2R - <u>34</u>

GENERAL CORRESPONDENCE

YEAR(S): 2003 - 1994

Transwestern Pipeline Company 1400 Smith Street Houston, TX 77002 713-853-6161

2234

May 1, 2003

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: Case #2R034 Groundwater Remediation Atoka-1 Compressor Station Transwestern Pipeline Company Eddy County, New Mexico RECEIVED

ENVIRONMENTAL BUREAU CUL CONSERVATION DIVISION

Dear Bill,

Field activities for the final closure and abandonment of the remediation system at the Atoka-1 Station were completed on March 13, 2003. These activities included the plugging and abandonment of 14 shallow soil vapor extraction (SVE) wells and two off-site monitor wells. The six on-site monitor wells were left in-place as per a condition of the site closure approval letter issued by your office (copy attached). A record of the well abandonment activities was submitted to the NM State Engineer District No. 2 office. A copy of this submittal is enclosed for your files. Abandonment activities also included the removal of the SVE blower unit, SVE conveyance system piping and manifold, and all other associated surface equipment.

If you have any questions or comments regarding this transmittal, please contact me at (713) 646-7644 or George Robinson at (713) 345-1537.

Sincerely,

Kendrich

Bill Kendrick Director, Environmental Affairs

xc w/enclosure: Bryan Arrant Larry Campbell George C. Robinson, PE

NMOCD Artesia District Office Transwestern Pipeline Company Cypress Engineering



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor

Joanna Prukop Cabinet Secretary Lori Wrotenbery Director Oil Conservation Division

February 21, 2003

Mr. Bill Kendrick Transwestern Pipeline Company 1400 Smith St. Houston, Texas 77002

RE: CASE #2R034 GROUND WATER REMEDIATION ATOKA 1 COMPRESSOR STATION EDDY COUNTY, NEW MEXICO

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division has reviewed Transwestern Pipeline Company's (TPC) August 13, 2002 "TRANSMITTAL OF CLOSURE PETITION, ATOKA-1 COMPRESSOR STATION, TRANSWESTERN PIPELINE COMPANY, EDDY COUNTY, NEW MEXICO." This document requests closure of the soil and ground water remedial actions and permission to plug and abandon the monitor wells and vapor extraction wells at TPC's Atoka 1 Compressor Station located in the NE/4 NE/4 of Section 1, Township 18 South, Range 27 East. The request is based upon a demonstration that the ground water underlying the facility is not classified as protectable ground water.

The closure request as contained in the above-referenced document is approved with the following conditions:

- 1. TPC will not plug and abandon the monitor wells located within the boundaries of the compressor station facility.
- 2. TPC shall plug and abandon the offsite monitor wells and all vapor extraction wells by cutting the casing off below the ground surface and grouting the annular space from the bottom to the top with a cement grout containing 3-5% bentonite.

Please be advised that OCD approval does not relieve TPC of responsibility if remaining contamination poses a future threat to ground water, surface 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.

Mr. Bill Kendrick February 21, 2003 Page 2

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.



10235 West Little York Road, Suite 256 Houston, Texas 77040 (713) 856-7980 office (713) 856-7981 fax

2234

April 10, 2003

Mr. Ken Fresquez New Mexico State Engineer District No. 2 1900 West Second Street Roswell, NM 88201 HAY 0 6 2003

RECEIVED

ENVIRONMENTAL BUREAU

RE: Plugging Notification Form wr-20 (MW-6, MW-7 and SVE 1 through SVE 14) Plug and Abandonment Drawing Atoka – 1 Compressor Station

Dear Mr. Fresquez:

On Wednesday April 9, 2003 I spoke with you about the abandonment of ground water monitor wells and soil vapor extraction wells located at the Transwestern Pipeline Company, Atoka – 1 Compressor Station. Sixteen wells were plugged and abandoned at this site after receiving approval from the New Mexico Energy, Minerals and Natural Resources Department on February 21, 2003. Enclosed please find the completed plugging information requested on form wr-20 for the abandoned wells. I have also included a site map showing the prior location of these wells.

If you have any questions or need further information, please contact me at (713) 345-1529.

Sincerely,

Sandra Sharp / Sr. Environmental Manager

Enclosures

cc: Lawrence Campbell

Transwestern Pipeline Company - Roswell, NM

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• MW-7 Para 03/03

75 Feet

Containment wall

Fence

Monitor well

Explanation

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PLUG AND ABANDONMENT MARCH 12-13, 2003 ATOKA-1 COMPRESSOR STATION TRANSWESTERN PIPELINE COMPANY Soil vapor extraction well CYPRESS ENGINEERING SERVICES, INC. .

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL Name: TEANSWESTERN PIPELINE COMPANY Contact: MC, LAWRENCE CAMPBELL Address: 6381 NORTH MAIN ST	Work Phone: <u>(505)625-802</u> 2. Home Phone:
City: POSWELL	State: <u>NM</u> Zip: <u>8820 </u>
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/41/4 Section: Township inEODY	: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X = feet, Y = fe Zone in the fe U.S.G.S. Quad Map	et, N.M. Coordinate System Grant.
C. Latitude:dm Longitude:	dms
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract Subdivision recorded in	of the County.
G. Other:	
H. Give State Engineer File Number if existing wel	1:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: <u>W. COUSER</u> Agent: <u>GED PROJECTS FNTL, INC</u> Mailing Address: <u>8834 CIRCLE DRIVE</u> City: <u>AUSTIN</u>	Work Phone: <u>1-800-553-7455</u> Home Phone: State: TX Zip: 78736
4. DRILLING RECORD	
Drilling began: <u>1129/94</u> ; Completed: <u>1130/94</u> ; Size of hole: <u>3.88</u> in.; Total depth of well: <u>46.5</u> Completed well is: <u>SHALLOW</u> (shallow, arter Depth to water upon completion of well: <u>36.50</u>	Type tools: <u>Are RotAry</u> ; 5 ft.; sian); ft.
File Number: Tr. Form: wr-20 page 1 of 4 MW-CO	n Number:

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth : From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

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Diameter (inches) <u>2"</u>	Pounds per ft. <u>PVC</u>	Threads per in.	Depth Top O	in Feet Bottom <u>46.5</u>	Length (feet) 46.5	Type of Shoe	Perfor From 3 	To To
RECORD OF			ENTING	• • • • • • • • • • • • • • • • • • •	<u></u>		<u></u>	<u> </u>

7.

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
		<u> </u>			
		<u></u>			

8. PLUGGING RECORD

Plugging Contractor: ATKINS ENGINEERING ASSOCIATES, INC. Address: 2904 WEST SECOND STREET, ROSWELL, NM 88202. Plugging Method: CEMENT SLURRY GROUT W/578 BENTONIE F/ TO to SURFACE WITREMIE PIPE Date Well Plugged: MARCH 12-13, 2003	
Plugging approved by:State Engineer Representative	
No. Depth in Feet Top Bottom $1 \underbrace{0}_{44e} \underbrace{44e}_{5} \underbrace{44.1}_{5}$ $4 \underbrace{4.1}_{5}$ $4 \underbrace{4.1}_{5}$	
File Number: Trn Number: Form: wr-20 page 2 of 4	

mw-6

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG OF HOLE

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Depth From	in	Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

Trn Number: page 3 of 4 mw-6

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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	3.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

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FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use ____; Location No. _____

File Number: Form: wr-20

Trn Number: page 4 of 4 mw-6

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

1. OWNER OF WELL Name: TRANSWESTERN PIPELINE COMPANY Work Phone: (505) 625-802 Contact: ML, LAWRENCE CAMPBELL Home Phone:	_
Address: <u>6381 No<i>KTH MAIN' ST</i></u> City: POSWELL State: NM Zip: 8820	
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/4 Section: Township: 185 Range: 27E N.M.P.M. inEODYCounty.	
B. X =feet, Y =feet, N.M. Coordinate System Zone in theGrant. U.S.G.S. Quad Map	
C. Latitude:dms Longitude:dms	
D. East (m), North (m), UTM Zone 13, NAD (27 or 83)	
E. Tract No, Map No of the Hydrographic Survey	
F. Lot No, Block No of Unit/Tract of the Of the County.	
G. Other:	
H. Give State Engineer File Number if existing well:	
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: W. COWSER Agent: GEOPROJECTS INTL, INC Mailing Address: 8834 CIRCE DRIVE	
City: AUSTIN State: TX Zip: 78736	
4. DRILLING RECORD	
Drilling began: $11 30 94$; Completed: $11 30 94$; Type tools: <u>Ark RotAry</u> ; Size of hole: <u>3.88</u> in.; Total depth of well: <u>46.0</u> ft.; Completed well is: <u>SHAUOU</u> (shallow, artesian); Depth to water upon completion of well: <u>45.58</u> ft.	

File Number: Form: wr-20

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	Trn	Number:	
page 1 of 4			
MW-7			

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
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6. RECORD OF CASING

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Diameter	Pounds	Threads	Depth :	in Feet	Length	Type of Shoe	Perfo	rations
(inches)	per ft.	per in.	Тор	Bottom	(feet)	-	From	То
_2	PVC		<u> </u>	46.0	46	PVC	31	46
					<u> </u>		·	
	<u> </u>				<u></u>			
		<u> </u>			<u> </u>		·	

7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
					······································
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8. PLUGGING RECORD

Plugging Contractor:	ATKINS ENGINEERING ASSOCIATES, INC.
Address:	2904 WEST SECOND STREET, ROSWELL, NM 88202
Plugging Method:	CEMENT SLURGY GROUT W/5% BENTONITE F/ TO to SUGAKE WI TREMIE PIPE
Date Well Plugged:	MARCH 12-13, 2003
Plugging approved by	
	State Engineer Representative

	No. Depth	in Feet	Cubic Feetof Cement
1	тор Д	Bottom 46.0	4.0
2			
3			
4			
5			

File Number: Form: wr-20

	Trn	Number:	
page 2 of 4			
MW1-7			
MW-1			

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG OF HOLE

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Depth From	in Feet Tc	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

page 3 of 4 mw-7

Trn Number:

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use ____; Location No. _____

File Number: Form: wr-20 Trn Number: _____ page 4 of 4 MW-7

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

1

1. OWNER OF WELL	
Name: TRANSWESTERN FIDELINE COMPANY	Home Phone: (505)625-8022
Address: 6381 NORTH MAIN ST	
City: ROSWELL	State: <u>NM</u> Zip: 88201
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/41/4 Section: Township	:185 Range:27E N.M.P.M. County.
B. X = feet, Y = fe	et, N.M. Coordinate System Grant.
C. Latitude: d m s Longitude:	d m s.
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract Subdivision recorded in	of the County.
G. Other:	
H. Give State Engineer File Number if existing wel	1:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: Agent: <u>EADES</u> Mailing Address: 1200 EAST BENDER	Work Phone: Home Phone:
City: Hobbs	State: <u>NM</u> Zip: <u>88240</u>
4. DRILLING RECORD	
Drilling began: 10 30 95; Completed: 10 30 95; Size of hole: 6.125 in.; Total depth of well: 36.5 Completed well is: <u>SHALLOW</u> (shallow, arter Depth to water upon completion of well: <u>DRY</u>	Type tools: <u>Aic Rotaly</u> ; _ ft.; sian); ft.
File Number: Tri Form: wr-20 page 1 of 4 SVE-/	n Number:

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

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Depth in Feet From To 	Thickness in feet	Descri water-	ption o bearing	f formati	Estima .on (ated Yield (GPM)
. RECORD OF CASIN	١G					
Diameter Poun (inches) per <u>2</u> 5014	ds Threads ft. per in. ONC	Depth i Top	n Feet Bottom <u>35</u>	Length (feet) _ 35	Type of Shoe SCH 40 PVC	Perforations From To <u>15 35</u>
. RECORD OF MUDE	DING AND CEM	ENTING	G 	0		
Depth in Feet From To 	Hole Diameter	Sacks of mud	Cubic of Cen 	Feet ment	Method of Pla	
PLUGGING RECOR	actor: ATK	INS EN		ung As	SOCIATES. I	NC.

