STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL

RESOURCES DEPARTMENT

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505 PWV50536273 23 9
FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: KAY WESTALL
	ADDRESS: Box 4, Loca HILLS, NM 98755
	CONTACT PARTY: RANDALL HARRIS PHONE: 505 677-237
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? Yes No R-2846
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone; Such data shall include a description of each well's type, construction, date drilled, location depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including: NOV 1 5 2005
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*Xl.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: MANUE SIGNATURE: DATE: 10/27/05
*	E-MAIL ADDRESS:

Well Selection Criteria Quick Print

Wednesday, December 28, 20

API Well #	Well Name and No.		Operator Name	Typ 9	Stat County	nty Surf	II C	Sec	Twp	Rng	Ft N/S	Ft E/W UICPrmt	Lst Insp Dt
30-015-04583-00-00	30-015-04583-00-00 CULWIN QUEEN UNIT	012	RAY WESTALL	0	A Eddy	_	F 2	-	19 S	30 E	N 099	1980 E	5/17/2004
30-015-04583-00-00	CULWIN QUEEN UNIT	012	RAY WESTALL	0	A Eddy	_	F 2	_	19 S	30 E	N 099	1980 E	5/17/2004
30-015-04584-00-00	CULWIN QUEEN UNIT	013	RAY WESTALL	_	A Eddy	_	Ч	-	19 S	30 E	N 099	660 E WFX-468	12/6/2005
30-015-04582-00-00	CULWIN QUEEN UNIT	016	RAY WESTALL	0	A Eddy	_	A Q	T-	19 S	30 E	1980 N	1980 E	5/17/2004
30-015-04586-00-00	CULWIN QUEEN UNIT	015	RAY WESTALL	0	A Eddy	_	I L	-	19 S	30 E	1980 N	900 E	12/2/2004
30-015-04585-00-00	CULWIN QUEEN UNIT	017	RAY WESTALL	0	A Eddy	_	Т		19 S	30 E	1980 S	1980 E R-2846	5/17/2004
30-015-05748-00-00	CULWIN QUEEN UNIT	014	RAY WESTALL	0	A Eddy	-	ш	9	19 S	31 E	330 N	330 W	5/17/2004
30-015-05653-00-00	CULWIN QUEEN UNIT	900	RAY WESTALL	0	A Eddy		ш	. 34	18 S	31 E	1980 S	592 W	12/2/2004
30-015-04571-00-00	CULWIN QUEEN UNIT	005	RAY WESTALL	0	A Eddy	-*	S	36	18 S	30 E	2319 N	1650 E R-2846	12/18/2003
30-015-04579-00-00	CULWIN QUEEN UNIT	00	RAY WESTALL	0	A Eddy		S	98 -	18 S	30 E	2310 N	909€	5/17/2004
30-015-04580-00-00	CULWIN QUEEN UNIT	900	RAY WESTALL	0	A Eddy		_ S	36	18 S	30 E	1980 S	900 E	9/10/2004
30-015-04578-00-00	CULWIN QUEEN UNIT	900	RAY WESTALL	0	A Eddy		r S	36	18 S	30 E	1650 S	1650 E	10/19/2004
30-015-04574-00-00	CULWIN QUEEN UNIT	003	RAY WESTALL	0	A Eddy		ω Υ	98	18 S	30 E	1650 S	2310 W	10/19/2004
30-015-04573-00-00	CULWIN QUEEN UNIT	011	RAY WESTALL	-	A Eddy		Σ S	36	18 S	30 E	330 S	990 W R-2846	9/2/2005
30-015-04572-00-00	CULWIN QUEEN UNIT	010	RAY WESTALL	0	A Eddy	-,	z s	98 1	18 S	30 E	330 S	2310 W	8/30/2005
30-015-26963-00-00	CULWIN QUEEN UNIT	019	RAY WESTALL	0	A Eddy		s o	98	18 S	30 E	1043 S	2363 E	10/19/2004
30-015-04577-00-00	CULWIN QUEEN UNIT	600	RAY WESTALL	0	A Eddy		o s	96 (18 S	30 E	540 S	1860 E	8/30/2005
30-015-26964-00-00	CULWIN QUEEN UNIT	020	RAY WESTALL	0	A Eddy		S	36	18 S	30 E	1268 S	1035 E	3/9/2005
30-015-26965-00-00	CULWIN QUEEN UNIT	021	RAY WESTALL	0	Eddy		S	98	18 S	30 E	30 S	1295 E	
30-015-04576-00-00	30-015-04576-00-00 CULWIN QUEEN UNIT	800	RAY WESTALL	0	A Eddy		S	98	18 S	30 E	S 099	900 E	3/22/2004

