KELLAHIN, KELLAHIN AND AUBREY

W. Thomas Kellahin Karen Aubrey

Jason Kellahin Of Counsel Attorneys at Law El Patio - 117 North Guadalupe Post Office Box 2265 Santa Fe, New Mexico 87504-2265

January 4, 1988

RECEIVED

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"Hand Delivered"

JAN 6 1988

**QIL CONSERVATION DIVISION** 

Mr. William J. LeMay Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87504

Re: Penroc Oil Corporation SWD Well Application State AF No. 2 Well

Dear Mr. LeMay:

Please set the enclosed duplicate originals of Form C-108 as our application for hearing at the next available examiner's docket now scheduled for February 3, 1988. We suggest the following language for the advertisement:

Application of Penroc Oil Corporation for saltwater disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Mid Vacuum Devonian Pool in the open hole interval from 11,837 feet to 12,000 feet in its State "AF" No. 2 well located 330 feet from the South line and 2130 feet from the East line (Unit O) of Section 8, T18S, R35E, NMPM. Said well is located approximately 6 miles southeast of Buckeye, New Mexico.

Very truly yours, Thomas Rel/lahin

WTK:ca Enc.

cc: Penroc Oil Corporation P. O. Box 5970 Hobbs, New Mexico 88241 Telephone 982-4285 Area Code 505

Case 9303

## PENROC

Penroc Oil Corporation / P. O. Box 5970 / Hobbs, New Mexico 88241 / Telephone (505) 397-3596 / Telecopier (505) 393-7051

December 23, 1987

RECEIVED

JAN 6 1983

OIL CONSERVATION DIVISION

Re: Conversion of Penroc Oil Corporation State "AF" No. 2 to a disposal well

Dear Sir:

Cuise 9303

÷.,

Please find enclosed a copy of Penroc Oil Corporation application to convert the State "AF" No. 2 well to disposal well. This application is being furnished to you per New Mexico Conservation requirements.

No reply is required unless you object to this application. Thank you for your cooperation.

Sincerely,

PENROC OIL CORPORATION

W. Y. (Merch) Merchant President

MYM/br

Enclosures

CC: Texaco - Hobbs Arco - Hobbs Maralo - Midland Bledsoe Petro Corp. - Bethany, Ok. R. D. Lee - Lovington New Mexico State Land Office - Santa Fe N. M. O. C. D. - Santa Fe N. M. O. C. D. - Hobbs W. T. Kellahin - Santa Fe

