.

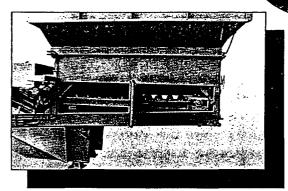
SCREENING PLANT

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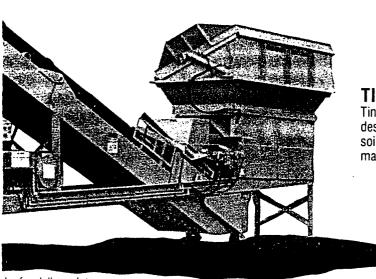
SELF-RELIEVING HOPPER/GRIZZLY

9 cu. yd. capacity designed to reduce material bridging and equipped with a rugged hydraulic activated sloped grizzly. Optional hopper wings are shown in photos.



VARIABLE SPEED BELT FEEDER

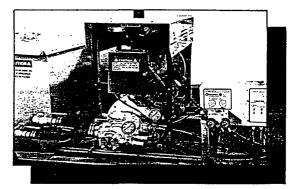
9' - 6" long roller belt designed for precise material metering. Enclosed with easy access doors.



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all

designed erials ions.

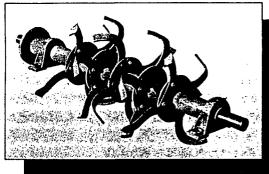


POWER UNIT

68 HP water cooled diesel with instrumentation. electric start and "high temperature/low oil" shut-down system to prevent engine damage.



Tine type shredder is designed for use in top soil and other related materials.

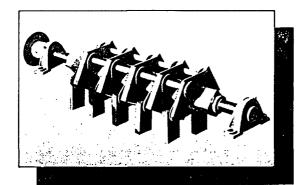


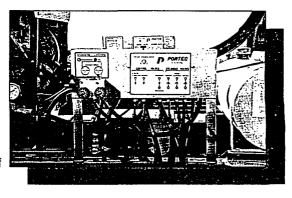
MILL SHREDDER

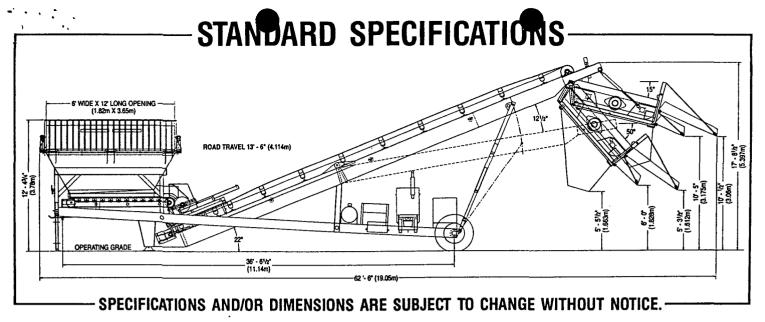
An optional mill type shredder is available.



Instrumentation and controls mounted at ground level for ease of operation.







VIBRATING SCREEN:

4' x 8' 2-Deck high frequency with variable speed control. Adjustable eccentrics provide maximum screening efficiency in multiple applications.

SCREEN SPRINGS: Rubber shear springs enable screen to function vigorously at any angle.

CHUTE/SUPPORTS: Chute Support frame complete with a 6'-0" (1.82m) long top and 3'-0" (.914m) long bottom chute plus a fines collecting hopper.

HOPPER/BELT FEEDER:

SELF-RELIEVING HOPPER: Reduces material bridging and increases material flow with long, steep side walls. Hopper capacity of 9 cu. yd. heaped, and heavy 1/4" (6.35mm) plate steel construction and telescopic support legs for increased stability.

SLOPED GRIZZLY DUMP: Hydraulic activated cylinders and heavy duty 5¹/2" (139.7mm) clear opening grizzly.

BELT FEEDER: Heavy-duty 9' - 6" (2.89m) long roller belt design with variable speed hydraulic drive for precise material metering.

SHREDDER CAPABILITIES:

THE SHREDDER: A "Tine" type shredder is included and designed for use in top soil and related applications.

SHREDDER HOUSING: Hydraulically slides "open" and "closed" for inspection and operation.

UNIQUE INTERCHANGEABILITY: A "Mili" design shredder is available for interchangeability or can be supplied in lieu of the standard "soil tiller."

POWER AND DRIVE SYSTEM:

POWER UNIT: A water cooled diesel produces 68 HP and is equipped with all instrumentation, electric start, battery, 45 gallon lockable fuel tank, and "high temperature/low oil" shut-down system.

DRIVES: All hydraulic with instrumentation and controls conveniently mounted at ground level to operate the main belt, screen, screen pitch, belt feeder, shredder, grizzly dump and conveyor lift. 100 gallon lockable Hydraulic Reservoir is also included.

AMPLE POWER: The diesel/hydraulic power unit is designed to operate two additional "off-plant" conveyors. (Conveyors not included).

HEAVY-DUTY CHASSIS/UNDERCARRIAGE:

TRUCK TYPE CHASSIS: Designed for dependable legal highway portability featuring a single axle with dual wheels, a king pin towing attachment, air brakes and a two speed landing gear.

UNDERCARRIAGE MEMBERS: Telescopic tubular design with hydraulic lift to elevate the conveyor to a maximum 22 degree operating incline. maximizing load-out height.

BASIC CONVEYOR:

CONVEYOR: 30" (762mm) wide x 40' (12.92m) long rigidly formed steel construction designed to handle a variety of material under tough load conditions. The conveyor frame also has a hinge design for lower travel dimensions.

CONVEYOR COMPONENTS:

HEAD PULLEY: Rubber lagged. TAIL PULLEY: Self cleaning wing.

TROUGHING IDLERS: are 35 degree CEMA B type spaced on

4' - 0" (1.21m) centers.

RETURN IDLERS: are spaced on 10'0" (3.048m) centers. **TAKE-UP:** are heavy-duty screw type with protective rod covers. **BELT CLEANER:** positive cleaning with spring tensions.

PAINT: Standard ename! Portec beige.

HIGHLY MOBILE TRAVEL: Width = 8' - 6" (2.590m) Height = 13' - 6" (4.114m) Weight = 22,000 lbs. (Approx.)

These well balanced machines can be moved quickly and easily.