Plugging contractor: ATKING ENGINEERING ASSOCIATES, INC.
Address: 2904 WEST SECOND STREET POSWELL NM 88202
Plugging Method: A Share Share Gant w/5% BENTENDE E/TO to SUPERIE W/TEENE OF
Deta Wall Diversity Construction of the Detailing of the Souther of the Pirce
Date well Plugged: <u>MARCH 12-13, 2003</u>
Plugging approved by:
State Engineer Representative
No. Depth in Feet Cubic Feetof Cement
Top Bottom
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Trn Number: _____ page 2 of 4 SVE-1 File Number: Form: wr-20

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG OF HOLE

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Depth From	in	Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20 Trn Number: _____ page 3 of 4 SVE-1

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File	Number:	
	Form:	wr-20

Trn Number: _____ page 4 of 4 SVE-

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

1. OWNER OF WELL
Contact: ML, LALIEWE CAMPANY Home Phone:
Address: 6381 NOKTH MAIN ST
City: ROSWELL State: NM Zip: 88201
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)
A. 1/4 1/4 1/4 Section: Township: 185 Range: 27E N.M.P.M. in EODY County.
B. X =feet, Y =feet, N.M. Coordinate System Zone in theGrant. U.S.G.S. Quad Map
C. Latitude:dms Longitude:dms
D. East (m), North (m), UTM Zone 13, NAD (27 or 83)
E. Tract No, Map No of the Hydrographic Survey
F. Lot No, Block No of Unit/Tract of the Subdivision recorded in County.
G. Other:
H. Give State Engineer File Number if existing well:
I. On land owned by (required):
3. DRILLING CONTRACTOR
License Number: Work Phone:
Agent: <u>EAMES</u> Home Phone: Mailing Address: <u>1200 EAST BENDER</u>
City: Hobbs State: NMZip: 88240
4. DRILLING RECORD
Drilling began: 10/31/05; Completed: 10/31/05; Type tools: And PotAMY; Size of hole: 6.125 in.; Total depth of well: 43.0 ft.; Completed well is: SHA 10w (shallow, artesian); Depth to water upon completion of well: Dry ft.
File Number: Trn Number: Form: wr-20 page 1 of 4 5VE-Z

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

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6. RECORD OF CASI	ING							
Diameter Pou (inches) per ZSch 4	nds Threads ft.per in.	Depth in Top B	Feet Sottom 43	Length (feet) <u>43</u>	Type of . Sch 40	shoe PK	Perfora From T	atior To <u>43</u>
		·					·	·····
7. RECORD OF MUD	DING AND CEM	ENTING						
Depth in Feet From To 	Hole Diameter	Sacks of mud	Cubic of Cer	Feet ment	Method c	of Pla	cement	
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Plugging Cont A Plugging	ractor: <u>ATKI</u> ddress: <u>2904</u> Method: Ceme	NS ENG 4 WEST NT SLURGY	SECO GROUT	UNG AS Na ST	SOCIATE PEET, P ITONITE F/) I asuell TO to	NC. NM 8 SULFACE 4	₹ 20 17€
Date Well P	lugged: <u>ma</u>	RCH 12-	-13, 2	<u>∞3</u>				
Plugging appr	oved by:		State I	Engineer	Represen	tativ	e	
	No. Depth	in Feet	Cubic	c Feetof	Cement			
	No. Depth Top 1 9	in Feet Bottom <u>43</u>	Cubio	: Feetof 3.8	Cement			
	No. Depth Top 1 2 3	in Feet Bottom <u>43</u>	Cubio	5 Feetof 3.8	Cement			

File Number: _____ Trn Number: _____ page 2 of 4 _____ Form: wr-20 _____ page 2 of 4 _____ SVE-Z

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

Trn Number: _ page 3 of 4 5VE-**3**

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File	Number:		
	Form:	wr-20	

Trn Number: _____ page 4 of 4 5VE -2

File Number:
NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD
1. OWNER OF WELL Name: TRANSWESTERN PIPELINE COMPANY Work Phone: (505) 625-8022 Contact: ML. LAWRENCE CAMPBELL Home Phone: Address: 6381 NORTH MAIN ST
City: PASWELL State: NM Zip: 88201
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)
A1/41/41/4 Section: Township: 185 Range: 27E N.M.P.M. inEODY County.
B. X = feet, Y = feet, N.M. Coordinate System Zone in the Grant.
C. Latitude: d m. s
D. East (m), North (m), UTM Zone 13, NAD (27 or 83)
E. Tract No. , Map No. of the Hydrographic Survey
F. Lot No, Block No of Unit/Tract of the Subdivision recorded in County.
G. Other:
H. Give State Engineer File Number if existing well:
I. On land owned by (required):
3. DRILLING CONTRACTOR
License Number: Name: Agent: Mailing Address: Mailing Address:
City: Hobbs State: NMZip: 88240
4. DRILLING RECORD
Drilling began: 10/31/45; Completed: 10/31/45; Type tools: Air Rotary; Size of hole: 6.125 in.; Total depth of well: 45.0 ft.; Completed well is: SHALLOW (shallow, artesian); Depth to water upon completion of well: DRY ft.
File Number: Trn Number: Form: wr-20 page 1 of 4 5VE-3

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

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i.

Depth in Feet From To 	Thickness in feet	Descrip water-b	etion of bearing f	Eormat	ion	Estima (ted Yi GPM)	eld	
6. RECORD OF CASIN Diameter Poun (inches) per	ds Threads ft. per in.	Depth in Top B	Feet L ottom (45.0	Length (feet) 45	Type o: sch 40	f Shoe	Perfo: From 25	rations To <u>45</u>	
7. RECORD OF MUDE	DING AND CEM	ENTING	······································						ð.
Depth in Feet From To 	Hole Diameter	Sacks of mud	Cubic F of Ceme 	Yeet ent 	Method	of Pla	cement		
S. PLUGGING RECOR Plugging Contr Ad Plugging M Date Well Pl Plugging appro	D actor: <u>ATK</u> dress: <u>290</u> ethod: <u>Eme</u> ugged: <u>ma</u> ved by:	INS ENG 4 WEST NT SLURY RCH 12-	SECONO GROUT W/ -13, Zac	NG A: 1 57 5880 3	SSOCIATE PEET, NTONITE F	S, I Rosuell 170 to	NC. - NM SULFACE	88202 w TREM	NE PIPE
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File	Number:			Trn	Number:	
	Form:	wr-20	page 2 of 4			
			SVE-3			

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

page 3 of 4 5VE-3

Trn Number: ____

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use ____; Location No. _____

File	Number:	
	Form:	wr-20

Trn Number: _____ page 4 of 4

SVE-3

NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL Name: TEANSWESTERN PIPELINE COMPANY Contact: ML. LAWRENCE CAMPBELL Address: 6381 NORTH MAIN ST	Work Phone: <u>(505)625-802</u> 2 Home Phone:
City: PASWELL	State: <u>NM</u> Zip: <u>88201</u>
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/4 Section: Township inEODY	: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X = feet, Y =feet, Y =	et, N.M. Coordinate System Grant.
° C. Latitude:dms Longitude:	dms
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract Subdivision recorded in	of the County.
G. Other:	
H. Give State Engineer File Number if existing wel	1:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: <u>EADES</u> Agent: Mailing Address: <u>1200 EAST BENDER</u> City: <u>HobbS</u>	Work Phone: Home Phone: State: <u>NM</u> Zip: <u>88240</u>
4. DRILLING RECORD	A
Drilling began: <u>10/31/15</u> ; Completed: <u>10/31/15</u> ; Size of hole: <u>6.125</u> in.; Total depth of well: <u>53.0</u> Completed well is: <u>SHALLOW</u> (shallow, artes Depth to water upon completion of well: <u>42.84</u>	Type tools: <u>AIR RotAu</u> 2 ft.; sian); ft.
File Number: Tri Form: wr-20 page 1 of 4 SVE-4	n Number:

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NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth : From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

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Diameter Pounds Threads	Depth in Feet	Length Type of Shoe	Perforations
(inches) per ft. per in.	Top Bottom	(feet)	From To
Sch 40 PVC	53.0	<u>53</u> 5ch 40 PVC	28 53
<u> </u>	······································		
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7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
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				<u></u>	

8. PLUGGING RECORD

Plugging Contractor:	ATKINS ENGINEERING ASSOCIATES, INC.
Address:	2904 WEST SECOND STREET, POSWELL, NM 88202
Plugging Method:	CEMENT SLURG GROUT W/5% BENTONITE F/ TO to SURFACE W/ TREMIE PIPE
Date Well Plugged:	MARCH 12-13, 2003

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State Engineer Representative

	No. Depth	in Feet	Cubic Feetof Cement
1		Bottom	4.6
2			
3			
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File Number: _____ Trn Number: _____ page 2 of 4 SVE-4

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### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

# 9. LOG OF HOLE

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Depth From	in	Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

Trn Number: _____ page 3 of 4

SVE-4

# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File Nu	mber:		Trn	Number:	 
	Form: wr-20	page 4 of 4			
		SVE-4			

# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL	
Name: TRANSWESTERN PIDELINE COMPANY	Work Phone: (505) 625-8022
Address: 6381 NANTH MAIN ST	Home Priorie:
	70701
City: <u>Poswell</u>	State: <u>NM</u> Zip: <u>8820</u>
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/41/4 Section: Township	: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X =feet, Y =fe	et, N.M. Coordinate System Grant.
C. Latitude:dms Longitude:	ds
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract Subdivision recorded in	of the County.
G. Other:	
U Cive State Engineer File Number if existing vel	1.
I. On land owned by (required):	·
3. DRILLING CONTRACTOR	
License Number:	
Name:	Work Phone:
Agent: <u>EADES</u> Mailing Address: /200 EAST BENDER	Home Phone:
City: Hibbs	State: NM Zip: 88240
4. DRILLING RECORD	
Drilling began: <u>1101/95</u> ; Completed: <u>1101/95</u> ; Size of hole: <u>6125</u> in.; Total depth of well: <u>46</u> Completed well is: <u>SHALLOW</u> (shallow, arte Depth to water upon completion of well: <u>DRY</u>	Type tools: <u>And lotthey</u> ; 2 ft.; sian); ft.
File Number: Tr Form: wr-20 page 1 of 4 SVE-5	n Number:

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# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
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	<b>_</b>	·		

# 6. RECORD OF CASING

Diameter Pounds Thread (inches) per ft. per in	s Depth . Top	in Feet Bottom	Length (feet)	Type of Shoe	Perfo From	rations To
2 5CH 40 PUC	0	46	_46_	sch 40 PVC	26	46
	·					

#### 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of	Placement
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#### 8. PLUGGING RECORD

Plugging Contr Ac Plugging M Date Well Pl Plugging appro	actor: <u>ATKINS ENGINEERING ASSOCIATES</u> , <u>INC</u> . Idress: <u>2904 WEST SECOND STREET, POWELL, NM 88202</u> Iethod: <u>EMENT SLUREY GROUT W/5% BENTONITE F/TO to SURFACE W</u> TREMIE PIPE .ugged: <u>MARCH 12-13, 2003</u> oved by: State Engineer Representative	61
	No. Depth in Feet Cubic Feetof Cement	
le Number: Form: wr-	20 Trn Number: 5VE-5	

File Number: Form: wr-20

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# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

# 9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

page 3 of 4 SVE-5

Trn Number:

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### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

# **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File Number: Form: wr-20	Trn Number: page 4 of 4 SVE-5	

# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL	Namie Dhanna 60/00 0000
Name: <u>TRANSWESTERN FIPELINE (OMPANY</u> Contact: MI, / ALIPENNE (A ALET)	_ work Phone: <u>(505)625-802</u> 2 Home Phone:
Address: 6381 NORTH MAIN ST	
City: ROSWELL	State: <u>NM</u> Zip: <u>8820</u> 1
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/4 Section: Townshi	p: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X = feet, Y = f Zone in the f U.S.G.S. Quad Map	eet, N.M. Coordinate System Grant.
C. Latitude:dms Longitude	:°dms
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract	of the Of the
G. Other:	
H. Give State Engineer File Number if existing we	11:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: Agent: <u>EADES</u> Mailing Address: 1200 EAST BENJER	Work Phone: Home Phone:
City: Hobbs	- - State: NM Zip: 88240
4. DRILLING RECORD	
Drilling began: <u>III105</u> ; Completed: <u>III195</u> Size of hole: <u>6.125</u> In.; Total depth of well: <u>4</u> . Completed well is: <u>SHAUOU</u> (shallow, art) Depth to water upon completion of well: <u>Dry</u>	; Type tools: Ail Po(Any; 3 ft.; esian); ft.
File Number: T Form: wr-20 page 1 of 4 5VE-6	rn Number:

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# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

# 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
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		<u> </u>		

# 6. RECORD OF CASING

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Diameter	Pounds	Threads	Depth :	in Feet	Length	Type of	Shoe	Perfo	rations
(inches)	per ft.	per in.	Top	Bottom	(feet)		A	From	То
	sch 40 Pre	/	0	43_	43	sch 40	PUC	23	43
	<u> </u>				·	<u> </u>			
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## 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement	
			<u></u>			

#### 8. PLUGGING RECORD

Plugging Contractor:	ATKINS ENGINEERING ASSOCIATES, INC.
Address:	2904 WEST SECOND STREET, ROSWELL, NM 88202
Plugging Method:	EMENT SLURGY GROUT W/5 % BENTONITE F/ TO to SURFACE W/ TREMIE PIPE
Date Well Plugged:	MARCH 12-13, 2003

Plugging approved by: ______State Engineer Representative

	No. Depth	in Feet	Cubic Feetof Cement
1	Top A	Bottom 42	3.8
2			
3			
5			

File Number:	Trn Number:
Form: wr-20	page 2 of 4
	SVE-6


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File Number:

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#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

# 9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

Trn Number: _____ page 3 of 4

SVE-6

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File	Number:			Trn	Number:	
	Form:	wr-20	page 4 of 4			
			SVE-6			

# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL	
Name: TRANSWESTERN PIPELINE COMPANY	Work Phone: (505) 625-8022
Address: 6381 NORTH MAIN ST	Home Phone:
City: PASWELL	State: <u>NM</u> Zip: <u>8820</u> 1
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/4 Section: Township inEODY	: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X = feet, Y = fe Zone in the U.S.G.S. Quad Map	et, N.M. Coordinate System Grant.
C. Latitude:dm •••••s Longitude:	dms
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract Subdivision recorded in	of the Of the
G. Other:	
H. Give State Engineer File Number if existing wel	1:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number.	
Name:	Work Phone:
Agent: <u>EADES</u> Mailing Address: <u>1200 EAST BENNER</u>	Home Phone:
City: Hobbs	State: <u>NM</u> Zip: <b>88240</b>
4. DRILLING RECORD	
Drilling began: <u>10/31/95</u> ; Completed: <u>10/31/95</u> ; Size of hole: <u>6.125</u> in.; Total depth of well: <u>39.5</u> Completed well is: <u>SHALLOW</u> (shallow, artes Depth to water upon completion of well: <u>35.00</u>	Type tools: An R RotAny; ft.; sian); ft.
File Number: Tra Form: wr-20 page 1 of 4 SVE-7	n Number:

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

### 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
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## 6. RECORD OF CASING