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3155 Order No. R-2846

APPLICATION OF THE ATLANTIC REFINING COMPANY FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 15, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>21st</u> day of December, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, The Atlantic Refining Company, seeks permission to institute a waterflood project in the Shugart Pool in the Culwin Queen Unit Area by the injection of water into the Queen formation through six injection wells in Section 36, Township 18 South, Range 30 East; Section 31, Township 18 South, Range 31 East; Section 1, Township 19 South, Range 30 East; and Section 6, Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, The Atlantic Refining Company, is hereby authorized to institute a waterflood project in the Shugart Pool in the Culwin Queen Unit Area by the injection of water into the Queen formation through the following-described wells:

WELL	UNIT	SECTION	TOWNSHIP	RANGE
Hondo State RD Well No. 5	G	36	18 South	30 East NMPM
Hondo State RD Well No. 7	M	36	18 South	30 East NMPM
Hondo State RD Well No. 2	0	36	18 South	30 East NMPM
Trigg Federal Well No. 1	M	31	18 South	31 East NMPM
O'Neill Federal "E" Well No. 2	J	1	19 South	30 East NMPM
O'Neill Federal "G" Well No. 1	L	6	19 South	31 East NMPM
all in Eddy County New Mayico				

all in Eddy County, New Mexico.

- (2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.
- That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