STANDARD OPTIONS:

 REMOTE CONTROL GRIZZLY DUMP COMPOSITE HOPPER LINERS

 WET SCREEN WITH SPRAY BARS "AR" STEEL LINERS FEED HOPPER WINGS

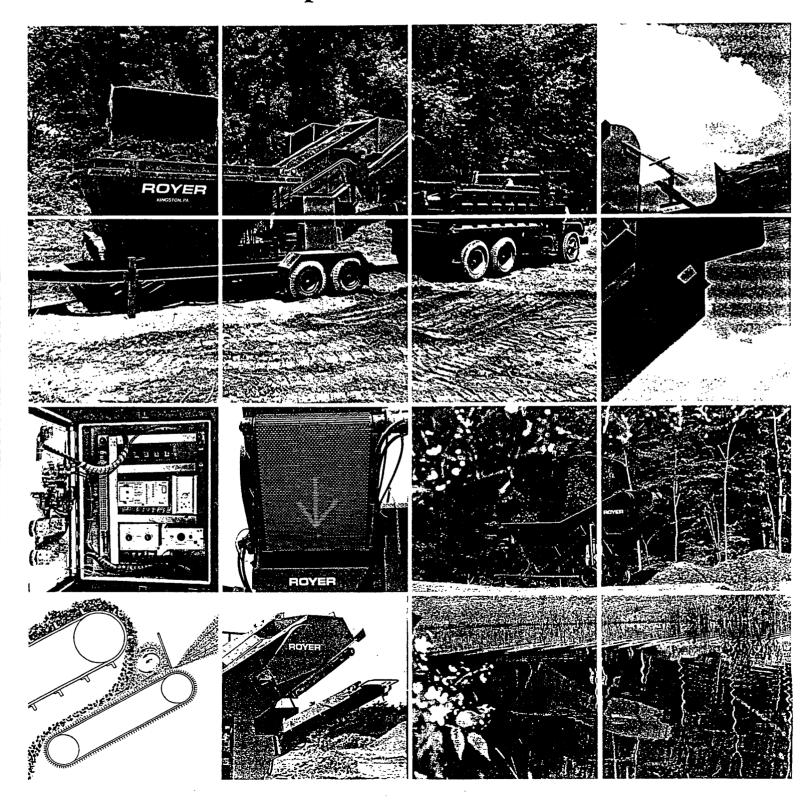
se Portec/Kolberg may use in its catalogs and literature, field photographs of its products which may have been modified by the owners, products furnished by Portec/Kolberg may not necessarily be as illustrated therein. Also continuous design progress makes it necessary that specifications be subject to change without notice. All sales of the products of Portec/Kolberg are subject to the provisions of its standard warranty. Portec/Kolberg does not warrant or represent that its products meet any federal, state or local statues, codes, ordinances, rules, standards or other regu-lations, including OSHA and MSHA, covering safety, pollution, electrical wiring, etc. Compliance with these statutes and

regulations is the responsibility of the user and will be dependent upon the area and the use to which the product is put by the user. In some photographs, guards may have been removed for illustrative purposes only. This equipment should not be operated without all guards attached in their normal position. Placement of guards and other safety equipment is often dependent upon the area and the use to which the product is put. A safety study should be made by the user of the application, and, if required, additional guards, warning signs and other safety devices should be installed by user, wherever appropriate before operating the products.



P.O. BOX 220 . YANKTON, SOUTH DAKOTA PHONE: (605) 665-8771 • FAX: (605) 665-8858

Royer Shredder-Mixers: Machinery for an improved environment.



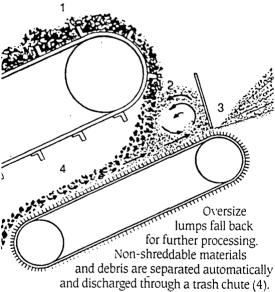
For processing basic earth materials, Royer Shredder-Mixers are better by design.

Of all the available equipment for processing top soils, compost, peat and other friable organic materials, only the Royer Shredder-Mixer is designed to perform the *whole* job. Actually a complete mobile processing plant, every Royer Shredder-Mixer:

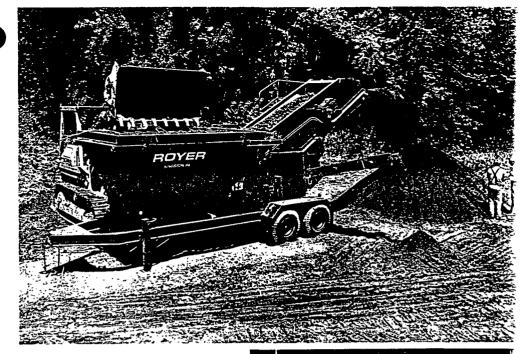
- ☐ provides two-stage mixing of materials,
- ☐ automatically separates nonshreddable materials,
- ☐ breaks down lumps and oversize materials into uniform particles,
- ☐ aerates materials both before and after discharge.

Patented four-step

processing action. When material is loaded into the hopper of a Royer Shredder-Mixer, it's carried to the top of the flighted conveyor (1), where it cascades onto the shredding belt (2). There, the material is thoroughly churned while rows of steel shredding cleats rake and aerate the load. Fully processed material discharges under an adjustable sweep (3).



The result is a light, fully aerated product that's clean, uniform in particle size and free of unwanted materials.



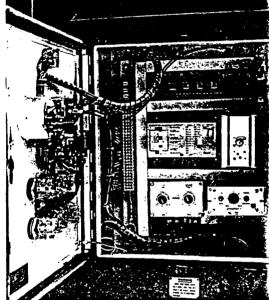
MODEL 401

Electronically programmable controls for hands-off operation and ultra-high capacity. Model 401 is the first Shredder-Mixer *anywhere* equipped with a fully *programmable* controller. Once it's set up on the job-site, no operator is required. The electronic program automatically:

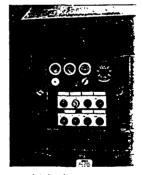
- ☐ adjusts the feed rate for maximum load.
- ☐ reverses the shredding belt at preselected intervals to clear debris and maintain maximum flow;
- ☐ interlocks with the engine and hydraulic system safety switches, and
- ☐ operates the optional shaker grate.

Program controls, starter key, temperature gage, tachometer, and other standard instruments are housed within a lockable steel compartment, to protect against tampering.