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Diameter	Pounds	Threads	Depth :	in Feet	Length	Type of Shoe	Perforations
(inches)	per ft.	per in.	Тор	Bottom	(feet)		From To
_2	sch 40 PMC		0	<u> </u>	39.5	Sch 40 PVC	19.5 39.5
		······		<u> </u>			
<u> </u>							<u>.</u>
		<u> </u>					

#### 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
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		· · · · · · · · · · · · · · · · · · ·		<u></u>	

#### 8. PLUGGING RECORD

Plugging Contractor: ATKINS ENGINEERING ASSOCIATES, INC. Address: 2904 WEST SECOND STREET, ROSWELL, NM 88202 Plugging Method: CEMENT SLURG GROUT W/576 BENTOWIE F/TO to SURFACE WITHEMIE PIFE Date Well Plugged: MARCH 12-13, 2003
Plugging approved by:State Engineer Representative
No. Depth in Feet Top Bottom $ \begin{array}{c} 1 \\ - 0 \\ 3 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$
ile Number: Trn Number: Form: wr-20

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### 9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

page 3 of 4

SVE-7

Trn Number:

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#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

The undersigned hereby certifies that, to the best of his knowledge and

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

_______________________________

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use ____; Location No. _____

File	Number:	
	Form:	wr-20

page 4 of 4

SVE-7

Trn Number:

# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL	Mark Bhana. ACL 12- 8032
Contact: MC, LAWRENCE CAMPEL	Home Phone:
City: KOWELL	_ State: <u>NM</u> Zip: <u>88201</u>
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/41/4 Section: Townshi	p: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = feet, Y = f	eet, N.M. Coordinate System Grant.
C. Latitude:dms Longitude	:dm; s
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract Subdivision recorded in	of the County.
G. Other:	
H. Give State Engineer File Number if existing we	11:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: Agent: <u>EADES</u> Mailing Address: <u>1200 EAST BEWDER</u>	Work Phone: Home Phone:
City: Hobbs	State: NM Zip: 88240
4. DRILLING RECORD	
Drilling began: 18/31/95 ; Completed: 10/31/95 ; Size of hole: 6.125 in.; Total depth of well: 4/ Completed well is: <u>SHALLOW</u> (shallow, arte Depth to water upon completion of well: <u>34.50</u>	Type tools: Anc Rotaty; ft.; esian); ft.
File Number: Tr Form: wr-20 page 1 of 4 5VE-8	n Number:

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#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
	· <u></u>			
<u></u>		<u></u>		· · · · · · · · · · · · · · · · · · ·
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#### 6. RECORD OF CASING

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	Diameter (inches)	Pounds per ft, <u>5ch 40 pV</u>	Threads per in.	Depth Top <b>O</b>	in Feet Bottom <u>41</u>	Length (feet) <u>4</u> /	Type of SCh 40	Shoe	Perfor From <u>21</u>	To <b>4</b> /
3.	9. 	,								
7. F	RECORD OF	MUDDING	AND CEMI	ENTING						
	Depth in	Feet 1	Hole	Sacks	Cubic	Feet	Method o	f Plac	cement	

Erom	To	Diamotor	of mud	of Comont	
ETOW	10	Drameter	or mud	or cement	
			**************************************		
	<u> </u>				

#### 8. PLUGGING RECORD

Plugging Contractor: ATKI Address: 2904 Plugging Method: Cemen Date Well Plugged: MA Plugging approved by:	NS ENGINEERING ASSOCIATES, INC. WEST SECOND STREET, POSWELL, NM 88202 VT SLURY GROUT W/5% BENTOWITE F/ TO to SUGAKE W/TREME PIPE RCH 12-13, 2003 State Engineer Representative	1.1
No. Depth Top 1 2 3 4 5	in Feet Cubic Feetof Cement Bottom <u>41</u> <u>3.6</u>	
File Number: Form: wr-20	Trn Number: page 2 of 4 5 VE-8	

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#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## 9. LOG OF HOLE

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Depth From	in	Feet To	Thickness in feet	Color and Type of Material Encountered
			·	
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			<del>_</del> _	

File Number: Form: wr-20

Trn Number: _____ page 3 of 4

SVE-8

### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

Trn Number:

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File	Number:					
	Form: wr-20	page	4	of	4	

SVE-8

## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL Name: TEANSWESTERN PIPEUNE COMPANY Contact: ML, LAWRENCE CAMPBELL Address: 6381 NORTH MAIN ST	Work Phone: (505) 625-8022 Home Phone:
City: Paswell	State: <u>NM</u> Zip: <u>88201</u>
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/4 Section: Township	hip: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X =feet, Y = Zone in the U.S.G.S. Quad Map	feet, N.M. Coordinate System Grant.
C. Latitude:dms Longitud	de:dms
D. East (m), North (m), U	IM Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract	of the County.
G. Other:	
H. Give State Engineer File Number if existing w	vell:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: Agent: EAOES Mailing Address: JZOO EAST BENDER	Work Phone: Home Phone:
City: Hobbs	State: <u>NM</u> Zip: <u>88240</u>
4. DRILLING RECORD	. 01
Drilling began: <u>10/3/75</u> ; Completed: <u>10/31/75</u> Size of hole: <u>6.125</u> in.; Total depth of well: Completed well is: <u>574741000</u> (shallow, ar Depth to water upon completion of well: <u>35.4</u>	; Type tools: Are blany; <u>45</u> ft.; rtesian); <u>4</u> ft.
File Number: Form: wr-20 page 1 of 4 SVE-9	Trn Number:

## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

# 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
<u> </u>	. <u></u>			
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<u></u>				

#### 6. RECORD OF CASING

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Diameter (inches)	Pounds Threa per ft. per i	ds Depth n. Top	in Feet Bottom	Length (feet)	Type of Shoe	Perfo From	rations To
_2_	SCH 40 PVC	0	44	_44_	Sch to PVC	24	_44
			·				
			;				

## 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of	Placement
	·				······	
<u> </u>	. <u></u>		<del></del>	<u> </u>		
	·	<u> </u>				

#### 8. PLUGGING RECORD

Plugging Contractor: ATKINS ENGINEERING ASSOCIATES, INC. Address: 2904 WEST SECOND STREET, POSWELL, NM 88202 Plugging Method: CEMENT SLURRY GROUT W/578 BENTONIE F/ TO to SURFACE W TREME PIPE Date Well Plugged: MARCH 12-13, 2003
Plugging approved by:State Engineer Representative
No. Depth in Feet Top Bottom $ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ \end{array} $ Cubic Feetof Cement $ \begin{array}{c} 3.8 \\ \hline 3.8 \\ \hline \hline 3.8 \\ \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline \hline$
File Number: Trn Number: Form: wr-20

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#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## 9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered	
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File Number: Form: wr-20

page 3 of 4 SVE-9

Trn Number:

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

_____

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File	Number:	Number:	
	Form: wr-20	Form: wr-20	_

Trn Number: _____ page 4 of 4

SVE-9

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# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL Name: <u>TEANSWESTER</u> Contact: <u>ML, LAWR</u> Address: <u>6381 Nor</u>	IN PIDELINE COMPANY ENCE CAMPBELL ITH MAIN ST	Work Phone: <b>(535)625-8022</b> Home Phone:
City: <b>PASWELL</b>		
2. LOCATION OF WELL (A, B,	C, or D required, E or F if known)	
A1/41/41/4	1/4 Section: Townsh	ip: <u>185</u> Range: <u>27E</u> N.M.P.M. County.
B. X =f Zone in th	Teet, Y =	feet, N.M. Coordinate System Grant.
C. Latitude:d	ms Longitud	e:dms
D. East (m	n), North (m), UT	M Zone 13, NAD (27 or 83)
E. Tract No, M	Map No of the	Hydrographic Survey
F. Lot No, Blo	ock No of Unit/Tract Subdivision recorded in	of the County.
G. Other:		
H. Give State Enginee	er File Number if existing w	ell:
I. On land owned by (	required):	
3. DRILLING CONTRACTOR		
License Number: Name: Agent: Mailing Address: 120	AVES DO BAST BENJER	Work Phone: Home Phone:
City:	96105	
4. DRILLING RECORD		
Drilling began: 10/31 Size of hole: 6.125 i Completed well is: Depth to water upon c	/95 ; Completed: <u>'0/31/95</u> n.; Total depth of well: <u>5</u> SHAUOW (shallow, art ompletion of well: <u>PF4</u>	; Type tools: <u>AIR RotARY</u> ; 8_ft.; tesian); ft.
File Number: Form: wr-20	page 1 of 4 SVE-10	Irn Number:

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
			· · · · · · · · · · · · · · · · · · ·	

## 6. RECORD OF CASING

Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Shoe	Perfo	rations
(inches)	per ft.	per in.	Top	Bottom	(feet)	1 1/0 01	From	То
	Sch 40 pvc	/	_0_	58	<u>58</u>	Sch 40 pvc	28	_58_
	<u> </u>	<u></u>					·	
							<u></u>	
	·							

## 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of	Placement
				<u> </u>	<u></u>	
		<u> </u>		······		
						····
			<u></u>			

#### 8. PLUGGING RECORD

Plugging Contractor:	ATKINS ENGINEERING ASSOCIATES, INC.
Address:	2904 WEST SECOND STREET, ROSWELL, NM 88202
Plugging Method:	CEMENT SLURGE GROUT W/57 BENTONITE F/TD to SULFACE W TREMIE PIPE
Date Well Plugged:	MARCH 12-13, 2003

Plugging approved by: _______State Engineer Representative

	No.	Depth	in Feet	Cubic Feetof Cement
1	To	dc Q	Bottom	5.1
2				
4				
5				

File Number: Form: wr-20

			Trn	Number:	
page 2	of	4			

SVE-10

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

# 9. LOG OF HOLE

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Depth From	in Fee T	et Thickness To in feet	Color and Type of Material Encountered	
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File Number: Form: wr-20

page 3 of 4 SVE-10

Trn Number:

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

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The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File	Number:	
	Form: wr-	20

Trn Number: _____ page 4 of 4

SVE-10

File Number: NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD **1. OWNER OF WELL** Name: TRANSWESTERN PIPELINE COMPANY Contact: ML, LAWRENCE CAMPBELL Address: 6381 NORTH MAIN 37 State: NM Zip: 8820 | City: RASWELL 2. LOCATION OF WELL (A, B, C, or D required, E or F if known) A. _____1/4 ____1/4 Section: _____ Township: 185 Range: 27E N.M.P.M. in ______County. feet, Y = _____ feet, N.M. Coordinate System B. X =______ leet, ______ Zone in the ______ Grant. C. Latitude: _____d ____m ____s Longitude: _____d ____m ____s D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83) E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey F. Lot No. _____, Block No. _____ of Unit/Tract ______ of the ______ of the ______ County. G. Other: H. Give State Engineer File Number if existing well: I. On land owned by (required): **3. DRILLING CONTRACTOR** License Number: Work Phone: _____ Home Phone: _____ Name: Agent: <u>EADES</u> Mailing Address: <u>J200 EAST BENDER</u> City: Hobbs State: NM Zip: 88240 **4. DRILLING RECORD** Drilling began: <u>/0/30/95</u>; Completed: <u>/0/30/95</u>; Type tools: <u>Ark Rotacy</u>; Size of hole: <u>6,125</u> in.; Total depth of well: <u>45</u> ft.; Completed well is: <u>5HALLOW</u> (shallow, artesian); Depth to water upon completion of well: <u>DRY</u> ft. File Number: Trn Number: page 1 of 4 Form: wr-20 SVE-11

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
	· · · · · · · · · · · · · · · · · · ·			
<u> </u>				
	• • • • • • • • • • • • • • • • • • • •			

## 6. RECORD OF CASING

Diameter	Pounds	Threads	Depth	in Feet	Length	Type of Shoe	Perfo	rations
(inches)	per ft.	per in.	Тор	Bottom	(feet)		From	То
_2	Sen 40 PVC	•	<u> </u>	44	44	SCH 40 PVC	24	44
		<u> </u>						
				· · · · · · · · · · · · · · · · · · ·		· .		<u> </u>
						· · · · · · · · · · · · · · · · · · ·		

## 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of	Placement
	•					
	·			<u> </u>		
	·					

#### 8. PLUGGING RECORD

Plugging Contractor:	ATKINS ENGINEERING ASSOCIATES, INC.
Address:	2904 WEST SECOND STREET, ROSWELL, NM 88202
Plugging Method:	CEMENT SLURPY GROUT W/5% BENTONIE F/ TO to SURFACE WI TREME PIPE
Date Well Plugged:	MARCH 12-13, 2003

Plugging approved by:

State Engineer Representative

Cubic Feetof Cement
20
2:0

File Number: _____ Trn Number: _____ page 2 of 4 _____ SVE-I

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## 9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered
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File Number: Form: wr-20

page 3 of 4

Trn Number: _____

SVE-11

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

# FOR STATE ENGINEER USE ONLY

Quad ____; FWL ___; FSL ____; Use _____; Location No. _____

File Number: ______ Form: wr-20 Trn Number: _____ page 4 of 4

SVE-11

## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

1. OWNER OF WELL	
Name: TRANSWESTERN PIPEUNE COMPANY	Work Phone: (505) 625-8022
Address: 6381 NORTH MAIN ST	
City: <b>ROSWELL</b>	State: <u>NM</u> Zip: <u>88201</u>
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A1/41/4 Section: Township: inEODY	185 Range: 27E N.M.P.M. County.
B. X = feet, Y = fee Zone in the fee	t, N.M. Coordinate System Grant.
C. Latitude: d s Longitude:	dms
D. East (m), North (m), UTM Z	one 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block No of Unit/Tract Subdivision recorded in	of the County.
G. Other:	
H. Give State Engineer File Number if existing well	:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
License Number: Name: Agent: EADES Mailing Address: JZOO EAST BENDER_	Work Phone: Home Phone:
City: Hobbs	State: <u>NM</u> Zip: <u>88240</u>
4. DRILLING RECORD	
Drilling began: <u>11/195</u> ; Completed: <u>11/195</u> ; Size of hole: <u>6.125</u> in.; Total depth of well: <u>45</u> Completed well is: <u>SHALLOW</u> (shallow, artes: Depth to water upon completion of well: <u>DRY</u>	Type tools: <u>AIR Potney</u> ; ft.; ian); _ ft.
File Number: Trn Form: wr-20 page 1 of 4 SVE-12	Number:

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### 5. PRINCIPAL WATER-BEARING STRATA

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E F	Depth in From To	Feet T D	hickness in feet	Desc: wate:	ription o r-bearing	f formati	Esti	.mated Yi (GPM)	.eld
- - 6. RE	ECORD OF	F CASING Pounds	Threads	Depth	in Feet	Length	Type of Sho	be Perfo	prations
	(inches) 2	per ft. <u>SCh 40 pvc</u>	per in.	Top O	Bottom	(feet) 45	schto puc	From	^{To} <u>45</u>
······································				<u></u>	<u> </u>				

#### 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method	of	Placement	
							·····	
	·	·····	<u> </u>	<u> </u>				
				·	<u></u>			
						_		

#### 8. PLUGGING RECORD

Plugging Contractor: ATKINS ENGINEERING ASSOCIATES, INC. Address: 2904 WEST SECOND STREET, ROSWELL, NM 88202 Plugging Method: CEMENT SLURRY GROUT W/5% BENTONNE F/ TO to SURFACE W/TREME PIPE Date Well Plugged: MARCH 12-13, 2003
Plugging approved by:
State Engineer Representative
No. Depth in Feet Cubic Feetof Cement

1	Bottom 45	3.9
2 3 4	 	
5	 ······	

File Number: _____ Trn Number: _____ page 2 of 4 _____ SVE-12_

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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## 9. LOG OF HOLE

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Depth From	in Fee T	et Thickness To in feet	Color and Type of Material Encountered
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			·
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File Number: Form: wr-20 Trn Number: _____ page 3 of 4



## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File Number: Form: wr-20

Trn Number: _____ page 4 of 4

SVE-12

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# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

1. OWNER OF WEI	LL PORTERAL PORTINE	Company	Work Phone .	5)625-8022
Contact: M	L. LAWRENCE CAM	OBELL	Home Phone:	3/0CS-002
Address: 6	381 NORTH MAIN'	51	-	
City: 7	ZASWELL		State: <u>NM</u> Zip: §	38201
2. LOCATION OF V	WELL (A, B, C, or D require	d, E or F if known)		
A1/4 in	1/41/4 Sec	tion: Township	: <u>185</u> Range: <u>276</u>	N.M.P.M. County.
B. $X = $ 2 U.S.G.S.	feet, Y = one in the Quad Map	fe	eet, N.M. Coordina	ate System Grant.
C. Latitude:	am	s Longiadde:	dm	S
D. East	(m), North	(m), UTM	Zone 13, NAD	(27 or 83)
E. Tract No.	, Map No	_ of the	Hydrograph	nic Survey
F. Lot No	, Block No Subdivis	of Unit/Tract ion recorded in	· · · · · · · · · · · · · · · · · · ·	of the County.
G. Other:				
H. Give Stat	e Engineer File Numb	er if existing wel	1:	
I. On land o	wned by (required):		-	
3. DRILLING CONT	TRACTOR			
License Num N Ag	ber: ame: ent: <u>EADES</u>		Work Phone: Home Phone:	
Mailing Addr	ess: 1200 EAST	BENDER		
С	ity: HobbS		State: 🕅 Zip: 💈	18240
4. DRILLING RECO	ORD			
Drilling beg Size of hole Completed we Depth to wat	an: <u>11/1/95</u> ; Comp : <u>6.125</u> in.; Total d ll is: <u>SHALLOW</u> er upon completion o	leted: <u>11/1/95</u> ; epth of well: <u>55</u> (shallow, arte f well: <u>Dey</u>	Type tools: Aik ft.; sian); ft.	2 Rotary ;
File Number: Form: w	r-20	rr page 1 of 4 SVE-13	n Number:	

## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

## 6. RECORD OF CASING

Diameter	Pounds	Threads	Depth :	in Feet	Length	Type of Shoe	Perfo	rations
(inches)	per ft. Sch 40 PVC	per in.	Top O	Bottom	(feet) 58	SCH 40 PVC	From 28	To 58
		<u> </u>					<u> </u>	
	<u> </u>							

## 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
	·	•	<u> </u>		
	· <u></u>			<u> </u>	
	- <u></u>				

## 8. PLUGGING RECORD

Plugging Contractor:	ATKINS ENGINEERING ASSOCIATES, INC.
Address:	2904 WEST SECOND STREET. ROSWELL, NM 88202
Plugging Method:	CEMENT SLURGY GROUT W/5% BENTONITE F/TO to SURFACE WI TREMIE PIPE
Date Well Plugged:	MARCH 12-13, 2003

	No. Depth	in Feet	Cubic Feetof Cement
	Тор	Bottom	
1	Ð	58	5.1
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2			<u></u>
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File	Number: Form: wr-20	Trn page 2 of 4	Number:	
		SVE-13		

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

### 9. LOG OF HOLE

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Depth From	in Feet To	Thickness in feet	Color and Type of Material Encountered
	·		
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			0
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	- <u> </u>		
<del></del>		<del></del>	

File Number: Form: wr-20 Trn Number: _____ page 3 of 4 SVE-13

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

## FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use ____; Location No. _____

File	Number:		
	Form:	wr-20	

Trn Number: _____ page 4 of 4

SVE-13

# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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1. OWNER OF WELL	<b>a</b>
Name: TRANSWESTERN PIPELINE COMPANY	Work Phone: (505) 625-8022
Contact: ML. LAWRENCE CAMPBELL	Home Phone:
Address: 6381 NORTH MAIN 57	_
City: POSWELL	State: NM Zip: 88201
2. LOCATION OF WELL (A, B, C, or D required, E or F if known)	
A. 1/4 1/4 1/4 Section: Townshi	p:185 Range:27EN.M.P.M.
in <u>EODY</u>	County.
	oot N.M. Coordinato Sustam
Zone in the	Grant.
U.S.G.S. Quad Map	
C. Latitude:dms Longitude	:dms
D. East (m), North (m), UTM	Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No. , Block No. of Unit/Tract	of the
Subdivision recorded in	County.
G. Other:	
1. Cine Chata Parisson Bile M. Jac. (C. suistian and	1.1.
H. GIVE State Engineer File Number II existing we.	LL:
I. On land owned by (required):	
3. DRILLING CONTRACTOR	
Liconso Numbers	
Name:	- Work Phone:
Agent: EADES	Home Phone:
Mailing Address: 1200 EAST BENDER	_
City: Hobbs	- State:NMZip: 88240
4. DRILLING RECORD	
11	A D L
Drilling began: <u>11/2/95</u> ; Completed: <u>11/2/95</u>	; Type tools: <u>AIR KotAKY</u> ;
Size of hole: 6,125 in.; Total depth of well: 4	<u>0</u> ft.; /
Depth to water upon completion of well: DVM	ft
File Number: Th	rn Number:
rorm: wr-zu page 1 of 4	
5VE-14	

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

## 5. PRINCIPAL WATER-BEARING STRATA

Depth From	in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
	·			
				<del></del>
	·			

#### 6. RECORD OF CASING

(inches) per ft. per in. Top Bottom (feet) 2 <u>sch 40 PVC</u> 0 40 40 5CH 40 PVC 15 40 	Diameter	Pounds	Threads	Depth :	in Feet	Length	Туре	of	Shoe	Perfo	rations
<u>2</u> <u>sch 40 pvc</u> <u>0</u> <u>40</u> <u>40</u> <u>5CH 40 pvc</u> <u>15</u> <u>40</u>	(inches)	per ft.	per in.	Тор	Bottom	(feet)		1.	010	From	To
	_2	Sch 40 PVC			40	40	SCH	40	WC	15	40_
		·	·			<u> </u>					
		•				<u> </u>	<del></del>				
		•		·	<u> </u>		<u>.                                    </u>				,

## 7. RECORD OF MUDDING AND CEMENTING

Depth From	in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of	Placement
				<u> </u>		
	·					·····

#### 8. PLUGGING RECORD

Plugging Contractor:	ATKINS ENGINEERING ASSOCIATES, INC.
Address:	2904 WEST SECOND STREET, ROSWELL, NM 88202
Plugging Method:	EMENT SLURGY GROUT W/57 BENTONITE F/ TO to SULFIKE WI TREMIE PIPE
Date Well Plugged:	MARCH 12-13, 2003

5

Plugging approved by: ________State Engineer Representative

	No.	Depth	in Feet	Cubic Feetof Cement
	Тс	pp A	Bottom	15
1	(	<u> </u>	40	
2			<u> </u>	
4				

File Number:	Trn Number:
	SVE-14

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#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### 9. LOG OF HOLE

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	Depth :	in Feet	Thickness	Color and Type of Material Encountered
	From	10	in reet	
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File Number: Form: wr-20

Trn Number: page 3 of 4

5VE-14

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I.

#### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

#### **10. ADDITIONAL STATEMENTS OR EXPLANATIONS:**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

(mm/dd/year)

#### FOR STATE ENGINEER USE ONLY

Quad ____; FWL ____; FSL ____; Use _____; Location No. _____

File Number:		Trn	Number:	
Form: wr-20	page 4 of 4			
	SVE-14	,		



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary Lori Wrotenbery Director Oil Conservation Division

February 21, 2003

Mr. Bill Kendrick Transwestern Pipeline Company 1400 Smith St. Houston, Texas 77002

# RE: CASE #2R034 GROUND WATER REMEDIATION ATOKA 1 COMPRESSOR STATION EDDY COUNTY, NEW MEXICO

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division has reviewed Transwestern Pipeline Company's (TPC) August 13, 2002 "TRANSMITTAL OF CLOSURE PETITION, ATOKA-1 COMPRESSOR STATION, TRANSWESTERN PIPELINE COMPANY, EDDY COUNTY, NEW MEXICO." This document requests closure of the soil and ground water remedial actions and permission to plug and abandon the monitor wells and vapor extraction wells at TPC's Atoka 1 Compressor Station located in the NE/4 NE/4 of Section 1, Township 18 South, Range 27 East. The request is based upon a demonstration that the ground water underlying the facility is not classified as protectable ground water.

The closure request as contained in the above-referenced document is approved with the following conditions:

- 1. TPC will not plug and abandon the monitor wells located within the boundaries of the compressor station facility.
- 2. TPC shall plug and abandon the offsite monitor wells and all vapor extraction wells by cutting the casing off below the ground surface and grouting the annular space from the bottom to the top with a cement grout containing 3-5% bentonite.

Please be advised that OCD approval does not relieve TPC of responsibility if remaining contamination poses a future threat to ground water, surface 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.

Mr. Bill Kendrick February 21, 2003 Page 2

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.


August 13, 2002

Mr. William C. Olson **Environmental Bureau** New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

**RE:** Transmittal of Closure Petition Atoka-1 Compressor Station Transwestern Pipeline Company Eddy County, New Mexico

RECEIVED

AUG 1 6 2002

ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION

Dear Bill,

The enclosed petition for termination of remediation and monitoring activities at the subject facility is submitted for review and approval by the NMOCD. The petition was prepared at Transwestern's request by Tetra Tech EM Inc. of Albuquerque, New Mexico with direction from our internal consultant, George Robinson with Cypress Engineering. The objective of this document is to support a site closure request by demonstrating that the shallow water-bearing zones beneath the site should be classified as a non-protectable resource based on lack of potential beneficial uses for the groundwater.

If you have any questions or comments regarding this petition, please contact me at (713) 646-7644 or George Robinson at (713) 345-1537.

Sincerely,

Mandul

Bill Kendrick Director, Environmental Affairs

xc w/enclosure: Bryan Arrant Larry Campbell Louis Soldano George C. Robinson, PE

NMOCD Artesia District Office Transwestern Pipeline Company Transwestern Pipeline Company Cypress Engineering



West Little York Road, Suite 256 Houston, Texas 77040 (713) 856-7980 office (713) 856-7981 fax

December 6, 1999

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

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	7 1999 MT.C.N. (1

RE: Report of Ground Water Remediation Activities Transwestern Pipeline Company - Atoka-1 Compressor Station Eddy County, New Mexico

Dear Bill,

The attached report is submitted pursuant to the NMOCD's requirements 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,

7 600

George C. Robinson, PE President/Principal Engineer

xc w/attachment:

Larry Campbell Bryan Arrant Transwestern Pipeline Company NMOCD Artesia District Office



Transwestern Pipeline Company P. O. Box 1188 Houston, TX 77251-1188

August 10, 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 - Atoka-1 Compressor Station Eddy County, New Mexico

Dear Bill,

The attached report is submitted pursuant to the NMOCD's requirements 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,

Jarry Compbell

Larry Campbell **Division Environmental Specialist** 

LC/gcr

xc w/attachments:

BRIAN ARRANT Mark Ashley

NMOCD Artesia District Office George Robinson Cypress Engineering Services

16/99 1535 hrs Verbal approval to George Rubinson to-purse water disposal. Autom

Natural gas. Electricity. Endless possibilities.[™]

STATE OF NEW MEXICO



. ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

April 10, 1997

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO: P-269-269-297</u>

Mr. Larry Campbell Transwestern Pipeline Company P.O. Box 1188 Houston, Texas 77251-1188

### RE: TRANSWESTERN PIPELINE CO. ATOKA-1 COMPRESSOR STATION

Dear Mr. Campbell:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) March 3, 1997 "SEMI-ANNUAL REPORT OF GROUND WATER REMEDIATION ACTIVITIES, TRANSWESTERN PIPELINE COMPANY ATOKA-1 COMPRESSOR STATION, EDDY COUNTY, NEW MEXICO". This document contains the results of TPC's remedial actions at the Atoka-1 Compressor Station during the second half of 1996. The document also contains TPC's proposal to modify the sampling schedule from quarterly to semiannually; 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.