PRODUCING OIL AND GAS FOR AMERICA SINCE 1961-

	· · · · · · · · · · · · · · · · · · ·	•	STATE LAND OFFICE BUILDING SANTA FE, NEW MERICO 8/501		6 9707
APPLICA	TION FOR AU	THORIZATION TO INJECT			Case 1303
; <b>I.</b>	Purpose: Applica	Secondary Recovery tion qualifies for adm:	Pressure Mainte inistrative approval?	nance yes	RECEIVED Disposal Storage S Disposal AN 6 1988
11.	Operator:	PENROC OIL CORPORA	TION	<u> </u>	
	Address:	P.O. BOX 5970 HOB	BS, NEW MEXICO 8824	1	UIL CONSERVATION DIVISIO
	Contact pa	rty: M.Y. MERCHANT		_ Phone:	505-397 7360
111.	Well data:	Complete the data red proposed for injection	quired on the reverse on. Additional sheet	side of s may be	this form for each well attached if necessary.
IV.	Is this an If yes, gi	expansion of an existive the Division order (	ing project?	s X e project	no t
۷.	Attach a ma injection a well. Thia	ap that identifies all well with a one-half mi s circle identifies the	wells and leases wit ile radius circle dra e well's area of revi	hin two m wn around ew.	miles of any proposed d each proposed injection attached
* VI.	Attach a ta penetrate well's type a schematic	abulation of data on al the proposed injection e, construction, date o c of any plugged well i	ll wells of public re zone. Such data sha drilled, location, de illustrating all pluge	cord with ll incluc oth, reco ging deta	nin the area of review whi de a description of each ord of completion, and ail.attached
VII.	Attach data	a on the proposed opera	ation, including:		
	1. Pro 2. Who 3. Pro 4. Son 5. If	oposed average and maxi ether the system is ope oposed average and maxi urces and an appropriat the receiving formation injection is for dispo at or within one mile o the disposal zone forma literature, studies, ne	imum daily rate and ve en or closed; imum injection pressur- te analysis of inject; a if other than reinje osal purposes into a p of the proposed well, ation water (may be me earby wells, etc.).	olume of ion fluid octed pro cone not attach a easured o	fluids to be injected; d and compatibility with oduced water; and productive of oil or gas a chemical analysis of or inferred from existing attached
VIII.	Attach app detail, geo bottom of a total disso injection a injection d	ropriate geological dat ological name, thicknes all underground sources olved solids concentrat cone as well as any suc interval.	a on the injection zo s, and depth. Give f of drinking water (a ions of 10,000 mg/1 c h source known to be	one inclu che geolo aquifers or less) immediat	iding appropriate litholog ogic name, and depth to containing waters with overlying the proposed ely underlying the
IX.	Describe th	ne proposed stimulation	program, if any.		attached
Χ.	Attach appr with the Di	copriate logging and te ivision they need not b	est data on the well. be resubmitted.)	(If wel	<b>l logs have</b> been filed
XI.	Attach a ch available a location of	nemical analysis of fre and producing) within o f wells and dates sampl	sh water from two or ne mile of any inject es were taken.	more fre ion or d	sh water wells (if lisposal well showing
XII.	Applicants	for disposal wells mus	t make an affirmative	stateme	attached
	examined av or any othe source of c	vailable geologic and e er hydrologic connectio drinking water.	ngineering data and f n between the dispose	ind no e il zone a	widence of open faults ind any underground attached
XIII.	Applicants	must complete the "Pro	of of Notice" section	on the	reverse side of this form.
XIV.	Certificati	ion			attached
	I hereby ce to the best	ertify that the informa ; of my knowledge and b	tion submitted with t elief.	his appl:	ication is true and correc
	Name:	M.Y. MERCHANT	Tit	le PRE	SIDENT
	Signature:	upper plein f	concert c	ate:	2/23/87
* If th submi of th	e informatio tted <u>,</u> it nee c carlier su	on required under Secti ed not be duplicated an obmittal.	ons VI, VIII, X, and d resubmitted. Pleas	XI above ie show t	has been previously he date and circumstance

ATTACHED

#### 111. 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.
    ATTRACHED

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.

- 8. 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 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, P. O. Box 2088, Santa Fe, New Mexico 87501 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.

STATE OF NEW MEXI		CONSERVATI	ON DIVISION		Form C-101 Revised 10	- 1 - 7 8	
DISTRIBUTION SANTA FE FILE	SA	NTA FE, NEW M	EXICO 87501		5A. Indicato BTATE	Type of Lyane X Fre (	
U.S.G.S.			•		E -	7723 71111111111111111111111111111111111	
	N FOR PERMIT TO	DRILL DEEPEN	OR PLUG BACK			ANNANNAN SA	
1a. Type of Work					7. Unit Agre	ement Mane	
b. Type of Well DRILL		DEEPEN X	PLUG		8. Faim or 1. STAT	ease Name E "AF"	
2. Name of Operator	OC OIL CORPORAT				9. Well No.		
3, Address of Operator DO			2241		10. Field an	d Pool, or Wildest	
4. Location of Well		S, NEW MEXICO 8			AV (LLM) 7/7///777	CUUM DEVONIAN	
AND 330	ER	CATED 2130 P	LET FACE THEE	5E NMPM			
					12. County		
			9. Proposed Depth 12000	DEVONIA	1	REVERSE UNIT	
1. Elevations (Show whether DF	<i>KI</i> , etc.) 21A. Kind	6 Status Plug. Bond 2	1B. Drilling Contractor		22. Apprex.	Date Work with stud	
3956	DF• BL	ANKET			2/1		
23.	i	PROPOSED CASING AND	CEMENT PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF	CEMENT	EST. YOP	
•	NO CHANGE						
			· ·				
	1) Propose to	o deepen well ar	d convert to di	.sposal we	11		
:	2) Rig up reverse unit, drill out CIBP at 9702, and 10100'. SQZ perfs at 9864 - 9900, and 10134 - 10155, and 8937 - 9080.						
	3) Deepen wel 11837)	Ll from PBTD at	11409 to 12000.	(TD 1185	0, 7" cs	g set at	
	4) Run in hol tubing, ar	le with approxim nd 7" plastic co	atly 11800' of ated Baker AD -	2 7/8" pl · 1 packer	astic co set at	ated 11800.	
	5) Begin inje	ection		-			
N ABOVE SPACE DESCRIBE PR	OPOSED PROGRAMI IF	PROPOSAL 15 TÔ DEEPEN OR	PLUG DACK, GIVE DAYA DI	I PRESENT PROD	UCTIVE ZONE	AND PROPOSED NEW PRODU	
hereby certify that the information	on above is true and com	plete to the best of my kn	owledge and belief.	······			
igned that h	kechant	President		D	12 ate	103/55	
(This space for S	State Use)					<u></u>	
PPROVED BY		TITLE		D	ATE		
ONDITIONS OF APPHOVAL, IF	ANYI						
		-	•				