Besides the revolutionary programmable controls, the Model 401 offers the largest capacity in the field. Its hopper, with an opening of 7' x 12', can easily accommodate loader buckets as large as 5 yards. Discharge height of the Royer Model 401 Shredder-Mixer is 12'8". Maximum rated capacity is to 200 cubic yards, hour, depending on the quality and moisture content of the input material.



Despite the Model 401's unequalled capacity, the unit is easily trailable and highly maneuverable. Measuring only 8' wide by 13'6" high, it comes equipped with hydraulic brakes and highway tires: a complete highway light package is available.



The Trash-Away conveyor, which elevates and discharges trash away from the finished product, and a stationary stone grate are supplied as standard equipment. Optional equipment for the Model 401 includes a shaker grate and a hopper platform.

There's a Royer Shredder-Mixer for every application.

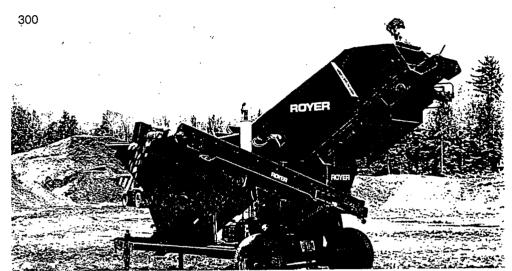
Royer manufactures several different models of shredder-mixers, so you can select the one that's right for you. Each features Royer's patented four-step processing action and, of course, traditional Royer quality, value and ease of operation.

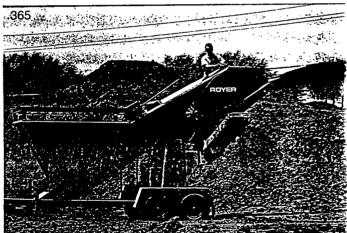
Every Royer Shredder-Mixer comes equipped with a variable sweep to precisely regulate particle size, and a high discharge design to permit direct truck loading. Each offers easy highway trailability and maximum on-site maneuverability, with built-in leveling jacks for fast, easy set-up. Heavy steel stone grates are available for every model, to keep hoppers free of oversize debris. Many models offer a shaker grate. Power plants range to a hefty 90-hp, four-cylinder turbocharged diesel.

The Models 300, 365, and 401 have a hydrostatic drive. Conveyor speed can be regulated to maintain optimum material flow to the shredder. Hydraulic power also is used for an optional Trash-Away conveyor (standard on Model 401), which automatically discharges non-shreddable materials and debris at a 90° angle away from the finished product. A complete over-the-road package, including all necessary lights and signals, is available for every model. Hydraulic brakes are standard on the 401 and electric brakes are optional on the 300 and 365.

Royer Shredder-Mixers are supplied with hoppers ranging in capacity from 1.4 cu. yds. to 9 cu. yds., to accommodate loaders from 1 cu. yd. to 5 cu. yds. Rated outputs range to a whopping 200 cu. yds./hr.* when dry, reasonably clean material is to be processed. Output will be lower than the listed maximum rating, however, when input material contains large proportions of moisture and/or non-shreddable debris.

The moisture, clay content and percentage of non-shreddable debris will directly affect maximum output.





ROYER* INDUSTRIES, INC.

P.O. Box 1232 • Kingston, PA 18704 Phone: 717-287-9624

FAX: 717-283-0578



	300	365	401
Stationary stone grate		1 2 2 2 2	1,333,349
Shaker grate			
Lumpbreakers			
Trash-Away conveyor			
Service platform w/rails	:		
Hopper platform w/rails			
Hydrostatic drive			
Programmable controller			
Electric brakes			
Air brakes			
Highway lights	2		
Highway tires			
Leveling jacks			
Gas engine			
Diesel engine			

■ Standard ☑ Optional ☐ Not Available

Operating and **Construction Features:**

A. Stone grate—heavy welded steel: keeps large rocks, trash out of hopper. **B. Shredding belt**—faced with rows of

steel cleats that shred, mix and aerate material.

C. Lump breakers—"swing-away" weights break up lumps, level depth of material moving to the shredding belt.

D. Conveyor—steel-flighted belt moves material from the receiving hopper to the shredding belt.

E. Trash-Away conveyor—receives non-shreddable material rejected by the shredding belt. Discharges 90° to processed material.

F. Variable sweep and deflector manually operated sweep controls particle size, fine to coarse. Adjustable deflector regulates discharge angle of the processed material. Accessible from service platforms.

G. Service platform—heavy-gage steel. Serves as observation deck. (Hopper platform is also available.)

H. Clean-out gate—hinged, heavygage steel. Provides access to back of hopper for clean out.

Standard equipment and options are listed in the chart at left. Use the chart to help determine which Royer Shredder-Mixer is right for your operation. Every Royer Shredder-Mixer is designed and built to provide years of reliable service, and each is packed with quality features to make your job easier and more productive.

Whether you're in the business of producing topsoil or peat, operating your community's composting program, or engaged in recycling other friable, organic materials, you'll find that Royer Shredder-Mixers will do your job faster and better.

INDUSTRIES, INC.

P.O. Box 1232 • Kingston, PA 18704 Phone: 717-287-9624

FAX: 717-283-0578

To implement its policy of continuing product improvement, Royer reserves the right to alter designs and specifications without notice.

FIERY FURNACE ENVIRONMENTAL

P. O. Box 4802 • Midland, Texas 79704 [915] 694-7793 • Fax [915] 694-7872



SOIL SHREDDING/MIXING TO REDUCE SOIL TPH CONTENT

Soil shredding and/or mixing can be used to lower the total petroleum hydrocarbon (TPH) content of soils which have been contaminated. The process utilizes equipment (Royer) which mechanically reduces the soil to small particles, thus allowing a much greater surface area of the soil to be exposed to the atmosphere.

This shredding and aeration has been used by Fiery Furnace Environmental on numerous occasions with TPH reductions of at least 60 per cent. A typical job involves shredding soil contaminated with crude oil from a tank battery spill. The TPH at the outset was in excess of 80,000 ppm. The completed job saw TPH levels reduced to less than 10,000 ppm.

Fiery Furnace Environmental also has available the equipment to add measured amounts of liquids to the soil as it exits the shredder/mixer. This feature allows the addition of nutrients or fertilizers and the capability of moisture content enhancement for dust control in dry soils.