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

xc: OCD Artesia District Office George Robinson, Cypress Engineering Services, Inc.

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

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May 2, 1996

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

RE: Semi-Annual Report of Groundwater Remediation Activities Transwestern Pipeline Company Atoka-1 Compressor Station Eddy County, New Mexico



MAY 09 1996

Environmental Bureau Oil Conservation Division

Dear Bill,

The attached report is submitted pursuant to the NMOCD's requirements for semi-annual reporting of groundwater 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,

lampbell farry

Larry Campbell Division Environmental Specialist

LC/sls

xc w/attachments:

Mark Ashley Gene Brazfield George Robinson NMOCD Artesia District Office TW Operations Cypress Engineering Services



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

RE: **TW** Atoka-1 Station Remediation Plan; and 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,

W Kenduck

Bill Kendrick EOC Environmental Affairs Manager, Projects Group



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

INT 3 I 1662 BECEINED

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

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 26, 1995

CERTIFIED MAIL RETURN RECEIPT NO: P-667-242-266

Mr. Bill Kendrick ENRON Operations Corp. P.O. Box 1188 Houston, Texas 77251-11881

### RE: TRANSWESTERN PIPELINE CO. ATOKA 1 COMPRESSOR STATION

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) March 1995 "ADDITIONAL INVESTIGATION AND CLOSURE ACTIVITIES AT THE TRANSWESTERN PIPELINE COMPANY ATOKA 1 COMPRESSOR STATION, ARTESIA, NEW MEXICO" which was received by the OCD on March 31, 1995. This document contains the results of TPC's remedial and investigation actions at the Atoka 1 Compressor Station.

The OCD approves of the remedial and investigation actions conducted to date. However, the report does not include recommendations for contaminated ground water or for remaining contaminated soils at the facility. Therefore, the OCD requires that TPC submit, by July 31, 1995, a plan to address remaining soil and ground water contamination at the site.

Please submit all original documents to the OCD Santa Fe Office with copies provided to the OCD Artesia Office.

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

Sincerely

William C. Olson Hydrogeologist Environmental Bureau

xc: Tim Gum, OCD Artesia District Supervisor Ray Smith, OCD Artesia District George Robinson, Cypress Engineering Services, Inc.



January 26, 1995

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



FEB 06 1995

Environmental Bureau Oil Conservation Division

RE: Final Disposition of Waste Material Transwestern Pipeline Company Atoka-1 Compressor Station Eddy County, New Mexico

Dear Bill,

In the course of closure of an out-of-service surface impoundment at the subject facility, TPC removed an oily sludge material from the bottom of the impoundment and stockpiled the material on plastic at the site. TPC subsequently loaded the material into drums (a total of 20 drums, each with 55 gallon capacity) and collected a grab sample from 5 of the 20 drums. A single composite sample was made from the five grab samples and the composite sample was delivered to a laboratory for analysis. Because analytical results indicate elevated levels of benzene (benzene concentration in a TCLP extract is 0.7 mg/L), TPC proposes to dispose of the material, including the plastic liner used, at the Rollins hazardous waste incineration facility in Deer Park, Texas. A copy of the laboratory analysis report is enclosed.

TPC, as operator of the subject facility, will implement the proposed disposition of the waste material upon review and approval by your office. If you have any questions regarding this proposal, please contact me at (713) 646-7644 or George Robinson at (713) 646-7327.

Sincerely,

Bill Kendrick EOC Environmental Affairs Manager, Projects Group

2/9/95 / for Verbal Approve / for Georse Robinson de Dr. M. De



January 24, 1995

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

**RE:** Soil and Ground Water Investigations

Eddy County, New Mexico

**TPC** Atoka 1 Compressor Station

RECEIVED

JAN 2 6 1995

OIL CONSERVATION DIV. BANTA FE

Dear Bill,

Your office approved an investigation work plan for the subject facility in a letter dated September 28, 1994. Condition #5 of the approval requires that "TPC will submit to the OCD by January 27, 1995 a report containing the results of the investigation and closure activities." Both the investigation and closure activities outlined in the closure plan have been completed, however, TPC is still in the process of preparing the investigation report. Upon completion of the report and an internal review, TPC will deliver the report to the NMOCD. The report will be submitted no later than March 31, 1995.

If you have any questions regarding this change in schedule, please contact me at (713) 646-7644 or George Robinson at (713) 646-7327.

Sincerely,

,6 5 5

Bill Kendrick Manager, Projects Group

**ENRON** OPERATIONS CORP.

P. O. Box 1188 Houston, Texas 77251-1188

51-1188 (713) 853-6161

December 21, 1994

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

Fax recieved on 12/21/9 Web RECEIVEL JAN 0 6 1995

OIL CONSERVATION DIV. SANTA FE

RE: Disposal of Investigation Derived Wastes Transwestern Pipeline Company Atoka-1 Compressor Station

Dear Bill,

Transwestern Pipeline Company (TPC) requests approval from your office for the disposal of purge water which was removed from five ground water monitor wells located at the subject facility. This facility is part of TPC's natural gas pipeline gathering system located approximately 12 miles east of Artesia, NM. TPC proposes to dispose of the purge water in the on-site oily waste water tank. Analytical results for each of the five monitor wells and two trip blanks are attached.

If you have any questions regarding this request, please contact George Robinson at (713) 646-7327.

Sincerely,

Bill Kendrick Projects Group Manager EOC Environmental Affairs



FROM PER	CEPTIVE SCIENTIFIC I RUMENTS, INC.	12,14,	1994 🗨 43	NO. 7	P. 2
、	TERRA LABORATOR: 2525 SOUTH SHORE BLY LEAGUE CITY, TX 713/334-5052 FAX 7:	IES, LTD. VD, SUITE X 77573 13/334-313	100 16		
	PRELIMINARY RI	EPORT			
Report Da	Report Date: DEC. 14 1994Page # 1				
Brown and 1415 Loui: Houston	Caldwell siana, Suite 2500 , TX 77002	·	Customer#: Job Number:	- 309 :	
Attn: Wrig	ght, Lynn		Date Collec	cted:12/02/	94
Sample Number: 94008429Time Collected:1100Sample ID: MW-3Date Received: 12/06/94				94	
Test Cod	e - Analyte -	Result	Units	- Method	Analyst
BTEXW'D	BTEX Analysis Prep(Date/Time)	12/08 18	01 init.	6-5030	PRS
BZ8020W	Benzene	.014	ppm	6-8020	PRS
TOL8020W	Toluene	,< 0.002	ppm	6-8020	PRS
EBZ8020W	Ethylbenzene	< 0.002	mqq	6-8020	PRS
XYLSTLw	Total Xylenes	< 0.004	ppm	6-8020	PRS
BTEXTLW	Total BTEX	< 0.022	ppm	6-8020	PRS
aaaTFTw	aaa-TFT (surr)	111.	de t	82-114	PRS
4BFBw	4-BFB (surr)	102.	· · .	85-115	PRS
HGT'W'D	Mercury Analysis (D/T)	12/13 14:	30 init.		RR
HGCVAAW	Mercury	< 0.0002	mg/L	6-7470	RR
DMIMM.D	Acid Digestion (Date/Time)		00 init.	6-3015	RR
BRAAN' D	Base/neutral/acid Extraction(D/	12/00 130	00 Init.	6-351U	REA
Acennhew	Aconomithene		$m_{\rm T}/L$	6-8270	MCD
Acenphew	Acenaphthylene		mg/D	6-8270	MSR
AnthronW	Anthracene	< 0.010	mg/L	6-8270	MSB
BzaAnthW	Benzo (a) anthracene	< 0.010	mg/L	6-8270	MSB
BzaPyrnW	Benzo(a) pyrene	< 0.010	ma/L	6-8270	MSB
BzbFAntW	Benzo(b).fluoroanthene	< 0.010	mg/L	6-8270	MSB
BzghipeW	Benzo(g,h,i)perylene	< 0.010	mg/L	6-8270	MSB

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FROM PERCEPTIVE SCIENTIFIC IN MUNENTS, INC. 12.14.1994

### NO.7 P.3

TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 1 713/334-5052 FAX 713/334-3116

### PRELIMINARY REPORT

Report Date: DEC. 14 1994

Page # 2

Frown and Caldwell Customer#: 309 1415 Louisiana, Suite 2500 Job Number: 77002 Houston , TX

Attn: Wright, Lynn

Date Collected:12/02/94

Sample Number: 94008429 Sample ID: MW-3

Time Collected:1100 Date Received: 12/06/94

Test Code	e « Analyte	· Result	Units ··	Method	Analyst
EzkFAntW ChrysenW ciBzahAnW F'AnthenW F'luorenW JndnPyrW NaphthlW PhnAnthW FyreneW NitBzd5W 2FbiPhnW trPhd14W CLAUTO'D C:LAUTO	Benzo(k) fluoroanthene Chrysene Dibenz(a,h) anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene Pyrene Nitrobenzene-d5 (surr) 2Fluorobiphenyl (surr) Terphenyl-d14 (surr) Chloride, Titrimetric (D/T)	<pre>&lt; 0.010 &lt; 0.010 &lt; 0.010 &lt; 0.010 &lt; 0.010 &lt; 0.010 &lt; 0.010 &lt; 0.010 &lt; 0.010 &lt; 0.010 87. 82. 81. 12/13 0930 470</pre>	mg/L mg/L mg/L mg/L mg/L mg/L mg/L % % % init, mg/L	6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 35-114 43-116 33-141 3-325.2	MSB MSB MSB MSB MSB MSB MSB MSB MSB MSB

COMMENTS :

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FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences Dil.Fx. - Minimum dilution required to allow acceptable quantitation init=date and time initiated B=found in blank J=>mdl< reporting limit

Preparation and Analysis Method References:

ASTM: American Society for Testing and Materials, 1984. 1.

2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).

:3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.

HACH: Test Methods, accepted by EPA in November, 1983. 4.

SM: Standard Methods for the Examination of Water and Wastewater, 18th ₅. 1 . edition.

SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition. 6. Update I, July 1992. ₽. . |

Rav 12/14/94 Barry Dellace

FROM PERCEPTIVE SCIENTIFIC I

TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116

### PRELIMINARY REPORT

Report Date: DEC. 14 1994

Brown and Caldwell 1415 Louisiana, Suite 2500 77002 , TX Houston

12,14,1994

Page # 1

Customer#:

Job Number:

Attn: Wright, Lynn

Time Collected:1145

Sample Number: 94008430 Sample ID: MW-4

Date Received: 12/06/94

Date Collected:12/02/94

309

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Test Code	a 🤲 Analyte 👘	Result	Units -	Method	Analyst
BTEXW'D	BTEX Analysis Prep(Date/Time)	12/08 1821	init.	6-5030	PRS
B28020W	Benzene	.23	ppm	6-8020	PRS
TOL8020W	Toluene	.060	ppm	6-8020	PRS
EB28020W	Ethylbenzene	< 0.002	ppm	6-8020	PRS
XYLSTLW	Total Xylenes	.13	ppm	6-8020	PRS
BTEXTLW	Total BTEX	< 0.422	ppm	6-8020	PRS
aaaTFTw	aaa-TFT (surr)	MI	<b>\$</b> _	82-114	PRS
4BFBw	4-BFB (surr)	103.	ş	85-115	PRS
BNAXW'D	Base/neutral/acid Extraction(D/	12/06 1300	init.	6-3510	BKW
S8270'D	Semivolatile Organics (D/T)	12/09 2035	init.	6-8270	MSB
AcenpheW	Acenaphthene	< 0.010	mg/L	6-8270	MSB
AcenphyW	Acenaphthylene	< 0.010	mg/L	6-8270	MSB
AnthronW	Anthracene	< 0.010	mg/L	6-8270	MSB
BzaAnthW	Benzo (a) anthracene	< 0.010	mg/L	6-8270	MSB
BzaPyrnW	Benzo (a) pyrene	< 0.010	mg/L	6-8270	MSB
BzbFÂntW	Benzo (b) fluoroanthene	< 0.010	mg/L	6-8270	MSB
BzghipeW	Benzo(q,h,i)perylene	< 0.010	mg/L	,6-827D	MSB
BzkFAntW	Benzo(k) fluoroanthene	< 0.010	mg/L	6-8270	MSB
ChrysenW	Chrysene	< 0.010	mg/L	6-8270	MSB
dBzahAnW	Dibenz (a, h) anthracene	< 0.010	mg∕L	6-8270	MSB

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iBzahAnW Dibenz(a,h)anthracene 

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NO. 7 P. 4

FROM PERCEPTIVE SCIENTIFIC IN UMENTS, INC.