Jack M. Campbell, Chairman

SEAL

E. S. WALKER, Member

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

OPERATOR: KAY (1/1657ACC

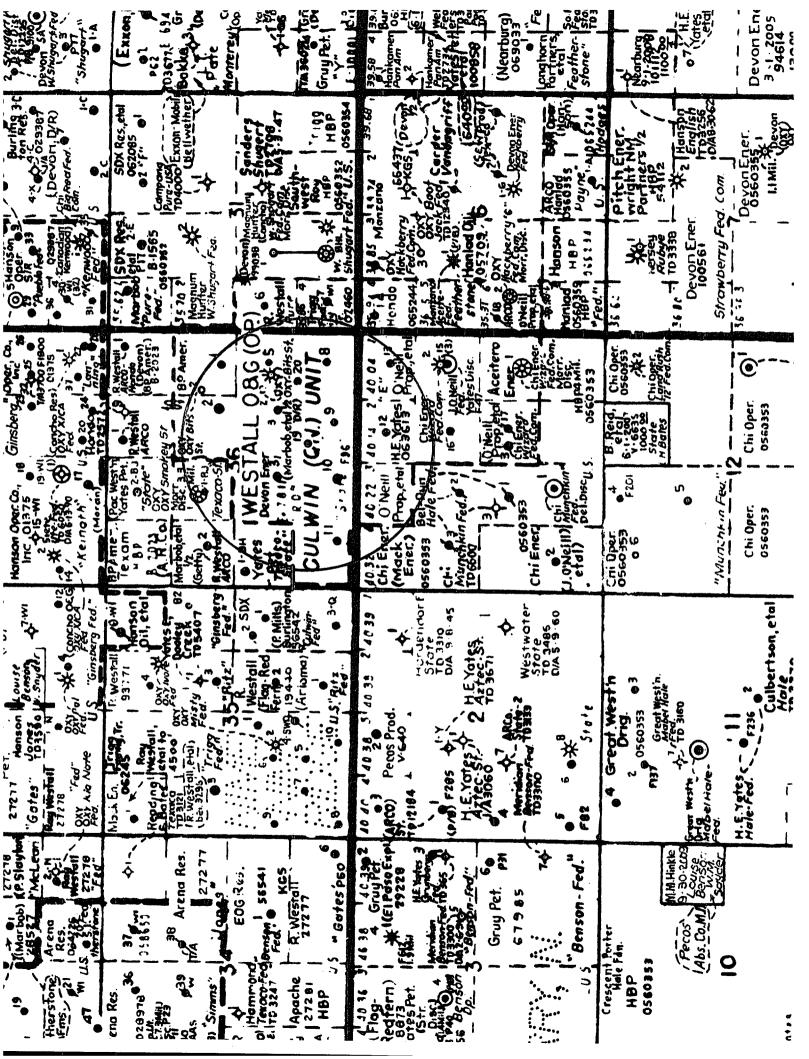
Side 1

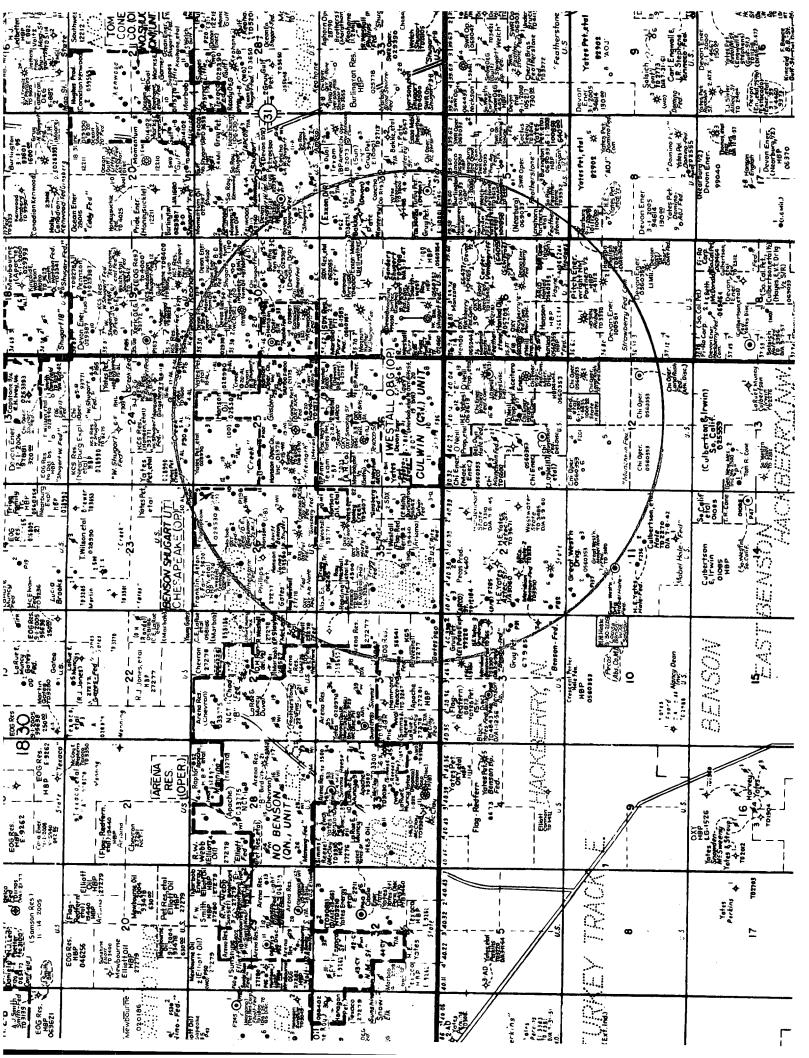
(Perforated or Open Hole; indicate which)

Tub	Tubing Size:	1/2/2		Lining Material:	RASTIC
Tyr	e of Packer:	BAKEK	Type of Packer: BAKEK MOD R	NICKLE PLATED	OL MTED
Pac	ker Setting	Packer Setting Depth:	2980		
Oth	er Type of	Tubing/Casing	Other Type of Tubing/Casing Seal (if applicable):);	
			Addi	Additional Data	
_;	Is this a no	Is this a new well drilled for injection?	for injection?	Xes X	No
	If no, for	what purpose w	If no, for what purpose was the well originally drilled?	Ily drilled?	C PRODUCTION
7	Name of t	Name of the Injection Formation:		QUEEN	
ж.	Name of I	ield or Pool (if	applicable):	Name of Field or Pool (if applicable): $\int U \zeta \omega / N / Q \psi \xi \xi \omega$	EN UNIT
4.	Has the wintervals a	ell ever been pe ınd give pluggin	rforated in any othig detail, i.e. sacks	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.	uch perforated used.
5.	Give the n injection z	Give the name and depths o injection zone in this area: \mathcal{M}	ths of any oil or gas zones unrea: $\frac{\sqrt{3}765 - 7}{100}$	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: $44745 - 7-R104A5$ $2400 - 2600$	verlying the proposed

ATTACHMENT V

Maps that identifies all wells of public record within two miles of each proposed injection wel
and the area of review one-half mile radius around each proposed injection well.





ATTACHMENT VI

Data on all wells of public record within the area of review. Included are schematics of the plugged wells that penetrated the proposed injection zone within the area of review.