- 1-4 Attached PART III A
- PART III B
- 1) The formation to be injected is the Devonian, in the Mid Vacuum Devonian Pool.
  - 2) The injection will be open hole 11837 - 12000.
  - 3) This well was drilled as an oil well in 1964.
  - 4) The well is currently producing from perforations at 8937 - 9080, in the Vacuum Abo Reef Pool.
  - There is no lower production , and the next 5) higher oil and gas production is the Wolfcamp at 9700 - 9900'.

PART VII

- 1) The average daily injection rate will be 5000 BWPD, with a maximum of 10,000 BWPD.
- This system will be closed. 2)
- 3) The source of the water will be produced water from the Devonian and from offset Abo and San Andres floods.
- The average injection pressure will be 0 (zero) 4) with a maximum of 500 PSI.
- 5) The injection zone is productive of oil and gas within one (1) mile. Analysis attached.
- PART VIII The proposed injection zone is the Devonian, and the lithology is a Limestone. The top of the Devonian is at 11838 (-7882), and the injection zone is 11837 -12000'. The only fresh water in the area is the Ogallala at 200 - 250' from surface, and there is no fresh water known below the injection zone.
- PART IX We plan to acidize the openhole interval with 5000 gallons 15% HCL.
- PART XII PENROC OIL CORPORATION has examined available geologic and engineering data, and finds no evidence of open faults or any other hydrologic connection between the disposal zone and any source of drinking water.

PENROC OIL CORPORATION STATE "AF" NO. 2 SECTION 8 - T18S - R35E UNIT LETTER O 330' FSL & 2130' FEL TD 11837' DEVONIAN

13 3/8" 48# set @ 408' with 400 sxs circulated 9 5/8" 40# set @ 4015' with 3554 sxs circulated 7" N - 80 set @ 11837 with 2000 sxs TOC 320' TS

Perforations; 10134 - 10155 CIBP @ 10100' + 2 sxs cmt 9864 - 9900 CIBP @ 9702 8937 - 9080 currently producing Vacuum Abo Reef

Plan to run approximatly 11800' of plastic coated tubing, and a 7" plastic coated Baker AD - 1 set at 11800'. .



12000'

Unien K Sool	Anodarké 1633 Anodarké 1633 Anodarké 1633 Anodarké 1633 Anodarké 1635 An	Prichardson & Besnutind Stornulind Stornulind DA2-82-30 DA2-82-40 N-7-7-40 N-7-		FFBoss FFSoss 15 State 21 014 6.21 61	9	282 284	
Rich 8 Boss (1002-14) B 5014 120-8 10 121-88 100-8 10 121-88 10 101-14 10	Roy Pearce (S) Alabil Alabil I Sissi I Billo Sine Spread		34 9-1-15 9-1-19 9-10 9-10	So Rey, s Mabil LG-2731		H.B.P# 17/A B.373A B.1189   B.373A NCT-4   Stocal 1 109076	
See Control Co	TOID.352 ()	PENROC OIL CORPOR STATE "AF" NO. SECTION 8 - T18S LEA COUNTY NEW M	2 1:1 1.000 1:00 1:00 1:00 1:00 1:00 1:00 1:00 1:00	Se Ray E (Mapil) LG-2730		10 02000 15 10 0000 15 10 0000000 15 10 0000 15 10 00000 15 10 00000000000000000000000000000000000	
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Excent         HE Yotes           Construction         H0 1 - 1 - 10           Construction         H0 1 - 5773           Azage         E - 6181           Azage         E - 6181           Struction         19752	Ancco Viloga Anco	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	35 Shore	ARCO H 80 E+1582 V (09) 9		(1) (Amoco) (	Envis es. S. M. B. S. M. B. S. M. C. S. M. C. B. M. C. B. S. S. Sente fe

• ...