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TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116

### PRELIMINARY REPORT

Report Date: DEC. 14 1994

Page # 2

Brown and Caldwell 1415 Louisiana, Suite 2500 Houston , TX 77002

Customer#: 309 Job Number:

Attn: Wright, Lynn

Date Collected: 12/02/94

Sample Number: 94008430 Sample ID: MW-4 Time Collected:1145 Date Received: 12/06/94

Test Cod	e , Analyte	43) -	Result	Ünite	Method	Analyst
FAnthenW	Pluoranthene Bluoranc		< 0.010	mg/L	6-8270	MSB
IndnPyrW	Indeno (1,2,3-cd) pyrene	11	< 0.010	mg/L mg/L	6-8270	MSB MSB
NaphthlW FhnAnthW	Naphthalene Phenanthrene	<b>1</b> .1	< 0.010 < 0.010	mg/L mg/L	6-8270 6-8270	MSB MSB
FyreneW	Pyrene		< 0.010	mg/L	6-8270	MSB
2FbiPhnW	2Fluorobiphenyl (surr)		83.	5 8	35-114 43-116	MSB
trPhd14W EGT'W'D	Terphenyl-dl4 (surr) Mercury Analysis (D/T)		72. 12/13 1430	<pre>% init.</pre>	33-141	MSB RR
HgCVAAw DMiww'D	Mercury Acid Digestion (Date/Time)		< 0.0002 12/07 1400	mg/L init.	6-7470 6-3015	RR BR
CLAUTO'D	Chloride, Titrimetric (D/T)		12/13 0930	init.	* •••±•	CJT
CINUCO	curotice, itclimetto		±/U :		3-343.4	

COMMENTS:

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FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences Dil.Fx.- Minimum dilution required to allow acceptable quantitation init=date and time initiated B=found in blank J=>mdl< reporting limit

Preparation and Analysis Method References:

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1. ASTM: American Society for Testing and Materials, 1984.

- 2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).
- EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & & Industrial Wastewater, 1982.
- 4. HACH: Test Methods, accepted by EPA in November, 1983.
- 5. SM: Standard Methods for the Examination of Water and Wastewater, 18th edition.
- 6. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition. Update I, July 1992.

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FROM PERCEPTIVE SCIENTIFIC I PRUMENTS, INC.

12,14,1994 💕 : 46

: NO. 7 P. 6

TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116

### LAB ANALYSIS REPORT

Report Date: DEC. 12 1994

Page # 1

Brown and Caldwell 1415 Louisiana, Suite 2500 Houston , TX 77002

Attn: Wright, Lynn

Sample Number: 94008431 Project Name: ATOKA 1 Sample ID: TB-1

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Reviewed by: TMG Customer#: 309 Job Number:

Date Collected: 12/02/94

Time Collected:1700

Date Received: 12/06/94

Test Code	e Analyte		Result	Units	Method	Analyst
3TEXW'D 3Z8020W TOL8020W 3BZ8020W XYLSTLW 3TEXTLW 3AATFTW 4BFBW	BTEX Analysis Prep Benzene Toluene Ethylbenzene Total Xylenes Total BTEX aaa-TFT (surr) 4-BFB (surr)	(Date/Time)	12/08 1840 < 0.002 < 0.002 < 0.002 < 0.004 < 0.010 91. 89.	init. ppm ppm ppm ppm ppm %	6-5030 6-8020 6-8020 6-8020 6-8020 6-8020 82-114 85-115	PRS PRS PRS PRS PRS PRS PRS PRS

### COMMENTS:

FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences Dil.Fx.- Minimum dilution required to allow acceptable quantitation ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil) init - date & time initiated B=found in blank J=>mdl< reporting limit

Preparation and Analysis Method References:

- 1. ASTM: American Society for Testing and Materials, 1984.
- 2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).
  - 3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
  - 4. HACH: Test Methods, accepted by EPA in November, 1983.
  - 5. SM: Standard Methods for the Examination of Water and Wastewater, 18th edition.
  - 6. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition. Update I, July 1992.

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FROM PERCEPTIVE SCIENTIFIC I PUMENTS; INC.

TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116

### PRELIMINARY REPORT

Report Date: DEC. 14 1994

Page # 1

12,14,1994 🌰 46

Brown and Caldw	ell			
1415 Louisiana,	Suite 2500		Customer#:	309
Houston ,	TX	77002	Job Number:	

Attn: Wright, Lynn

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Date Collected:12/02/94

Sample Number: 94008439 Sample ID: MW-5 GRAB Time Collected:1300 Date Received: 12/06/94

Test Code	analyte a	Result	Units	Method	Analyst
BTEXW'D	BTEX Analysis Prep(Date/Time)	12/09 1051	init.	6-5030	PRS
BZ8020W	Benzene	6.2	ppm	6-8020	PRS
TOL8020W	Toluene	13	ppm	6-8020	PRS
EBZ8020W	Ethylbenzene	1.1	ppm	6-8020	PRS
<b>XYLSTLw</b>	Total Xylenes	7.4	ppm	6-8020	PRS
BTEXTLW	Total BTEX	27.7	ppm	6-8020	PRS
aaaTFTw	aaa-TFT (surr)	105.	2	82-114	PRS
4BFBw	4-BFB (surr)	92.	at a	85-115	PRS
BNAXW'D	Base/neutral/acid Extraction(D/	12/06 1300	init.	6-3510	BKW
58270'D	Semivolatile Organics (D/T)	12/09 2127	init.	6-8270	MSB
Acenphew	Acenaphthene	< 0.010	mg/L	6-8270	MSB
AcenphyW	Acenaphthylene	< 0.010	mg/L	6-8270	MSB
AnthrenW	Anthracene	< 0.010	mg/L	6-8270	MSB
BzaAnthW	Benzo(a) anthracene	< 0.010	mg/L	6-8270	MSB
BzaPyrnW	Benzo(a)pyrene	< 0.010	mg/L	6-8270	MSB
BzbFAntW	Benzo(b)fluoroanthene	< 0.010	mg/L	6-8270	MSB
BzghipeW	Benzo(g,h,i)perylene	< 0.010	mg/L	6-8270	MSB
BzkFAntW	Benzo(k)fluoroanthene	< 0.010	mg/L	6-8270	MSB
ChrysenW	Chrysene	< 0.010 ,	mg/L	6-8270	MSB
dBzahAnW	Dibenz (a, h) anthracene	< 0.010	mg/L	6-8270	MSB

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NO.7 P.7

FROM PERCEPTIVE SCIENTIFIC IN UNENTS, INC. 12.14.1994 💼 47 NO.7 P.8 TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116 PRELIMINARY REPORT Page # 2 Report Date: DEC. 14 1994 Brown and Caldwell Customer#: 309 1415 Louisiana, Suite 2500 Job Number: Houston , TX 77002 Date Collected:12/02/94 Attn: Wright, Lynn Time Collected:1300 Sample Number: 94008439 Date Received: 12/06/94 Sample ID: MW-5 GRAB Test Code and Analyte and Result Onits and Method Analyst _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 6-8270 MSB FAnthenW Fluoranthene 6-8270 6-8270 MSB FluorenW Fluorene IndoPyrWIndeno(1,2,3-cd)pyrene< 0.010</th>NaphthlWNaphthalene< 0.010</td>PhnAnthWPhenanthrene< 0.010</td>PyroneWPyrene< 0.010</td> MSB 6-8270 MSB 6-8270 MSB 6-8270 MSB PyreneW NitBzd5W Nitrobenzene-d5 (surr) 35-114 MSB 2FbiPhnW 43-116 MSB trPhd14W Terphenyl-d14 (surr) HGT'W'D Mercury Analysis (D/T) 33-141 MSB RR 6-7470 RR HgCVAAw 6-3015 RR DMiWW'D CJT CLAUTO'D 3-325.2 CJT ClAuto COMMENTS: BTEX Dil.Fx. X 50 FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences Dil.Fx. - Minimum dilution required to allow acceptable quantitation init=date and time initiated B=found in blank J=>mdl< reporting limit Preparation and Analysis Method References: ASTM: American Society for Testing and Materials, 1984.
 EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983). EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal 3. & Industrial Wastewater, 1982. HACH: Test Methods, accepted by EPA in November, 1983. 4. SM: Standard Methods for the Examination of Water and Wastewater, 18th 5. edition. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition. 6. Update I, July 1992. Jary Dolalin 4 ¹⁰ - 1 3 ] 11 . .... 11

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12,14,1994 NO. 7 47 P. 9 TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116 PRELIMINARY REPORT Page # 1 Report Date: DEC. 14 1994 Brown and Caldwell Customer#: 309 Job Number: 77002 Date Collected:12/02/94 Attn: Wright, Lynn Time Collected:1345 Sample Number: 94008440 Date Received: 12/06/94 GRAB Sample ID: MW-6 Result a Units ... Method Analyst Test Code Analyte ****** 6-5030 PRS ETEXW'D BTEX Analysis Prep(Date/Time) 12/08 1544 init.

EZ8020W TOL8020W EBZ8020W XYLSTLW ETEXTLW	Benzene Toluene Ethylbenzene Total Xylenes Total BTEX Basa-TFT (surr)	.36 < 0.01 .050 < 0.02 < 0.44 104.	& bbw bbw bbw bbw bbw	6-8020 6-8020 6-8020 6-8020 6-8020 82-114	PRS PRS PRS PRS PRS PRS
ENAXW'D S8270'D AcenpheW AcenphyW AnthronW EzaAnthW EzaPyrnW EzbFAntW EzghipeW EzkFAntW ChrysenW clBzahAnW	Base/neutral/acid Extraction (D/ Semivolatile Organics (D/T) Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (c, h, i) perylene Benzo (k) fluoroanthene Chrysene Dibenz (a, h) anthracene	12/06 1300 12/09 2218 < 0.010 < 0.010	init. init. mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	6-3510 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270 6-8270	BKW MSB MSB MSB MSB MSB MSB MSB MSB MSB

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FROM PERCEPTIVE SCIENTIFIC IN UNENTS, INC.

1415 Louisiana, Suite 2500 Houston , TX

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FROM PERCEPTIVE SCIENTIFIC INTERUMENTS, INC.

TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116

### PRELIMINARY REPORT

Report Date: DEC. 14 1994

Page # 2

Job Number:

Customer#: 309

48

12.14.1994

Brown and Caldwell 1415 Louisiana, Suite 2500 Houston , TX 77002

Attn: Wright, Lynn

Date Collected:12/02/94

Sample Number: 94008440 Sample ID: MW-6

GRAB

Time Collected:1345 Date Received: 12/06/94

Test Code	e Analyte	. Result	Units	Method	Analyst
FAnthenW	Fluoranthene	< 0.010	mg/L	6-8270	MSB
FluorenW	Fluorene	< 0.010	mg/L	6-8270	MSB
IndnPyrW	Indeno(1,2,3-cd)pyrene	< 0.010	mg/L	6-8270	MSB
NaphthlW	Naphthalene	< 0.010	mg/L	6-8270	MSB
PhnAnthW	Phenanthrene	< 0.010	mg/L	6-8270	MSB
Pyrene₩	Pyrene	< 0.010	mg/L	6-8270	MSB
NitBzd5W	Nitrobenzene-d5 (surr)	71.	ະ	35-114	MSB
2FbiPhnW	2Fluorobiphenyl (surr)	82.	<del>%</del>	43-116	MSB
trPhd14W	Terphenyl-d14 (surr)	70.	8	33-141	MSB
HGT'W'D	Mercury Analysis (D/T)	12/13 143Q	init.		RR
HgCVAAw	Mercury	< 0.0002	mg/L	6-7470	RR
DMiWW'D	Acid Digestion (Date/Time)	12/07 1400	init.	6-3015	RR
CLAUTO'D	Chloride, Titrimetric (D/T)	12/13 0930	init.	-	CJT
ClAuto	Chloride, Titrimetric	420	mg/L	3-325.2	CJT

COMMENTS: BTEX Dil.Fx. X 5

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FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences Dil.Fx.- Minimum dilution required to allow acceptable quantitation init=date and time initiated B=found in blank J=>mdl< reporting limit

Preparation and Analysis Method References:

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1. ASTM: American Society for Testing and Materials, 1984.

 EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983).

- 3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982.
- 4. HACH: Test Methods, accepted by EPA in November, 1983.

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5. SM: Standard Methods for the Examination of Water and Wastewater, 18th edition.

5. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition. Update I, July 1992.