No plugged wells within area of review.

WELL NAME	ME	LOCATION	SPUD DATE	SUR.CASING	INT.CASING	PROD. CASING	COMPLETION
Ray Westall Culwin Queen #1	all Jeen #1	SENE Sec 36 T18S-R30E	3/9/1960	8 5/8" @ 787' 50 sxs T/ 550' calc		4 1/2" 3420' 220 sxs T/1924' calc	3114-3170 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #2	all Jeen #2	SWNE Sec 36 T18S-R30E	1/30/1960	8 5/8" @ 787' 50 sxs T/550' calc		4 1/2 @ 3351' 150 sxs T/2343' calc	3124-3133 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #3	all Jeen #3	NESW Sec 36 T18S-R30E	9/6/1960	8 8/5" @ 735' 50 sxs T/504' calc		5 1/2" @ 3139' 125 sxs T/2299' calc	3102-3118 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #4	all teen #4	NWSE Sec 36 T18S-R30E	3/9/1959	8 5/8" @ 742' 50 sxs T/511' calc		4 1/2" @ 742' 160 sxs T/2068' calc	3117-3130 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #5	all ieen #5	NESE Sec 36 T18S-R30E	5/28/1959	8 5/8" @ 725' 100 sxs T/263' calc		4 1/2" @ 3164' 100 sxs T/2492' calc	3105-3150 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #8	all ieen #8	SESE Sec 36 T18S-R30E	4/16/1959	8 5/8" @ 690' 25 sxs T/574' calc		4 1/2" @ 3071' 75 sxs T/2567' calc	3071-3115 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen # 9	ail ieen # 9	SWSE Sec 36 T18S-R30E	5/20/1959	8 5/8" /@ 702' 20 sxs T/609' calc		4 1/2" @ 3145' 175 sxs T/1969' calc	3090-3108 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #10	ali ieen #10	SESW Sec 36 T18S-R30E	6/12/1960	8 5/8" @732' 50 sxs T/501' calc		4 1/2" @ 3148' 100 sxs T/2476' calc	3106-3130 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #11	ali ıeen #11	SWSW Sec 36 T18S-R30E	8/12/1960	8 5/8" @ 719' 50 sxs T/488' calc		5 1/2" @ 3164' 125 sxs T/2212' calc	3110-3126 Shugart Y-Qb-7R-GB INJ

٠.

WELL NAME	LOCATION	SPUD DATE	SUR.CASING	INT.CASING	PROD. CASING	COMPLETION
Ray Westall Culwin Queen #12	NWNE Sec 1 T19S-R30E	12/24/1959	8 5/8" @ 760' 75 sxs T/413' calc		5 1/2" @ 3317' 150 sxs T/2174' calc	3080-3097 Shugart Y-Qb-7R-GB Oil
Ray Westall Culwin Queen #13	NENE Sec 1 T19S-R30E	11/8/1958	8 5/8" @ 760' 50 sxs T/529' calc		5 1/2" @ 3171 125 sxs T/2219' calc	3092-3126 Shugart Y-Qb-7R-GB INJ
Ray Westall Culwin Queen #20	SWSW Sec 36 T18S-R30E	3/26/1992	8 5/8" @426' 300 sxs circulated		5 1/2" @ 3400 525 sxs Circulated	2520-3151 Shugart Y-Qb-7R-GB Oil
OXY USA OXY Bits State #1	NESW Sec 36 T18S-R30E	1/8/2002	13 3/8" @ 655' 550 sxs circulated	9 5/8" @ 3220' 1300 sxs circulated	5 1/2" @ 12280 775 sxs T/8478' CBL	12106-12129 Hackberry Morrow Gas
OXY USA SENW Sec OXY Smokey State #1T18S-R30E	SENW Sec 36 #1T18S-R30E	5/15/2001	13 3/8"@ 575' 740 sxs circulated	9 5/8" @ 3630' 1290 sxs circulated	5 1/2" @ 12290 1200 sxs T/5794' CBL	11756-11776 Hackberry Morrow Gas
Texaco State BJ #1	SENW Sec 36 T18S-R30E	6/1/1972	8 5/8" @794' 475 sxs circulated		5 1/2" @ 3714 850 sxs 100' Temp	3187-3305 Shugart Y-Qb-7R-GB Oil
Texaco State BN #1	NWSW Sec 36 T18S-R30E	8/18/1972	8 5/8" @ 787' 350 sxs circulated		5 1/2" @3716 1000 sxs circulated	2358-3176 Shugart Y-Qb-7R-GB Oil

ATTACHMENT IX

Proposed stimulation:

No proposed stimulation.