BROWN AND CALDWELL

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OCT 26 1994

OIL CONSERVATION DIV. SANTA FE

October 20, 1994

Mr. Roger Anderson New Mexico Oil Conservation Division Post Office Box 2088 Santa Fe, New Mexico 87504-2088

Subject:

Soil Remediation and Ground Water Monitoring Proposal

Transwestern Bell Lake Plant, near Jal, New Mexico

Dear Mr. Anderson:

On behalf of Transwestern Pipe Line Company, Brown and Caldwell is submitting this proposal for the soil remediation and ground water monitoring at the Transwestern Bell Lake Plant. The proposal discusses the closure of four surface impoundments and the monitoring of ground water to measure the rate of reduction in the dissolved phase volatile organic plume.

Should you have any questions, please feel free to contact me at (713) 759-0999 or Mr. Larry Campbell at (505) 625-8022.

Very truly yours,

BROWN AND CALDWELL

Susanne Richard, REM, REP

Principal Geologist

cc: Ms. Laura Kunkel, PE, Transwestern Pipeline Company, Roswell, New Mexico Mr. Larry Campbell, Transwestern Pipeline Company, Roswell, New Mexico

BROWN AND CALDWELL

October 17, 1994

Ms. Laura Kunkel, PE Transwestern Pipeline Company P.O. Box 1717 Roswell, New Mexico 88202-1717

9973.98

Subject:

Proposal for the Bell Lake Plant Transwestern Pipeline Company

Jal, New Mexico

Dear Ms. Kunkel:

Brown and Caldwell is pleased to present this proposal to Transwestern Pipeline Company to conduct environmental services at the Bell Lake Plant. This facility is located in Lea County, New Mexico, approximately 25 miles west of Jal, New Mexico.

Brown and Caldwell understands that the objectives of the project are to close four surface impoundments and monitor the rate of reduction in the dissolved phase volatile organic plume in the ground water. The surface impoundments will be closed by excavating impacted soil.

The dissolved phase volatile organic plume will be monitored by installing three monitor wells. The objective of the well installations is to monitor the dissolved phase volatile organic plume down gradient of the impacted surface impoundments and the borings/wells where ground water samples collected were impacted by volatile organics. In addition, selected soil and ground water samples will be analyzed for parameters to assist in evaluating the feasibility of intrinsic bioremediation (bioattenuation) and monitoring as a remediation alternative. Our approach to meeting the objectives is to install three monitor wells down gradient of monitor well MW-1. Soil and ground water samples will be collected from each boring/monitor well for laboratory analysis. The data generated during the installation will

The information contained in this proposal is proprietary and contains confidential information which is of significant economic value to Brown and Caldwell. It is intended to be used only for evaluation of our qualifications to provide services. It should not be duplicated, used or disclosed in whole or in part for any purpose other than to evaluate this proposal.

be evaluated and included in a report submitted to Transwestern and the New Mexico Oil Conservation Division (NMOCD).

Scope of Work

Based on the objectives Brown and Caldwell proposes the following scope of work for the project.

1. Surface Impoundment Closure and Impacted Soil Excavation

Transwestern will conduct field observations and sampling for the closure of four surface impoundments and excavation of shallow (up to a depth of 10 feet) impacted soil. Three impoundments are unlined, earthen, and have been backfilled and the fourth is a concrete lined, above grade, structure.

The concrete lining of the one impoundment will be demolished and placed into the excavation. The concrete lined surface impoundment will then be backfilled with clean soil. The three unlined surface impoundments will be excavated to approximately four feet, to remove the most visibly impacted soil.

The remaining cavities will be visually inspected for highly contaminated soil as indicated by gross hydrocarbon staining in accordance with I.B of the NMOCD Unlined Surface Impoundment Guidelines (Guidelines). In the event that gross hydrocarbon staining is present, a sample will be taken no less than three feet into the undisturbed soil beneath the most grossly stained area with a backhoe. This sample will be analyzed for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylene (BTEX) using field testing methods. BTEX will be measured in the field with an organic vapor meter (OVM).

If the analysis determines that the sample does not meet the remediation goals of 50 mg/kg BTEX and 100 mg/kg TPH, the soils beneath and adjacent to the impoundments will be excavated until the grossly stained soil is removed. Soil samples will then be taken and analyzed from each of the excavation sidewalls and the bottom to confirm that remediation goals have been met. If the analysis, field screening, yields TPH or BTEX levels in excess of the remediation goals, excavation will resume. This sequence will be repeated until;

- 1. Analysis of field screened confirmation samples indicate that the contaminated soils have been removed;
- 2. Consolidated material is encountered (backhoe limitations); or
- 3. A depth of ten feet below grade is reached.

Note that under conditions 2 and 3, excavations will continue laterally until analyses of sidewall field screened confirmation samples are below the remediation goals for BTEX and TPH; the excavation extends a maximum distance of ten feet beyond the property line; or physical restraints (buildings, pipelines, etc.) terminate the excavations. In the event that the excavation stops because of depth or consolidated material, a sample will be collected for laboratory analysis for BTEX by EPA Method 8020 and TPH by EPA Method 418.1. Duplicate samples will also be taken of 10% of the soil samples analyzed for BTEX and TPH using field screening methods. These duplicates will be analyzed for BTEX by EPA Method 8020 and TPH by EPA Method 418.1.

Once excavation of contaminated soils is complete, plastic sheeting will be placed within the cavity, and the cavity will be backfilled and mounded above grade with clean soil transported from an offsite source. A soil/concrete mixture cap will then be formed over the four impoundments. Excavated soil will be transported to and treated at the C & C Landfarm located in Monument, New Mexico.

2. Monitor Well Installations

Prior to initiation of field activities Brown and Caldwell will develop a Site Safety and Health Plan (SSHP) to encompass the closure and investigation activities. Subcontractor personnel will be required to document their review of and comply with the SSHP.

Brown and Caldwell will install three, two inch monitor wells, to an estimated depth of 100 feet each. The wells will be utilized to monitor benzene, toluene, ethyl benzene and xylenes (BTEX) constituent levels in ground water.

Brown and Caldwell understands that a Transwestern representative will be available to assist with clearance of underground utilities and pipelines. Additionally, prior to drilling, the proposed locations of soil borings will be probed or hand augered to a depth of approximately three feet below ground surface.