ATTACHMENT TO FORM C - 108 PENROC OIL CORPORATION STATE "AF" NO. 1

PENROC OIL CORPORATION STATE "AF" NO. 1 SECTION 8 - T18S - R35E UNIT LETTER M 510' FSL & 660' FWL TD 11791' DEVONIAN

13 3/8" 48# set @ 385' with 400 sxs circulated 9 5/8" 36, 40# set @ 3970' with 2176 sxs circulated 7" 23,29, and 32# set @ 11791' with 1700 sxs TOC 230' TS

Perforations; 8707 - 8782 11513 - 11573 currently producing MID VACUUM DEVONIAN

PENROC OIL CORPORATION STATE "AF" NO.3 SECTION 8 - T18S - R35E UNIT LETTER L 1980' FSL & 990' FWL TD 11956' DEVONIAN

13 3/8" 48# set @ 360' with 400 sxs circulated 9 5/8' 36, 40# set @ 3876' with 2300 sxs circulated 5 1/2" 17# set @ 10387' with 2440 sxs Toc 1780' TS TD 11956 PBTD 10387'

Perforations; 8714 - 8770 SQZD WITH 150 sxs 9883 - 9927 TA'D

ARCO OIL and GAS COMPANY LEA 403 STATE NO. 4 SECTION 17 - T18S - R35E UNIT LETTER D 510' FNL & 510' FWL TD 11896' DEVONIAN

13 3/8" 48# set @ 380' with 475 sxs circulated 9 5/8" 36, 40# set @ 4000' with 1700 sxs TOC 800' TS 7" 23,26,29, 32# set @ 11896 with 1050 sxs TOC 6400' TS

Perforations; 11652 - 11720 CIBP set @ 9550' + 25 sxs cmt 8807 - 8882 currently producing VACUUM ABO REEF ENERGY RESERVES GROUP, INC. TP STATE NO. 2 SECTION 8 - T18S - R35E unit letter J 1980' FSL & 1980' FEL TD 5066' SAN ANDRES

ENERGY RESERVES GROUP, INC. TP STATE 2 - Y SECTION 8 - T18S - R35E UNIT LETTER J 1980' FSL & 1880' FEL TD 9156' ABO

BLEDSOE PETRO CORPORATION TP STATE NO. 1 SECTION 8 - T18S - R35E UNIT LETTER I 1980' FSL & 660' FEL TD 9200' ABO

BISHOP CANYON URANIUM CORPORATION HOOKIN BULL NO. 1 SECTION 17 - T18S - R35E UNIT LETTER D 660'FNL'& 660'FWL : TD 4530' SAN ANDRES

ARCO OIL and GAS COMPANY LEA 4011 STATE NO. 1 SECTION 8 - T18S - R35E UNIT LETTER N 330' FSL & 1650' FWL TD 12000' DEVONIAN

13 3/8" 48#set @ 415' with 400 sxs circulated 9 5/8" 36# set @ 4000' with 2700 sxs circulated 7" 26# set @ 12000' with 2600 sxs TOC 2650' TS

Perforations; 8758 - 8785 SQZD with 100 sxs 8834 - 8856 SQZD with 100 sxs 11506 - 11586 Currently producing

MID VACUUM DEVONIAN

ARCO OIL and GAS COMPANY LEA 403 STATE NO. 5 SECTION 17 - T18S - R35E UNIT LETTER F 1980' FNL & 1980' FWL TD 11823' DEVONIAN

π.

13 3/8" 48# set @ 382' with 400 sxs circulated 9 5/8" 36, 40# set @ 4013' with 1800 sxs circulated 5 1/2" 17, 20# set @ 11823' with 1867 sxs TOC 4300' TS

Perforations; 11770 - 11807 CIBP @ 11680' + 2 sxs cmt CMT RETAINER @ 7800' 50 sxs ABOVE & 50 sxs BELOW 5 1/2" cut & pulled @ 4220' SET 75 sxs ACROSS 5 1/2" STUB AND 9 5/8" csg shoe SET 10 sxs @ surface P&A'D 3/26/75

ARCO OIL and GAS COMPANY LEA 403 STATE NO. 6 SECTION 17 - T18S - R35E UNIT LETTER B 660' FNL & 1980' FEL TD 11776' DEVONIAN

13 3/8" 48# set @ 402' with 450 sxs circulated 9 5/8" 36, 40# set @ 4000' with 1850 sxs TOC 965' TS 7 5/8" liner set @ 3849 - 10425 with 1060 sxs circulated 5" 18# liner set @ 10318 - 11776 with 142 sxs circulated