ATTACHMENT XI

		. •					• •	1
Th	ere is no	Octiva	trech	water	MALIC	xxnthin	one mi	Ie.
		active	116311	walcı	WCIIO	AAILIIII		

ATTACHMENT VII

- 1. Proposed average of 100 bbls per day and maximum of 500 bbls per day of injected fluids. At a rate of one bbl per minuet.
- 2. System will be closed.
- 3. Average anticipated pressure of 400 psi and a maximum of 600 psi.
- 4. Water will be reinjected produced water.

ATTACHMENT VIII

The proposed injection zone is a sand of the Queen formation. This is a fine grained sand. There is possible drinking water overlying the injection in the surface sands at a depth of 0-150'. There is no known source underlying the injection interval.

ATTACHMENT XII

All available geologic and engineering data have been examined and there is no evidence of open faults or any other hydrologic connection between the disposal zone and any source of drinking water.

ATTACHMENT XIV

PROOF OF NOTICE

Leasehold operators within one-half mile of the well location are: ChevronTexaco, Yates, BP America, OXY and Chi Energy. Each of the operators were provided a copy of our application by certified mail. Proof of notice is enclosed. The surface owner is the State of New Mexico.

PROOF OF PUBLICATION

Proof of publication is from the Artesia Daily Press and is attached.

	CERTIFIED MAIL
ChevronTexaco P.O. Box 36366 Houston, Tx 77236-6366	7004 0750 0002 5384 5291
Yates Petroleum 105 S 4 th Street Artesia, NM 88210	7002 0460 0000 3842 5603
BP America 501 Westlake Park Blvd Houston, TX 77079-2604	7002 0460 0000 3842 5610
OXY 10889 Wilshire Blvd Los Angeles, CA 90024-4201	7002 0460 0000 3842 5627
Chi Energy P.O. Box 1799 Midland, TX 79702-1799	7002 0460 0000 3842 5634
New Mexico State Land Office P.O. 1148 Santa Fe, NM 87504-1148	7002 0460 0000 3842 5641

Oil Conservation Division 1301 W. Grand Artesia, NM 88210

Oil Conservation Division 1220 S. St. Francis Santa Fe, NM. 87505

Affidavit of Publication

	110.		10000			
STATE OF NEW MEX	ICO					
County of Eddy:						
Gary D. Scott		7.7.1		being duly		
sworn,says: That he is	the	Pul	olisher	of The		
Artesia Daily Press, a	daily newsp	aper (of gene	ral		
circulation, published i	n English at	Artes	sia, said	county		
and county and state,	and that the	here	to attac	ched		
	····	Leç	jal Noti	се		
was published in a reg	jular and en	tire is	sue of t	he said		
Artesia Daily Press,a	daily newspa	aper o	luly qua	lified		
for that purpose within the meaning of Chapter 167 of						
the 1937 Session Laws of the state of New Mexico for						
1 Consecutiv week/days on the same						
day as follows:						
First Publication	Octobe	er	28	2005		
Second Publication						
Third Publication		_/	2			
Fourth Publication						
Mana		90	4			
Subscribed and sworn	to before m	ne this	6			
28th Day	October	<u> </u>		2005		
Backer On	allo Eddu O	aa	no Nou M	lovico		
Notary Put	olic, Eddy Co	ounty.	, New IV	IEXICO		

September : 23, 2007

My Commission expires

Copy of Publication:

uruay varri

LEGAL NOTICE

Westall-Operator, Ray Westall-Operator, P.O. Box 4, Loco Hills, New Mexico 88255 Pho-ne (505)677-2370. Con-tact party for Ray Westall-Operator is Randall Harris, is seeking administrative approval from the New Mexico Oil Conservation Division to utilize a well located 2363' FEL & 1043' FSL Section 36, T18S-R30E, Eddy County, New Mexico known as the Culwin Queen #19 for water injection. Proposed injection is in the Queen formation through perforations 3077-3123 feet. Expected maximum injection rate of 500 bbls per day at 600 psi. Interested parties must objection or requests for hearing with the Oil Conservation Division, 1220 So. St. Francis Drive, Santa Fe, NM 87505 within 15 days of the notice. Published in the Artesia Daily Press, Artesia, N.M. October 28, 2005.

Legal 19058