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NO. 7 PROM PERCEPTIVE SCIENTIFIC INTERUMENTS, INC. 12.14.1994 P.11 TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116 PRELIMINARY REPORT Report Date: DEC. 14 1994 Page # 1 Brown and Caldwell 1415 Louisiana, Suite 2500 Customer#: 309 , TX Houston 77002 Job Number: Attn: Wright, Lynn Date Collected:12/02/94 Sample Number: 94008441 Time Collected: 1430 Sample ID: MW-7 GRAB Date Received: 12/06/94 Test Code 💦 💦 Analyte Result Units Method Analyst • _____ BTEX Analysis Prep(Date/Time) 12/08 1604 init. 6-5030 BTEXW'D PRS ppm ppm ppm ppm ppm \$ \$ BZ8020W 6-8020 Benzene .62 PRS TOL8020W Toluene , 1.1 6-8020 PRS EBZ8020W Ethylbenzene .17 1.1 6-8020 PRS XYLSTLW Total Xylenes 6-8020 PRS BTEXTLW Total BTEX ,2.99 6-8020 PRS aaaTFTw aaa-TFT (surr) 106. 82-114 PRS MI 4BFBw 4-BFB (surr) 03-115 6-3510 6-8270 6-8270 85-115 PRS Base/neutral/acid Extraction(D/ 12/06 1300 init. BNAXW'D BKW Semivolatile Organics (D/T) 12/09 2310 init. S8270'D MSB Acenphew Acenaphthene < 0.010 mg/L < 0.010 mg/L MSB AcenphyW < 0.010 Acenaphthylene 6-8270 MSB AnthronW Anthracene BzaAnthW Benzo(a)anthracene ....mg/L, 6-8270 < 0.010 MSB 6-8270 < 0.010 mg/L MSB BzaPyrnW Benzo(a)pyrene < 0.010 mg/L 6-8270 MSB < 0.010 mg/L < 0.010 mg/L < 0.010 mg/L 2 010 mg/L BzbFAntW Benzo(b) fluoroanthene 6-8270 MSB BzghipeW Benzo(g,h,i)perylene BzkFAntW Benzo(k)fluoroanthene 6-8270 MSB 6-8270 MSB ChrysenW Chrysene 6-8270 MSB dBzahAnW Dibenz(a,h)anthracene < 0.010 mg/L 6-8270 MSB

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FROM PERCEPTIVE SCIENTIFIC IMPRUMENTS, INC. 12.14.1994 149 NO. 7 P.12 TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116 PRELIMINARY REPORT Report Date: DEC. 14 1994 Page # 2 Brown and Caldwell 1415 Louisiana, Suite 2500 Customer#: 309 Houston , TX 77002 Job Number: Attn: Wright, Lynn Date Collected:12/02/94 Sample Number: 94008441 Time Collected: 1430 Sample ID: MW-7 GRAB Date Received: 12/06/94 Test Code Analyte Result & Units Method Analyst FAnthenWFluoranthene< 0.010 | mg/L</th>6-8270MSBFluorenWFluorene< 0.010</td>mg/L6-8270MSBIndnPyrWIndeno(1,2,3-cd)pyrene< 0.010</td>mg/L6-8270MSBNaphthlWNaphthalene< 0.010</td>mg/L6-8270MSBPhnAnthWPhenanthrene< 0.010</td>mg/L6-8270MSBPyreneWPyrene< 0.010</td>mg/L6-8270MSBNitBzd5WNitrobenzene-d5 (surr)74.%35-114MSB2FbiPhnW2Fluorobiphenyl (surr)92.%43-116MSBtrPhd14WTerphenyl-d14 (surr)58.%33-141MSB PyreneW Pyrene NitBzd5W Nitrobenzene-d5 (surr) 2FbiPhnW 2Fluorobiphenyl (surr) trPhd14W Terphenyl-d14 (surr) HGT'W'D Mercury Analysis (D/T) 2Fb1Phnw2Fluorobiphenyl (surr)92.%43-116MSBtrPhd14WTerphenyl-d14 (surr)58.%33-141MSBHGT'W'DMercury Analysis (D/T)12/131430init.RRHgCVAAwMercury< 0.0002</td>mg/L6-7470RRMiWW'DAcid Digestion(Date/Time)12/071400init.6-3015RRCLAUTO'DChloride, Titrimetric (D/T)12/130930init.CJTClAutoChloride, Titrimetric350mg/L3-325.2CJT COMMENTS: BTEX Dil.Fx. X 5 فالمارك ا FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences Dil.Fx.- Minimum dilution required to allow acceptable quantitation init=date and time initiated B=found in blank J=>mdl< reporting limit Preparation and Analysis Method References: ASTM: American Society for Testing and Materials, 1984. 1. 2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983). 3. EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal & Industrial Wastewater, 1982. 4 HACH: E Test Methods, accepted by EPA in November, 1983. SM: Standard Methods for the Examination of Water and Wastewater, 18th 5. edition. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition. 6. Update I, July 1992. TS-Jarry Dolidlan : : • * 1 t. . . ,**i** 1 - -4 - 1 - - 1 - --4. É. A. 14 1 N :: 

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PROM PERCEPTIVE SCIENTIFIC IN UMENTS, INC. 12,14,1994

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NO. 7 P.13

TERRA LABORATORIES, LTD. 2525 SOUTH SHORE BLVD, SUITE 100 LEAGUE CITY, TX 77573 713/334-5052 FAX 713/334-3116

### LAB ANALYSIS REPORT

GRAB

Report Date: DEC. 12 1994

Brown and Caldwell 1415 Louisiana, Suite 2500 ·, TX Houston 77002

Attn: Wright, Lynn

Sample Number: 94008442 Project Name: ATOKA 1 Sample ID: TB-2

Page # 1

Reviewed by: TMG Customer#: 309 Job Number:

Date Collected: 12/02/94

Time Collected: 1700

Date Received: 12/06/94

Test Cod	e Analyte	Result	Units	Method	Analyst
BTEXW'D BZ8020W TOL8020W EBZ8020W XYLSTLW BTEXTLW aaaTFTW 4BFBW	BTEX Analysis Prep(Date/Time) Benzene Toluene Ethylbenzene Total Xylenes Total BTEX aaa-TFT (surr) 4-BFB (surr)	12/08 1919 < 0.002 < 0.002 < 0.002 < 0.004 < 0.010 85. 84.	init. ppm ppm ppm ppm ppm %	6-5030 6-8020 6-8020 6-8020 6-8020 6-8020 6-8020 82-114 85-115	PRS PRS PRS PRS PRS PRS PRS PRS PRS
COMMENTS :					

FOOTNOTES: MI - Surrogate recovery is not reportable due to matrix interferences Dil.Fx. - Minimum dilution required to allow acceptable quantitation ٠, ь I ppm = mg/L(Liquid), mg/kg(Solid) ppb = ug/L(Liquid), ug/kg(Soil) init = date & time initiated B=found in blank J=>mdl< reporting limit 

Preparation and Analysis Method References:

- 1. ASTM: American Society for Testing and Materials, 1984.
- 2. EPA-600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1978 (revised 1983). S. .
- EPA-600/4-82-057, Methods for Organic Chemical Analysis of Municipal 3. & Industrial Wastewater, 1982. ۰. Second :
- HACH: Test Methods, accepted by EPA in November, 1983. : 4.
- 5. SM: Standard Methods for the Examination of Water and Wastewater, 18th edition.
- 6. SW: SW-846, Test Methods for Evaluation of Solid Waste, Third edition. Update I, July 1992. З,

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	TERRA LABORAT	ORIES LTD.	an An Star Star Star Star	يەر يەھەر مەربە يەھەر مەربە
2525 South Shore Blvd.	League City, Texas 77573	(713) 334-5052	Fax: (713) 334-3116	

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Cypress Engineering	Services, Inc.		(713) 578-3115 fax (713) 578-3491
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	e 8 52	(713) 646-7327 fax (713) 646-7247

# **FAX Transmission**

To:	Bill Olson	Fax:	505-827-7154
From:	George C. Robinson	Date:	November 23, 1994
Comme	ents:	Pages:	11 (including this cover)

Bill, attached is the analytical information for the Atoka-1 soil. We plan to begin treatment on Tuesday next week. I have also mailed a copy of this information to you. Please let me know if there is a problem with what I have sent. Thanks, George

bc:	Mike Terraso	Enron Operations Corp.	Houston, TX
	L. Kunkel	Transwestern Pipeline Co.	Roswell, NM
	L. Campbell	Transwestern Pipeline Co.	Roswell, NM



November 23, 1994

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

RE: Treatment of Excavated Soil at the Transwestern Pipeline Company Atoka 1 Compressor Station

Dear Bill,

In a letter dated November 2, 1994, Transwestern Pipeline Company (TPC) requested approval from your office for the on-site treatment of excavated soil which contains petroleum hydrocarbon compounds. Your office responded with a letter of approval dated November 14, 1994. A condition of the approval was for TPC to demonstrate by appropriate analyses the hazardous characteristics of the soil. TPC has determined that the soil is non-hazardous. Attached are two summary tables taken from a report of the initial subsurface investigation of the subject facility. This report was prepared by Brown & Root Environmental and dated October 20, 1993. A copy of this report was delivered to your office by Larry Campbell in early 1994. Table 1 of the report is attached and indicates which analyses were completed on soil samples collected from the site. Soil samples AT1-2A, AT1-2B, and AT1-4A are most representative of the soil excavated. Analyses for TPH, volatile organics, and semi-volatile organics were completed for each of these samples. The results are presented in Table 2 which is also attached. The results indicate that soil in this area contains elevated concentrations of TPH and BTEX compounds, but does not contain any compounds at a concentration greater than the minimum theoretical concentration necessary for the soil to be hazardous by analysis of a TCLP extract (i.e. benzene greater than 10.0 mg/kg). The detections of non-BTEX compounds are presumably laboratory artifacts as indicated by their presence in samples that were not impacted by elevated TPH or BTEX compounds. To complete the hazardous characterization, TPC collected a sample from the excavated soil pile and delivered it to a lab for analysis for the eight RCRA regulated metals. A copy of the analytical results is attached. The results indicate that the soil does not contain any of the eight metal constituents at a concentration greater than the minimum theoretical concentration necessary for the soil to be hazardous by analysis of a TCLP extract (i.e. barium greater than 2,000 mg/kg). In light of this information, TPC plans to proceed with the approved treatment of stockpiled soil. TPC has scheduled soil treatment activities to begin on Tuesday, November 29, 1994.

If you have any questions regarding this information, please contact George Robinson at (713) 646-7327.

Sincerely,

March Phillips

Bill Kendrick Projects Group Manager EOC Environmental Affairs

gcr/BK

xc: Mark Ashley

NMOCD Artesia District Office

### TABLE 1

## SUMMARY OF ANALYSES Atoka 1 Compressor Station Atoka, New Mexico

	Analyses Performed									
Sample ID	TPH	BTEX	Volatile	Semi-volatile	TDS					
			Organics	Organics						

SOIL				~	
AT1-1A	Х		X	Х	
AT1-1B	Х		X	X	
AT1-2A	Х		X	X	
AT1-2B	Х		X	X	
AT1-3A	X		X	X	
AT1-4A	Х		X	X	
AT1-5A	Х		X	X	
AT1-6A	Х		X	X	
AT1-7A	Х	Х			
AT1-8A	Х	Х			
AT1-9A	Х	Х			
AT1-10A	Х	Х			
AT1-10B	Х	Х			
AT1-10C	Х	Х			

# GROUNDWATER

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GROUNDW	ATER				
AT1-2W	Х		X	Х	X
MW-2	X	X			X
MW-3	Х	X			X
MW-4	X	Х			X

### TABLE 2

# ANALYTICAL RESULTS FOR SOIL SAMPLES Atoka 1 Compressor Station Atoka, New Mexico

PARAMETER	Units	Sample	AT1-1A	AT1-2A	AT1-2B	AT1-3A	AT1-4A	AT1-6A	AT1-7A	AT1-10A	AT1-108
		Depth	16-17	12-14	32-33	20-22	18-20	10.5-20.5	47-48.5	5-7	13-15
		·····									- 
Petroleum Hydrocarbons	mg/kg	[]	40	70	4,400	<20	410	<20	150	<20	<20
VOLATILES											
2-Butanone	ug/kg		<10	<10	<2,400	<10	<2,400	14	NA	NA	NA
Acetone	ug/kg		<10	<10	<2,400	<10	<2,400	20	NA	NA	NA
Benzene	ug/kg		<5	<5	<1,200	<5	<1,200	<5	2,000	<5	<5
Ethylbenzene	ug/kg		<5	<5	970	<5	6,200	<5	1,700	<5	<5
Methylene chloride	ug/kg		<5	<5	<1,200	30	<1,200	<5	NA	NA	NA
Toluene	ug/kg		<5	<5	30,000	<5	1,900	<5	6,700	<5	<5
Vulana (total)	ua/ka		<5	<5	40,000	<5	40,000	<5	12,300	7	6

bis(2-Ethylhexyl)phthalate ug/kg <330 <330 <330 <330 1,500 <330 NA NA NA

NOTE: Only samples with concentrations of analytes reported as greater than detection limits are shown.

Soil samples collected borings AT1-5, AT1-8, and AT1-9 contained no analytes whose concentration was greater than detection limits.

CES

Cypress Engineering Services, Inc.

November 2, 1994

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division 2040 S. Pacheco St. Santa Fe, New Mexico 87505 16300 Katy Freeway, Suite 105 Houston, Texas 77094-1609 (713) 578-3115 fax (713) 578-3491

# RECEIVED

**NOV** 0 3 1994

OIL CONSERVATION DIV. SANTA FE

RE: Treatment of Excavated Soil at the Transwestern Pipeline Company Atoka 1 Compressor Station

Dear Bill,

The purpose of this letter is to request approval for the proposed treatment and final disposition of excavated soil. Approximately 570 cubic yards of soil were recently excavated in accordance with the recently approved work plan for the subject facility. Excavation activities were halted due to very limited space within the facility boundary. An additional 300 to 500 cubic yards remain to be excavated. Subsequent to the initial excavation work, we have obtained permit from the BLM for access to property adjacent to the facility. Therefore, we plan to resume excavation activities within the next couple of weeks and will temporarily stockpile additional excavated soil just outside the facility boundary.

The table below indicates preliminary laboratory results for samples collected from the excavated soil. Final results, including BTEX analysis, will be available within the next few days.

Soil Pile ID	Volume cubic yards	# of samples	TPH mg/kg
large nile north	210	8	1800
large pile north	210	0	4100
	230	0	4100
medium pile north	60	4	490
medium pile south	50	4	30000
small pile	20	2	5800
Totals & Average TPH	570	26	5200

These results indicate the TPH concentration of soil which was located immediately adjacent to and below the former waste impoundment. The soil remaining to be excavated could reasonably be expected to contain lower TPH concentrations.