Proposed monitor well boring locations for this investigation are presented in Figure 1. The well locations may be modified by Transwestern personnel and Brown and Caldwell Project Manager prior to project mobilization. It is anticipated that both hollow stem auger and air rotary drilling methods will be employed during this investigation. Initially, hollow stem augers will be utilized. When consolidated sediments, unsuitable for hollow stem augering, are encountered air rotary drilling methods will be used.

At a minimum, one subsurface sample, collected from the capillary fringe of each boring, will be submitted for laboratory analysis. Samples will be collected using split spoon samplers or an NDX core barrel depending on the drilling method. Boring logs will be constructed for each monitor well boring. These logs will contain sample interval

information, a physical description of recovered samples or cuttings and field screening results.

Monitor wells will be constructed of two-inch flush-threaded schedule 40 PVC screen, riser, and bottom cap. Slot size for well screens will be 0.010 inches. Monitor wells will be completed with a minimum of ten feet of well screen below the water table and five feet of well screen above the water table. A sand pack consisting of 10/20 silica sand will be emplaced into the borehole annulus to a minimum height of two feet above the top of the well screen. A bentonite seal (bentonite pellets), having a minimum, thickness of two feet will be emplaced in the borehole annulus above the sank pack. The bentonite will be hydrated with potable water and allowed to stand for a minimum of one hour. The remainder of the annulus will then be grouted with a Portland cement/bentonite slurry. Wells will be equipped with flush mount well covers and locking water-tight caps. Well construction information will be contained in the boring log/well construction diagram. Monitor well casing elevations will be surveyed to a relative benchmark by the Brown and Caldwell geologist following well installation.

Monitor wells will be developed within 24 hours after installation. Wells will be developed using a bailer and/or submersible pump. Well development will be considered complete when the wells are relatively free of sand and fine sediment and readings of pH and conductivity have stabilized, or when five well volumes have been removed, or when the well has been bailed or pumped "dry". Readings for pH and conductivity will be considered stabilized when successive readings are within +/-0.1 units for pH and +/-10 percent for conductivity.

Monitor wells will be sampled no sooner than 24 hours after well development has been completed. Newly installed and existing monitor wells, will be purged prior to sample collection using a bailer or submersible pump. Prior to purging, ground water elevations will be measured and recorded. The ground water elevation data will be used to detect any changes to the ground water gradient at the site. Purging activities will be considered complete when readings of pH and conductivity have stabilized, or three well volumes have been removed, or when the well has been bailed or pumped "dry". Readings for pH and conductivity will be considered stabilized when successive readings are within +/-0.1 units for pH and +/-10 percent for conductivity. Wells will then be sampled using a disposable polyethylene bailer and dedicated bailer rope.

Soil samples collected will be analyzed for BTEX using EPA Method 8020, and TPH using EPA Method 418.1. Ground water samples will be analyzed for BTEX using EPA Method 8020. BTEX and TPH samples will be analyzed by Terra Laboratory, Inc., in Houston, Texas. Brown and Caldwell will also field screen ground water samples for dissolved oxygen, redox potential, ferrous iron, pH and conductivity. In addition to the analysis listed above, one soil sample per boring from the vadose zone and one ground water sample from

each monitor well will also be analyzed for parameters to assist in evaluating potential remediation methods for affected soil and ground water at the sites and the feasibility of intrinsic bioremediation and monitoring as a remediation alternative. These samples will be analyzed for the following constituents, using EPA-approved methods, where appropriate. The proposed analysis package for ground water includes:

- pH
- Ammonia Nitrogen
- Dissolved Oxygen (DO)
- Ortho-Phosphate
- Total Kjeldahl Nitrogen (TKN)
- Total Bacterial Counts
- Selective Bacterial Counts (the organisms that degrade hydrocarbons)
- Soluble Chemical Oxygen Demand (SCOD)
- Total Chemical Oxygen Demand (TCOD)
- Nitrate
- Sulfate
- Ferrous Iron
- Manganese Dioxide

The proposed analysis package for soil samples includes:

- pH
- Ammonia Nitrogen
- Ortho-Phosphate
- TKN
- Total Bacterial Counts
- Selective Bacterial Counts (the organisms that degrade hydrocarbon)
- Total Organic Carbon (TOC)
- Grain Size Distribution (sample collected from the water producing zone)

The analytical laboratory designated for this project by Transwestern is Terra Laboratory (Terra) in Clear Lake, Texas. Terra will conduct all fixed-based analyzes except for bacterial counts and grain size distributions. Brown and Caldwell understands that Terra will contract directly with Transwestern. Under said contract it is understood that Terra will provide ice chests, labels, chain-of-custody forms, packing material, and sample jars with appropriate preservatives. Brown and Caldwell will place labeled samples on ice in laboratory supplied containers. The samples will be delivered by common carrier to Terra. The samples will be labeled, packaged, and shipped according to EPA protocols. Brown and Caldwell will subcontract the common carrier.

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The drill rig and downhole drilling and sampling equipment (e.g. augers, split spoons, etc.) will be steam cleaned prior to the commencement of drilling activities and prior to demobilizing from the site. Downhole drilling and sampling equipment will also be steam cleaned between boring locations. In addition, all sampling equipment will be decontaminated prior to use at each boring location and between sample intervals using a phosphate free soap/potable water wash followed by a potable water rinse and then a distilled water rinse. Sampling equipment will be allowed to air dry before it is used.

Soil cuttings generated while drilling monitoring well boreholes will be collected on plastic sheeting. Purge water will be placed into 55-gallon drums, supplied by Transwestern. Brown and Caldwell understands that Transwestern will be responsible for the proper disposal of fluids, cuttings, and wastes generated during the well installation.

Following completion of the well development and sampling, slug tests will be conducted on up to two monitor wells per site. Slug-out (rising head) tests will be conducted on the monitor wells selected for slug testing. Water level changes will be measured using a pressure transducer and recorded using a Hermit Datalogger. Slug test data will be analyzed using the AQUESOLVE software package to determine aquifer characteristics.

3. Report Preparation

Brown and Caldwell will provide one draft and three final reports documenting the installation of the three monitor wells. The report will include a boring/monitor well location map, summary of the field activities, slug test data, a table of the analytical results, boring log/well completion diagrams, a ground water gradient map, and conclusions.