Perforations; 11642 - 11745 SQ2D with 250 sxs Spot 40 sx plug across top of 5" liner @ 10400 - 10140 Perf. 9016 - 9083 SQ2D with 150 sxs Perf. 7813 - 7837 SQ2D with 125 sxs Spot 100' plug @ 7637 - 7737 Spot 100' plug @ 3820 - 3920 Spot 100' plug @ 1800 - 1900 Spot 10 sxs plug @ surface P&A 8/3/81

## ARCO OIL and GAS COMPANY LEA 403 STATE NO. 6

Set 10 sx plug at surface /// 13 3/8" 48# set @ 402' with 450 sxs circulated Set 100' plug @ 1800 - 1900 Set 100' plug @ 3820 - 3920 Top of 7" liner @ 3849' 9 5/8" 36, 40# set @ 4000' with 1850 sxs TOC 965' TS Set 100' plug @ 7637 - 7737 Perf. 7813 - 7837 SQZD with 125 sxs Omt retainer @ 8943' + 30' cmt Perf. 9016 - 9083 SQZD with 150 sxs Set 40 sx plug across top of 5" liner 10140 - 10400Top of 5" liner @ 10318' 7 5/8"liner @ 10425' with 1060 sxs circulated Cmt retainer @ 11500' +5 sxs cmt Perf. 11642 - 11745 SQZD with 250 sxs 5" liner @ 11776' with 142 sxs circulated P & A 8/3/81

ARCO OIL and GAS COMPANY LEA 403 STATE NO. 5

Set 10 sx plug at surface //// 13 3/8" 48# set @ 382" with 400 sxs circulated Set 75 sx plug across 9 5/8" csg shoe & 5 1/2" stub 9 5/8" 36, 40# set @ 4013' with 1800 sxs circulated 5 1/2' csg shot & pulled @ 4220' Omt retainer @ 7800' + 50 sxs Perfs. 7897 - 7904 CIBP @ 11680' + 2 sxs cmt Perfs. 11770 - 11807

5 1/2" 17, 20# set @ 11823' with 1867 sxs TOC 4300' TS P & A 3/26/75

2	MALLIBURT MALLIBURT MIDLANG HOBBS, NEW	IJIUN EADURAIURI ON SERVICES DIVISION MEXICO 88240	
	LABORATORY V	VATER ANALYSIS	No
Io Mr. M. Y. Merchant			Date_ 12-12-87
PENROC		This report it nor any	is the property of Halilburton Company and neither part thereof nor a copy thereof is to be published
P.O. Box 5970 Hobbs NM 88240		or disclosed of laborator course of re and employ Company.	I without first securing the express written approva- ry management; it may however, be used in the gular business operations by any person or concern ees thereof receiving such report from Hamburton
Submitted by M.Y. Merch	nant		Date Rec
Well No. N.A.	Depth_N.A.		Formation
CountyLea CoNM	Field Buckeye	Area	Source water well / Devonian wa
	water well	Devonian	well
Resistivity	3.41 @ 68 <sup>0</sup> F	.09 @ 68 <sup>0</sup>	<u>PF</u>
Specific Gravity	1.002	1.066	
	7.2	7.6	
Calcium (Ca)	45	2150	*MPL
Magnesium (Mg)	30	330	
<b>Chioridas (Ci)</b>	950	55000	
Sulfates (SO_) ~	nil	heavy	
Bicarbonates (HCO_)	240	1284	
Soluble Iron (Fe)	nil	nil	
lemgrks: water taken f comparison pu	from wells in the same urposes.	area for	*Milligrams per liter
	C. R. Moore	harls Ray Mor	<u>v-</u>
			LIBURTON COMPANY
		By	

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NOTICE

CHEMIST

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THIS REPORT IS LIMITED TO THE DESCRIBED SAMPLE TESTED. ANY USER OF THIS REPORT AGREES THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER IT BE TO ACT OR OMISSION, RESULTING FROM SUCH REPORT OR ITS USE.



PENROC OIL CORPORATION STATE "AF" NO. 2



PS Form 3800, June 1985



## P-562 873 265

**RECEIPT FOR CERTIFIED MAIL** NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL (See Reverse)





### PS Form 3800, June 1985



## PS Form 3800, June 1985



RECEIPT FOR CERTIFIED MAIL NO INSURANCE COVERAGE PROVIDED £ ш

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