Transwestern proposes to process the excavated soil through a Royer 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 the soil exits the shredding equipment. The nutrient solution will consist of a 50/50 mixture of the commonly available fertilizers indicated below (or a comparable brand):

Miracle-Gro; 36-6-6
Total Nitrogen
1.2% Ammoniacal Nitrogen
1.9% Nitrate Nitrogen
32.9% Urea Nitrogen
Phosphoric Acid (P ₂ O ₅ )
Soluble Potash (K ₂ O)
Chelated Iron

and, Miracle-Gro; 18-24-16	
Total Nitrogen	
6.3% Ammoniacal Nitrogen	
5.0% Nitrate Nitrogen	
6.7% Urea Nitrogen	
Phosphoric Acid (P ₂ O ₅ )	24%
Soluble Potash (K ₂ O)	16%
Chelated Iron	0.10%
Copper	0.05%
Manganese	0.05%
Zinc	0.05%

The processed soil will be placed directly back into the excavated area as it exits the soil shredder. Prior experience with this method of processing soil has indicated that, within a period of two to 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. Transwestern has proposed this action because it is a cost effective method to reduce the potential for future leaching of hydrocarbon compounds to ground water to a level commensurate with the specific conditions and environmental setting of the Atoka-1 Station site. The specific conditions and setting include such factors as: 1) the lack of current ground water use in the area; 2) the limited amount of storm water infiltration in the area; 3) the relatively low initial TPH concentration; and 4) the effectiveness of the soil shredding process to reduce BTEX concentrations.

Transwestern would like to implement the proposed soil treatment within the next two to three weeks. 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 Mr. William C. Olson Treatment of Excavated Soil

1

bc:	Bill Kendrick	Enron Operations Corp.	
	L. Kunkel	Transwestern Pipeline Co.	
	L. Campbell	Transwestern Pipeline Co.	

Houston, TX Roswell, NM Roswell, NM FIERY FURNACE ENVIRONMENTAL P. O. Box 4802 • Midland, Texas 79704

[915] 694-7793 • Fax [915] 694-7872

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Danny Bisbee Sales Representative

P. O. Box 4802

Midland, Texas 79704

Off: (915) 694-7793 4 Fax: (915) 694-7872 Mobile: (915) 557-0219 Voice Pager: (915) 560-7139

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. Royer Shredder-Mixers: Machinery for an improved environment.




	300	365	401
Stationary stone grate	A DESCRIPTION		
Shaker grate			
Lumpbreakers			
Trash-Away conveyor			
Service platform w/rails	Records.		
Hopper platform w/rails			
Hydrostatic drive	aler ist	No. York	
Programmable controller			EXTERNAL PORT
Electric brakes			
Air brakes			
Highway lights			
Highway tires		aline i	
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.

E 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.

ROYER"

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.

## B R O W N AND C A L D W E L L

O'L CONSER. ON DIVISION RECLIED 194 DC 14 AM 8 52

October 7, 1994

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division Post Office Box 2088 State Land Office Building Santa Fe, New Mexico 87304

19-1618.02

Subject: Closure of Former Concrete Lined Surface Impoundment, Atoka 1 Compressor Station

Dear Mr. Olson:

On behalf of ENRON Operations Corp., Brown and Caldwell is submitting this letter as notification of closure activities at the Atoka 1 Compressor Station. The initial activities are scheduled to begin on October 12, 1994 and will involve the closure of the former concrete lined surface impoundment and excavation of impacted soil in the vicinity of boring AT1-4. The closure and excavation work is anticipated to take seven days and will be conducted in accordance with the Work Plan/Closure Plan for Atoka 1 Compressor Station dated August 29, 1994 and your approval letter dated September 28, 1994.

The subsurface investigation of soil and groundwater will be conducted following the completion of the closure and excavation activities.

If you have any questions or require additional information please contact me at (713) 759-0999.

Very truly yours,

**BROWN AND CALDWELL** M Wight

Lýnn M. Wright Hydrogeologist

LMW:tjw

cc:

Mr. Tim Gum, New Mexico OCD Artesia District Office Mr. Bill Kendrick, ENRON Operations Corp. Mr. George Robinson, ENRON Operations Corp. STATE OF NEW MEXICO

THE STATES OF THE STATES

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR

September 28, 1994

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

ANITA LOCKWOOD CABINET SECRETARY

> CERTIFIED MAIL RETURN RECEIPT NO: P-667-242-167

Mr. Bill Kendrick ENRON Operations Corp. P.O. Box 1188 Houston, Texas 77251-11881

**RE: INVESTIGATION AND SOIL REMEDIATION WORK PLAN** ATOKA 1 COMPRESSOR STATION

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division (OCD) has completed a review of Transwestern Pipeline Company's (TPC) August 29, 1994 "SOIL AND GROUND WATER INVESTIGATIONS, ATOKA 1 COMPRESSOR STATION, EDDY COUNTY, NEW MEXICO" and August 29, 1994 "WORK PLAN/CLOSURE PLAN FOR ATOKA 1 COMPRESSOR STATION, EDDY COUNTY, NEW MEXICO" which were submitted on behalf of TPC by ENRON Operations Corp. This document contains TPC's proposed work plan for additional soil borings and installation of ground water monitoring wells to further define the extent of contamination related to TPC's activities at the Atoka 1 Compressor Station. The work plan also includes TPC's proposed methods for closure of the former concrete lined surface impoundment at the facility.

The work plan as contained in the above referenced document is approved with the following conditions:

- 1. The monitor wells will be constructed with a minimum of ten feet of well screen below the water table and five feet of well screen above the water table.
- 2. In addition to the ground water analyses proposed, TPC will analyze ground water for polynuclear aromatic hydrocarbons (PAH's), heavy metals and major cations and anions using appropriate EPA approved methods.
  - NOTE: Because there is no New Mexico Water Quality Control Commission ground water standard for total petroleum hydrocarbons (TPH), the OCD does not require that TPC analyze ground water for TPH.

Mr. Bill Kendrick September 28, 1994 Page 2

- 3. Duplicate samples will be taken of 10 % of the soil samples analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) using immunoassay methods. These duplicates will be analyzed for BTEX and TPH using standard EPA laboratory methods.
- 4. All wastes generated during the investigation and closure activities will be stored onsite until TPC submits to the OCD for approval the hazardous characteristics of the wastes and the proposed method of disposal/remediation.
- 5. TPC will submit to the OCD by January 27, 1995 a report containing the results of the investigation and closure activities.
- 6. 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.
- 7. All original documents will be sent to the OCD Santa Fe Office with copies sent to the OCD Artesia Office.

Please be advised that OCD approval does not relieve TPC of liability should the investigation fail to adequately define the extent of contamination or 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, 1X-

William C. Olson Hydrogeologist Environmental Bureau

xc: OCD Artesia Office



Phone (505) 623-2761 FAX (505) 625-8060 ant denser. RECE 1 E

Transwestern Pipeline Company P. O. Box 1717 • Roswell, New Mexico 88202-1717

September 12, 1994

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

Dear Mr. Anderson:

Transwestern Pipeline company, owner and operator of the Atoka No. 1 Compressor Station, requests approval from the Oil Conservation Division (OCD) to dispose of oil and natural gas wastes (concrete materials) generated from the exploration and production area of Southeastern New Mexico. This request specifically addresses approval to bury on site approximately 10 to 15 cu. yds. of the concrete lined surface impoundment. The location of the proposed disposal site will be the into the excavation from remediation of the soils underlying this pit. Prior to placement of the concrete into the excavation area, the concrete will be steam cleaned to remove any hydrocarbon contamination which may be present. In addition, the liquids collected from the steaming operation, will be collected and placed into the facility's oily waste water tank for recycling.

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

Sincerely,

xc:

Farry Campsoni

Larry Campbell **Division Environmental Specialist** 

Greg McIlwain **Rich Jolly Omer Parker** George Robinson 3AC 3142 file

Mr. Gary Bowers, Bureau of Land Management, Carlsbad, New Mexico



Phone (505) 623-2761 FAX (505) 625-8060

## **Transwestern Pipeline Company**

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

September 13, 1994

Mr. Gary Bowers Reality Dept. Bureau of Land Management P.O. Box 1778 Carlsbad, New Mexico 88221-1778

Dear Mr. Bowers:

Transwestern Pipeline company, owner and operator of the Atoka No. 1 Compressor Station, in T.18S., R.27E., Sec.1, Lea County, requests approval from the Bureau of Land Management (BLM) to dispose of oil and natural gas wastes (concrete materials) generated from the exploration and production area of Southeastern New Mexico. This request specifically addresses approval to bury on site approximately 10 to 15 cu. yds. of the concrete which comprises the lined surface impoundment present at the facility. This impoundment collected condensate and used motor oils generated from the compression of natural gas at the facility. Transwestern will be performing remediation activities of this feature, and anticipates removal of surface and subsurface soil materials underlying the impoundment. The location of the proposed disposal site for the concrete will be the into the excavation area.

Prior to placement of the concrete into the excavation area, the concrete will be steam cleaned to remove any hydrocarbon contamination which may be present. The liquids collected from the steaming operation, will be collected and placed into the facility's oily waste water tank for recycling.

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

Sincerely,

Harry (ampbell

Larry Campbell Division Environmental Specialist

xc: Greg McIlwain Rich Jolly Omer Parker George Robinson 3AC 3142 file

Mr. Roger Anderson, Oil Conservation Division, Santa Fe, New Mexico

194 SE1 1 PM 8 50

RF1. JED

DIL CONSERT

UN DIVISION



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

August 29, 1994

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504-2088

RE: Soil and Ground Water Investigations Atoka 1 Compressor Station Eddy County, New Mexico

Dear Bill,

Enclosed are two copies of a work plan for the subject facility. The work plan outlines Transwestern Pipeline Company's (TPC) intended activities associated with the removal of an out-of-service surface impoundment and the further delineation of petroleum hydrocarbons in subsurface soil and ground water in the vicinity of the former surface impoundment. TPC will implement the work plan within thirty days of approval of by the NMOCD and approval for off-site access by the BLM.

If you have any questions regarding this work plan, please contact me at (713) 646-7644 or George Robinson at (713) 646-7327.

Sincerely,

Bill Kendrick Manager, Projects Group

gcr/BK



bc:	M. Terraso	ENRON Operations Corp.	Houston, TX
	L. Kunkel	Transwestern Pipeline Co.	Roswell, NM
	L. Campbell	Transwestern Pipeline Co.	Roswell, NM
	G. Robinson	Cypress Engineering Services	Houston, TX



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

July 25, 1994

Mr. William C. Olson Environmental Bureau New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504-2088

RE: Soil and Ground Water Investigations Atoka 1 Compressor Station Eddy County, New Mexico

Dear Bill,

Larry Campbell of Transwestern Pipeline Company (TPC) recently sent me a copy of your letter sent to Larry's attention dated June 1, 1994 regarding the subject facility investigation. In your letter, TPC was requested to provide a work plan to complete the definition of the extent of soil and ground water contamination and a closure plan for the former surface impoundment by July 29,1994. As you and George Robinson discussed this morning, on behalf of TPC, ENRON Operations Corporation's Environmental Affairs Department will provide the requested items to the NMOCD by August 31, 1994.

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

Sincerely,

11/1

Bill Kendrick Manager, Projects Group

gcr/BK

xc:	M. Terraso	ENRON Operations Corp.	Houston, TX
	L. Campbell	Transwestern Pipeline Co.	Roswell, NM
	G. Robinson	Cypress Engineering Services	Houston, TX

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR

June 1, 1994

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

ANITA LOCKWOOD CABINET SECRETARY

> CERTIFIED MAIL RETURN RECEIPT NO. P-111-334-121

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

RE: SOIL AND GROUND WATER INVESTIGATIONS ATOKA 1 COMPRESSOR STATION EDDY COUNTY, NEW MEXICO

Dear Mr. Campbell:

On May 27, 1994, the New Mexico Oil Conservation Division (OCD) met with you to discuss Transwestern Pipeline Company's (TPC) recent soil and ground water investigations at TPC's Atoka 1 Compressor Station. At this meeting, the OCD expressed their concern that the investigation did not completely define the extent of contamination related to TPC's activities.

Based upon the discussions at this meeting and the OCD's review of TPC's March 16, 1994 "SUBSURFACE PIT INVESTIGATION, ATOKA 1 COMPRESSOR STATION", the OCD requests that TPC submit to OCD by July 29, 1994 the following items:

- 1. A work plan to complete the definition of the extent of soil and ground water contamination related to TPC's activities.
- 2. A closure plan for the formerly used concrete lined surface impoundment.

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

Sincerely,

William C. Olson Hydrogeologist Environmental Bureau

xc: OCD Artesia Office

ENERGY, MINE	State of New Me RALS and NATURAL F Santa Fe, New Mexi	Mexico RESOURCES DEPARTMENT xico 87505	
STATE OF NEW MEXICO OL CONSERVITION DIVISION MEMOR.	ANDUM OF MEETING OR	R CONVERSATION	
[]Telephone Personal	Time 1300	Date 5/27/94	
Originating Party		Other Parties	
Levry Comphell - ENRON	Bil	11 Okon Rosen Auceim, Bobby Myer.	<u>·</u> <u>y</u>
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Phone (505) 623-2761 FAX (505) 625-8060

## Transwestern Pipeline Company

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

March 16, 1994

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

Re: Subsurface pit investigation, Atoka 1 Compressor Station

Dear Mr. Anderson:

Enclosed find a copy of the report describing the subsurface investigation of a concrete lined surface impoundment located at the Atoka No. 1 Compressor Station. Brown and Root Environmental was contracted to perform the drilling investigation.

The impoundment was historically used to store condensate and liquid wastes generated during activities at the facility. This feature was taken out of service in 1992.

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 this pit.

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

Sincerely,

Jarr

Larry Campbell Division Environmental Specialist

xc: w/o attachments

Greg McIlwain Rich Jolly Omer Parker file