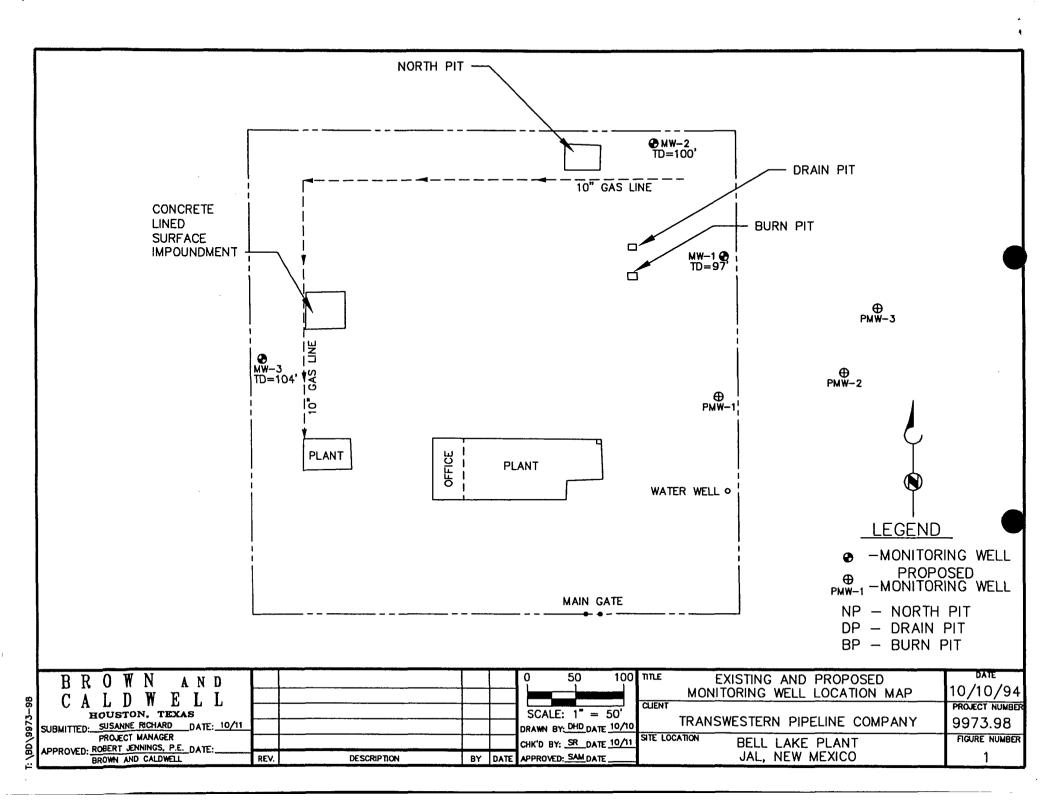
Brown and Caldwell appreciated the opportunity to submit this proposal and looks forward to being of service to Transwestern. Should you have any questions regarding this proposal, please do not hesitate to contact me at (713) 759-0999.

Very truly yours,

Submitted by,

BROWN AND CALDWELL

Susanne Richard, REM, REP Principal Geologist



BROWN AND CALDWELL

RECEIVED

OCT 2 6 1994

OIL CONSERVATION DIV. SANTA FE

October 17, 1994

Ms. Laura Kunkel, PE Transwestern Pipeline Company P.O. Box 1717 Roswell, New Mexico 88202-1717

9973.98

Subject:

Proposal for Bell Lake Plant Transwestern Pipeline Company Jal. New Mexico

Dear Ms. Kunkel:

Brown and Caldwell is pleased to present this proposal to Transwestern Pipeline Company to conduct environmental services at the Bell Lake Plant. This facility is located in Lea County, New Mexico, approximately 25 miles west of Jal, New Mexico.

Brown and Caldwell understands that the objectives of the project are to close four surface impoundments and monitor the rate of reduction in the dissolved phase volatile organic plume in the ground water. The surface impoundments will be closed by excavating impacted soil.

The dissolved phase volatile organic plume will be monitored by installing three monitor wells. The objective of the well installations is to monitor the dissolved phase volatile organic plume down gradient of the impacted surface impoundments and the borings/wells where ground water samples collected were impacted by volatile organics. In addition, selected soil and ground water samples will be analyzed for parameters to assist in evaluating the feasibility of intrinsic bioremediation (bioattenuation) and monitoring as a remediation alternative. Our approach to meeting the objectives is to install three monitor wells down gradient of monitor well MW-1. Soil and ground water samples will be collected from each boring/monitor well for laboratory analysis. The data generated during the installation will

The information contained in this proposal is proprietary and contains confidential information which is of significant economic value to Brown and Caldwell. It is intended to be used only for evaluation of our qualifications to provide services. It should not be duplicated, used or disclosed in whole or in part for any purpose other than to evaluate this proposal.

Note that under conditions 2 and 3, excavations will continue laterally until analyses of sidewall field screened confirmation samples are below the remediation goals for BTEX and TPH; the excavation extends a maximum distance of ten feet beyond the property line; or physical restraints (buildings, pipelines, etc.) terminate the excavations. In the event that the excavation stops because of depth or consolidated material, a sample will be collected for laboratory analysis for BTEX by EPA Method 8020 and TPH by EPA Method 418.1. Duplicate samples will also be taken of 10% of the soil samples analyzed for BTEX and TPH using field screening methods. These duplicates will be analyzed for BTEX by EPA Method 8020 and TPH by EPA Method 418.1.

Once excavation of contaminated soils is complete, plastic sheeting will be placed within the cavity, and the cavity will be backfilled and mounded above grade with clean soil transported from an offsite source. A soil/concrete mixture cap will then be formed over the four impoundments. Excavated soil will be stockpiled on six mil plastic sheeting at the site pending transport to and treatment at the C & C Landfarm located in Monument, New Mexico.

2. Monitor Well Installations

Prior to initiation of field activities Brown and Caldwell will develop a Site Safety and Health Plan (SSHP) to encompass the closure and investigation activities. Subcontractor personnel will be required to document their review of and comply with the SSHP.

Brown and Caldwell will install three, two inch monitor wells, to an estimated depth of 100 feet each. The wells will be utilized to monitor benzene, toluene, ethyl benzene and xylenes (BTEX) constituent levels in ground water.

Brown and Caldwell understands that a Transwestern representative will be available to assist with clearance of underground utilities and pipelines. Additionally, prior to drilling, the proposed locations of soil borings will be probed or hand augered to a depth of approximately three feet below ground surface.

Proposed monitor well boring locations for this investigation are presented in Figure 1. The well locations may be modified by Transwestern personnel and Brown and Caldwell Project Manager prior to project mobilization. It is anticipated that both hollow stem auger and air rotary drilling methods will be employed during this investigation. Initially, hollow stem augers will be utilized. When consolidated sediments, unsuitable for hollow stem augering, are encountered air rotary drilling methods will be used.

At a minimum, one subsurface sample, collected from the capillary fringe of each boring, will be submitted for laboratory analysis. Samples will be collected using split spoon samplers or an NDX core barrel depending on the drilling method. Boring logs will be

constructed for each monitor well boring. These logs will contain sample interval information, a physical description of recovered samples or cuttings and field screening results.

Monitor wells will be constructed of two-inch flush-threaded schedule 40 PVC screen, riser, and bottom cap. Slot size for well screens will be 0.010 inches. Monitor wells will be completed with a minimum of ten feet of well screen below the water table and five feet of well screen above the water table. A sand pack consisting of 10/20 silica sand will be emplaced into the borehole annulus to a minimum height of two feet above the top of the well screen. A bentonite seal (bentonite pellets), having a minimum, thickness of two feet will be emplaced in the borehole annulus above the sank pack. The bentonite will be hydrated with potable water and allowed to stand for a minimum of one hour. The remainder of the annulus will then be grouted with a Portland cement/bentonite slurry. Wells will be equipped with flush mount well covers and locking water-tight caps. Well construction information will be contained in the boring log/well construction diagram. Monitor well casing elevations will be surveyed to a relative benchmark by the Brown and Caldwell geologist following well installation.

Monitor wells will be developed within 24 hours after installation. Wells will be developed using a bailer and/or submersible pump. Well development will be considered complete when the wells are relatively free of sand and fine sediment and readings of pH and conductivity have stabilized, or when five well volumes have been removed, or when the well has been bailed or pumped "dry". Readings for pH and conductivity will be considered stabilized when successive readings are within +/-0.1 units for pH and +/-10 percent for conductivity.

Monitor wells will be sampled no sooner than 24 hours after well development has been completed. Newly installed and existing monitor wells, will be purged prior to sample collection using a bailer or submersible pump. Prior to purging, ground water elevations will be measured and recorded. The ground water elevation data will be used to detect any changes to the ground water gradient at the site. Purging activities will be considered complete when readings of pH and conductivity have stabilized, or three well volumes have been removed, or when the well has been bailed or pumped "dry". Readings for pH and conductivity will be considered stabilized when successive readings are within +/-0.1 units for pH and +/-10 percent for conductivity. Wells will then be sampled using a disposable polyethylene bailer and dedicated bailer rope.

Soil samples collected will be analyzed for BTEX using EPA Method 8020, and TPH using EPA Method 418.1. Ground water samples will be analyzed for BTEX using EPA Method 8020. BTEX and TPH samples will be analyzed by Terra Laboratory, Inc., in Houston, Texas. Brown and Caldwell will also field screen ground water samples for dissolved oxygen, redox potential, ferrous iron, pH and conductivity. In addition to the analysis listed

above, one soil sample per boring from the vadose zone and one ground water sample from each monitor well will also be analyzed for parameters to assist in evaluating potential remediation methods for affected soil and ground water at the sites and the feasibility of intrinsic bioremediation and monitoring as a remediation alternative. These samples will be analyzed for the following constituents, using EPA-approved methods, where appropriate. The proposed analysis package for ground water includes:

- pH
- Ammonia Nitrogen
- Dissolved Oxygen (DO)
- Ortho-Phosphate
- Total Kjeldahl Nitrogen (TKN)
- Total Bacterial Counts
- Selective Bacterial Counts (the organisms that degrade hydrocarbons)
- Soluble Chemical Oxygen Demand (SCOD)
- Total Chemical Oxygen Demand (TCOD)
- Nitrate
- Sulfate
- Ferrous Iron
- Manganese Dioxide

The proposed analysis package for soil samples includes:

- pH
- Ammonia Nitrogen
- Ortho-Phosphate
- TKN
- Total Bacterial Counts
- Selective Bacterial Counts (the organisms that degrade hydrocarbon)
- Total Organic Carbon (TOC)
- Grain Size Distribution (sample collected from the water producing zone)

The analytical laboratory designated for this project by Transwestern is Terra Laboratory (Terra) in Clear Lake, Texas. Terra will conduct all fixed-based analyzes except for bacterial counts and grain size distributions. Brown and Caldwell understands that Terra will contract directly with Transwestern. Under said contract it is understood that Terra will provide ice chests, labels, chain-of-custody forms, packing material, and sample jars with appropriate preservatives. Brown and Caldwell will place labeled samples on ice in laboratory supplied containers. The samples will be delivered by common carrier to Terra. The samples will be labeled, packaged, and shipped according to EPA protocols. Brown and Caldwell will subcontract the common carrier.

The drill rig and downhole drilling and sampling equipment (e.g. augers, split spoons, etc.) will be steam cleaned prior to the commencement of drilling activities and prior to demobilizing from the site. Downhole drilling and sampling equipment will also be steam cleaned between boring locations. In addition, all sampling equipment will be decontaminated prior to use at each boring location and between sample intervals using a phosphate free soap/potable water wash followed by a potable water rinse and then a distilled water rinse. Sampling equipment will be allowed to air dry before it is used.

Soil cuttings generated while drilling monitoring well boreholes will be collected on plastic sheeting. Purge water will be placed into 55-gallon drums, supplied by Transwestern. Brown and Caldwell understands that Transwestern will be responsible for the proper disposal of fluids, cuttings, and wastes generated during the well installation.

Following completion of the well development and sampling, slug tests will be conducted on up to two monitor wells per site. Slug-out (rising head) tests will be conducted on the monitor wells selected for slug testing. Water level changes will be measured using a pressure transducer and recorded using a Hermit Datalogger. Slug test data will be analyzed using the AQUESOLVE software package to determine aquifer characteristics.

3. Report Preparation

Brown and Caldwell will provide one draft and three final reports documenting the installation of the three monitor wells. The report will include a boring/monitor well location map, summary of the field activities, slug test data, a table of the analytical results, boring log/well completion diagrams, a ground water gradient map, and conclusions. Brown and Caldwell will utilize the data collected for determining if bioattenuation of dissolve phase organic's in ground water appears to be occurring. A recommendation will be developed as to the use of bioattenuation as a remediation strategy at the site. If necessary, further site investigation required to assess bioattenuation will be identified. No numeric ground water monitoring is anticipated for this project. Should the data collected indicate modeling is required, a separate proposal will be submitted.

Schedule

Brown and Caldwell is prepared to begin this project within two weeks after receiving authorization to proceed. The field activities, Task 2, is estimated to take 7 days to complete. The draft report, Task 3, will require two weeks after the analytical reports are completed. It is understood that Laboratory's scope of work will require final reporting of analytical results within two weeks of sample receipt (two week turnaround). Therefore the estimated time to complete this project is approximately nine weeks after the onset of field activities.

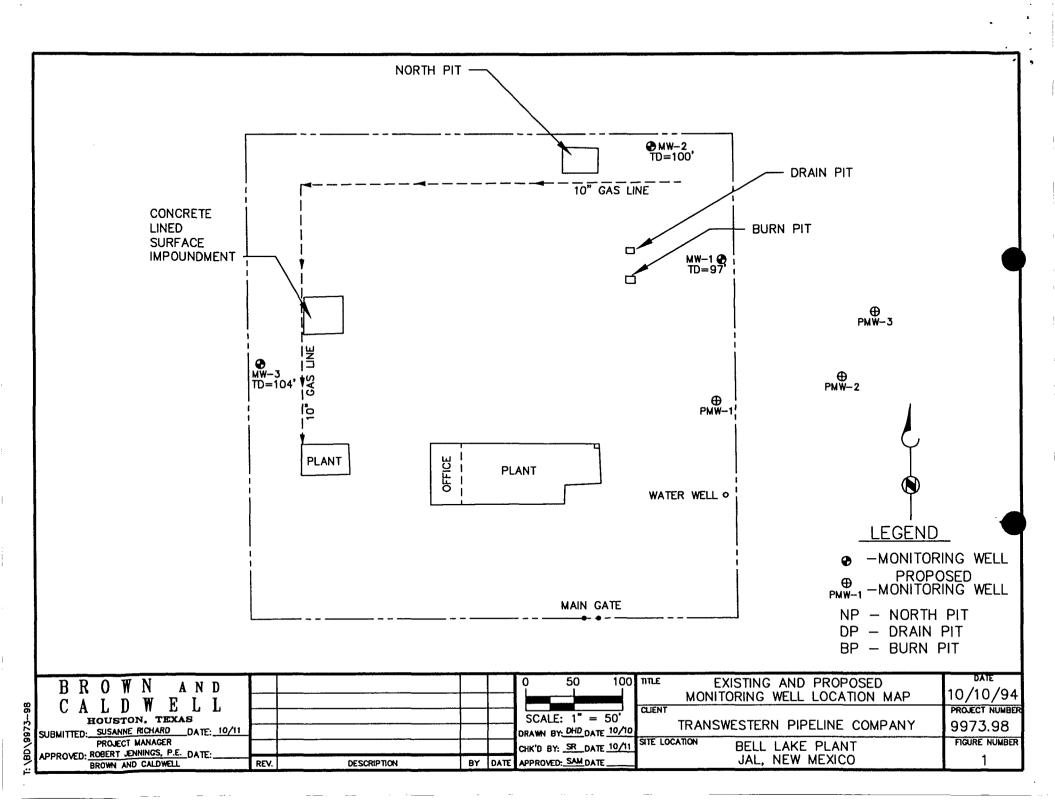
Project Cost, Terms And Conditions

The services of Brown and Caldwell will be provided and billed in accordance with our Environmental Professional Services Agreement No. PC-92-007 and the attached Schedule of Billing Rates, effective October 1, 1991. The project will be invoiced on time and material basis not to exceed \$29,319 without authorization. Approximately \$2,600 are additional laboratory costs associated with testing for bioattenuation. A breakdown of the estimated charges are included on Table 1.

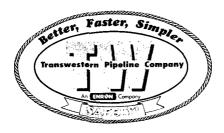
This proposal is valid for a period of sixty (60) days from the date of its submittal.

Brown and Caldwell appreciated the opportunity to submit this proposal and looks forward to being of service to Transwestern. Should you have any questions regarding this proposal, please do not hesitate to contact me at (713) 759-0999.

please do not nesitate to contact me at (/13) /3	9-0999.
Very truly yours,	
Submitted by, BROWN AND CALDWELL R. C.	Submitted for Approval by, BROWN AND CALDWELL
Susanne Richard, REM, REP Principal Geologist	Robert N. Jennings, PE Manager, Gulf Coast Region
ACCEPTED FOR TRANSWESTERN PIPELIN	IE COMPANY
Signature	-
Title	-
Date	•



PRECEING BOY ON.



Transwestern Pipeline Company

TECHNICAL OPERATIONS
P. O. Box 1717 • Roswell, New Mexico 88202-1717

May 12, 1994

Mr. Roger Anderson
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Re: Subsurface investigations Bell Lake Plant

Dear Mr. Anderson:

Enclosed find one (1) copy of the report describing the subsurface investigation of one (1) concrete lined surface impoundment, three (3) unlined impoundments, one (1) non regulated underground storage tank (UST) and one (1) septic system leach field. Each feature is located at Transwestern Pipeline Company's Bell Lake Plant. Brown and Root Environmental was contracted to perform the drilling investigation.

All impoundments and were historically used to store condensate and liquid wastes generated during activities at the facility. The septic system was used to dispose of domestic and plant wastes. The UST stored triethylene glycol for gas sweetening activities This facility was taken out of service in 1985.

At your convenience, review this report. Transwestern Pipeline Company will be contacting your agency in the near future to discuss remediation activities and formal closure of each feature.

Should you require any additional information concerning review of this report prior to the meeting, contact our Roswell Technical Operations at 625-8022.

Sincerely,

Larry Campbell

Division Environmental Specialist

xc:

Greg McIlwain w/o attachments

Berkeley Beard

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Sonny Payne

file

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